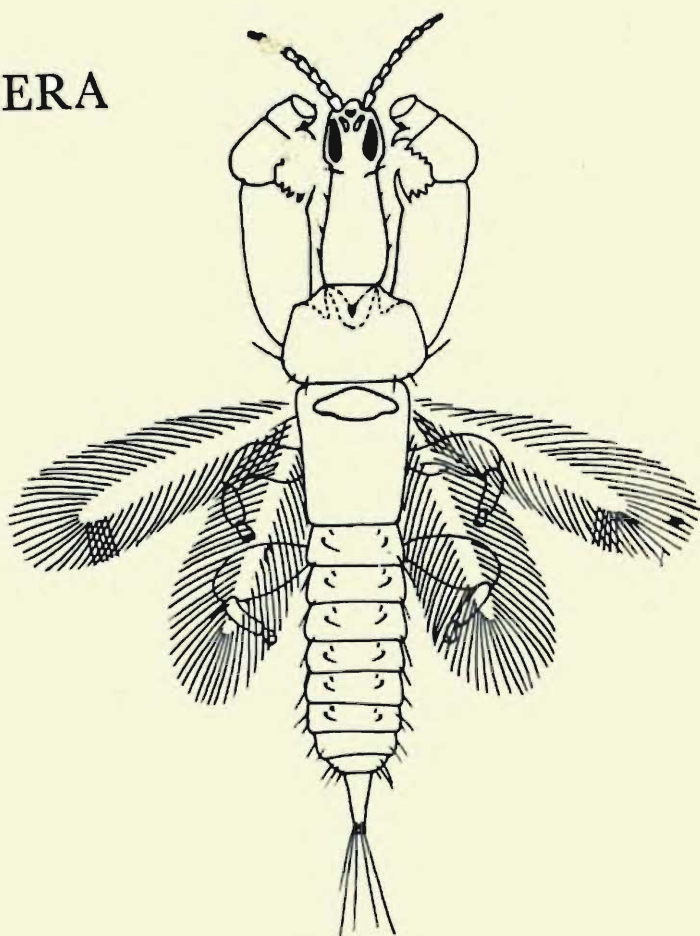


**HANDBOOK SERIES**

**No. 1**

**TAXONOMY OF  
INDIAN THYSANOPTERA**



**T. N. Ananthakrishnan**  
and  
**S. Sen**

**ZOOLOGICAL SURVEY OF INDIA  
CALCUTTA**

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## TAXONOMY OF INDIAN THYSANOPTERA

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T. N. ANANTHAKRISHNAN

AND

S. SEN

*Zoological Survey of India,  
Calcutta-700 012*



*Issued by the Director, Zoological Survey of India, Calcutta*  
**1980**

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Published : 28th June, 1980

**Price : India : Rs. 40/-**

**Foreign : £ 5/- or \$ 8/-**

PRINTED AT AMRA PRESS, MADRAS - 600 041 AND ISSUED BY THE ZOOLOGICAL  
SURVEY OF INDIA, CALCUTTA; PUBLISHED BY THE MANAGER OF  
PUBLICATION, DELHI.

## PREFACE

The increasing number of genera and species of thrips that are being added from year to year on the basis of extensive collections from diverse areas needs to be documented in a consolidated fashion, considering the utility of such a work not only from the view point of proper identification of taxa by those interested in the group, but also for a better assessment of the complexities involved in the taxonomic studies of thrips, especially when many genera often intergrade with each other resulting in considerable difficulty in assigning species to their respective genera, not to mention the involvement of endless degrees of intra-specific diversity in taxonomic assignments. It is with this view that the senior author published the "*Indian Thysanoptera*" (1969) and over the decade since then, appreciable changes have occurred in our understanding of the group, thanks to the pioneering studies of Mound, Zur Strassen, Sakimura and Bhatti, to mention a few, which have necessitated an overall assessment of taxonomic studies of Indian Thysanoptera. Efforts have been made in this work to provide a critical assessment of taxonomic criteria, classificatory systems, keys to the families and sub-families, genera and sub-genera, and species and sub-species, tribes and sub-tribes, besides providing an analysis of distribution and host plants of various species, along with an alphabetically arranged list of genera with their type species and the natural orders of host plants, followed by a complete set of references to literature on Indian Thysanoptera. It is hoped that the work would be of value to all students of Thysanoptera.

CALCUTTA  
28th May, 1980

T. N. ANANTHAKRISHNAN  
*Director*  
*Zoological Survey of India*

# ZOOLOGICAL SURVEY OF INDIA

## HANDBOOK SERIES

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| <b>No. 1</b> | <b>1980</b> | <b>Pages 1 to 234</b> |
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### CONTENTS

|                                                                                          | <i>Page</i> |
|------------------------------------------------------------------------------------------|-------------|
| <b>PREFACE</b>                                                                           | v           |
| <b>INTRODUCTION</b>                                                                      |             |
| <b>Taxonomic criteria — methods of collection and preservation</b>                       | 1           |
| <b>Key to the superfamilies, families, sub-families and genera of Indian Terebrantia</b> | 16          |
| <b>Key to the sub-families and genera of Indian Tubulifera</b>                           | 31          |
| <b>Key to the families and sub-families of Thysanoptera based on II instar larva</b>     | 48          |
| <b>Key to the species of Indian Terebrantia</b>                                          | 49          |
| <b>Key to the species of Indian Tubulifera</b>                                           | 82          |
| <b>APPENDIX – I</b>                                                                      |             |
| <b>List of valid species of Indian Thysanoptera with localities and hosts</b>            | 125         |
| <b>APPENDIX – II</b>                                                                     |             |
| <b>Alphabetical list of Indian genera with original reference and type species</b>       | 172         |
| <b>APPENDIX – III</b>                                                                    |             |
| <b>Host plants of Indian Thysanoptera, alphabetically arranged natural orderwise</b>     | 186         |
| <b>REFERENCES</b>                                                                        | 211         |

## INTRODUCTION

Thysanoptera includes a well defined order of insects of considerable economic importance and ranging from such small species as *Pseudodendrothrips dwivarna*, *Asprothrips indicus* etc. (0.5 mm) to comparably large-sized species of the genera *Elaphrothrips*, *Mecynothrips*, *Bactrothrips*, *Tiarothrips* etc. (10–12 mm). Many species frequently inhabit flowers and leaves of angiosperms and sheaths of Gramineae, while others are known to occur beneath bark of living or dead trees, fallen leaf litter and within plant galls. By feeding habits they are phytophagous or mycophagous, comparatively rarely predaceous. They possess remarkable structural peculiarities, with fringed wings, an asymmetrical feeding apparatus with the right mandible vestigial, and a protrusible bladder at the end of all tarsi and these have merited for them a separate ordinal rank and have maintained their independent status ever since the nine order classification of insects.

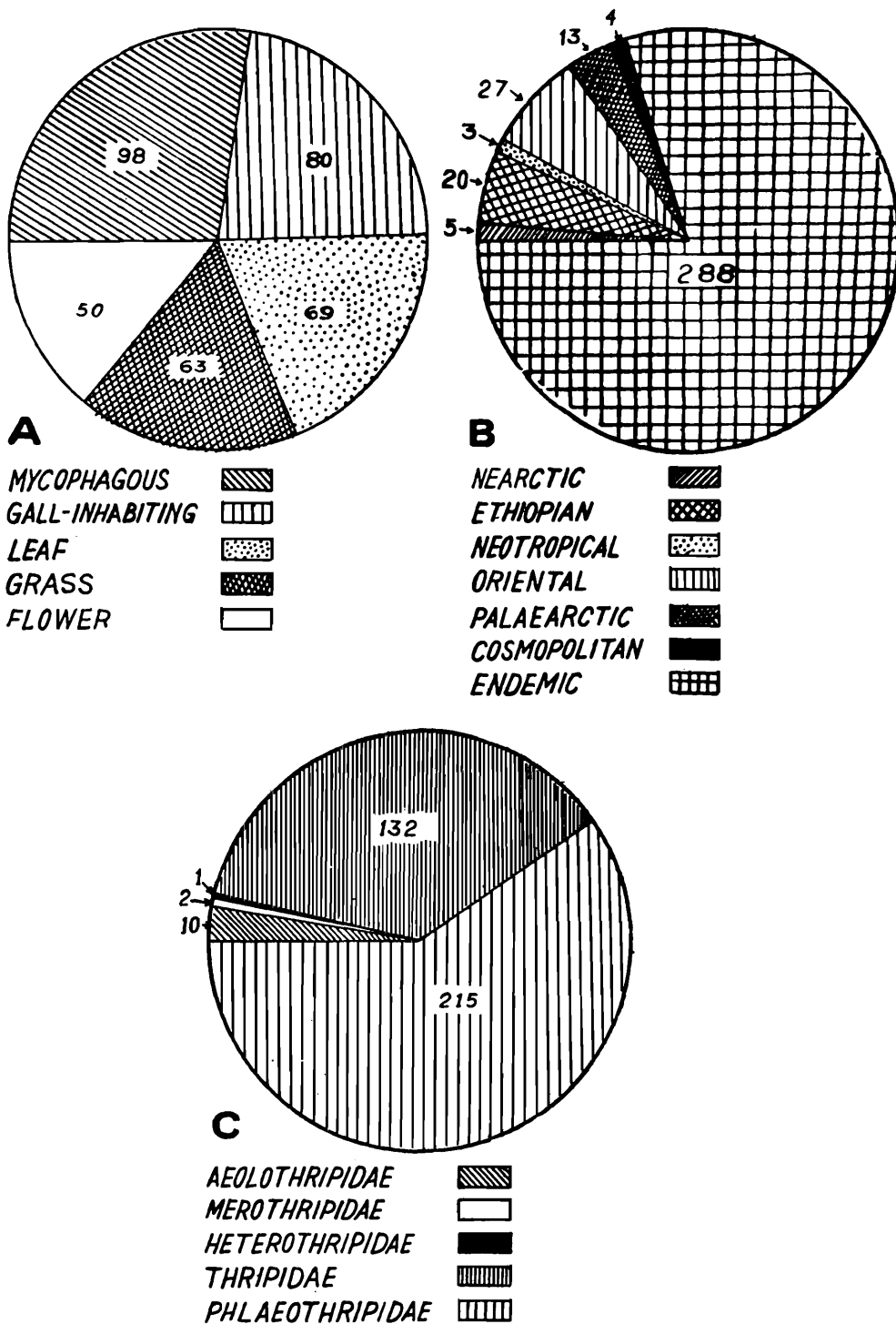
The order Thysanoptera is divided into two suborders, Terebrantia (females with distinct saw-like ovipositor, forewings with veins and setae, 2–8 segmented maxillary palp and maxillary stylets confined within the mouth-cone, last abdominal segment usually not tube-like; and Tubulifera (last abdominal segment tube-like, females without ovipositor, wings without veins and setae, maxillary palp always 2-segmented, maxillary stylets usually retracted within the head).

Considerable information on diverse aspects of Indian Thysanoptera has been published by Ananthakrishnan over the last three decades, such as on generic taxonomy (1969), mycophagous (1973), bioecology (1973), gall thrips (1978), predaceous thrips (1976) and biosystematics of Thysanoptera (1979).

From the distributional point of view the Indian thrips fauna appears to be very interesting since it involves Oriental, Ethiopian, Palaearctic and to a limited extent of Neotropical elements, besides species endemic to the Indian subcontinent as well as those which have a world wide distribution.

Ramakrishna and Margabandhu (1945) in their catalogue of Indian Thysanoptera have recorded 232 species, the family-wise break-up being, Aeolothripidae (4 genera, 5 species), Heterothripidae (1 genus, 1 species), Thripidae (39 genera, 94 species) and Phlaeothripidae (50 genera, 132 species). Ananthakrishnan (1969) in "*Indian Thysanoptera*" has recorded 525 species, under 213 genera, the family-wise break up-being, Aeolothripidae (8 genera, 16 species), Heterothripidae (1 genus, 1 species), Thripidae (82 genera, 205 species) and Phlaeothripidae (122 genera, 303 species). In the present work 647 species under 248 genera are recorded, the family-wise break-up being, Aeolothripidae (9 genera, 18 species), Merothripidae (2 genera, 3 species), Heterothripidae (2 genera, 2 species), Thripidae (96 genera, 237 species) and Phlaeothripidae (139 genera, 387 species).

The various landmarks in the history of classification of Thysanoptera have been referred to in detail by Ananthakrishnan (1969) and suffice it to mention that there has been considerable overall unanimity of approach in adopting this classificatory system as proposed by Priesner (1948, 1960, 1964).



Differential distribution of species A. In relation to habitat. B. in relation to zoo geography. C. in relation to family (values expressed in percentage of degrees).

CLASSIFICATION OF THYSANOPTERA  
(after Priesner, 1964)

|             |   |                           |
|-------------|---|---------------------------|
| Suborder    | : | <i>TEREBRANTIA</i>        |
| Superfamily | : | <b>Aeolothripoidea</b>    |
| Family      | : | <b>Aeolothripidae</b>     |
| Subfamily   | : | <i>EROTIDOTHRIPINAE</i>   |
| „           | : | <i>MELANTHRIPINAE</i>     |
| Tribe       | : | MELANTHRIPINI             |
| Subfamily   | : | <i>MYMAROTHRIPINAE</i>    |
| „           | : | <i>AEOLOTHRIPINAE</i>     |
| Tribe       | : | OROTHRIPINI               |
| „           | : | FRANKLINOTHRIPINI         |
| „           | : | AEOLOTHRIPINI             |
| Superfamily | : | <b>Merothripoidea</b>     |
| Family      | : | <b>Merothripidae</b>      |
| Superfamily | : | <b>Thripoidea</b>         |
| Family      | : | <b>Heterothripidae</b>    |
| Tribe       | : | HETEROTHRIPINI            |
| „           | : | HEMITHRIPINI              |
| „           | : | OPADOTHRIPINI             |
| „           | : | FAURIELLINI               |
| Family      | : | <b>Thripidae</b>          |
| Subfamily   | : | <i>THRIPINAE</i>          |
| Tribe       | : | CHIROTHRIPINI             |
| „           | : | DENDROTHRIPINI            |
| „           | : | SERICOTHRIPINI            |
| Subtribes   | : | SERICOTHRIPINA            |
| „           | : | SCIRTOTHRIPINA            |
| Tribe       | : | THRIPINI                  |
| Subtribe    | : | ANAPHOTHRIPINA            |
| „           | : | THRIPINA                  |
| Subfamily   | : | <i>PANCHAETOTHRIPINAE</i> |
| Suborder    | : | <i>TUBULIFERA</i>         |
| Superfamily | : | <b>Phlaeothripoidea</b>   |
| Family      | : | <b>Phlaeothripidae</b>    |
| Subfamily   | : | <i>PHLAEOTHRIPINAE</i>    |
| Tribe       | : | PHLAEOTHRIPINI            |
| Subtribe    | : | PHLAEOTHRIPINA            |
| „           | : | STICTOTHRIPINA            |
| „           | : | THILAKOTHRIPINA           |
| „           | : | ALEURODOTHRIPINA          |
| „           | : | MACROPHTHALMOTHRIPINA     |

|           |   |                       |
|-----------|---|-----------------------|
| Tribe     | : | HAPLOTHRIPINI         |
| „         | : | PLECTROTHRIPINI       |
| „         | : | LEEUWENINI            |
| „         | : | HYDIOTHRIPINI         |
| „         | : | HOPLOTHRIPINI         |
| Subtribe  | : | HOPLOTHRIPINA         |
| „         | : | KIADOTHRIPINA         |
| „         | : | MESOTHRIPINA          |
| „         | : | CERCOTHRIPINA         |
| „         | : | WILLIAMSIELLINA       |
| Subfamily | : | <i>IDOLOTHRIPINAE</i> |
| Tribe     | : | COMPOSOTHRIPINI       |
| „         | : | CRYPTOTHRIPINI        |
| Subtribe  | : | CRYPTOTHRIPINA        |
| „         | : | GASTROTHRIPINA        |
| „         | : | DICERATOTHRIPINA      |
| „         | : | ALLOTHRIPINA          |
| Tribe     | : | MEGATHRIPINI          |
| Subtribe  | : | IDOLOTHRIPINA         |
| „         | : | MEGATHRIPINA          |

#### TAXONOMIC CRITERIA

Comparative morphological studies involving both adults and immature stages have thrown sufficient light on numerous characteristics useful in the determination of taxa from the superfamily to the subspecific level. It would be appropriate here to outline in detail some of the essential taxonomic criteria which are and could be profitably used in taxonomic studies on Thysanoptera.

1. Striking patterns of sculpture in different genera and species, taking the form of distinct polygonal reticulations, wrinkles or irregular corrugations, anastomosing or transverse striae or granulations (Text-figs. 8 and 9).

2. Cuticular colouration ranging from dark blackish brown to pale or hyaline yellow and intermediate shades from greyish brown or yellowish brown; hypodermal orange or red pigmentation often extending in patches or throughout the body (very characteristic of immature stages). Depending on sex, age and habitat of species, the body colouration may considerably vary in the same species.

3. Number, size, position, shape and colour of the body setae in adults and in the immature stages are very important. Depending upon the kind of setae present they are variously referred to as hair, seta, flagellum, bristle, spine and cilia. Various types of setae are recognised according to the nature of the setal apices, as pointed, knobbed or club like, blunt or rounded, lanceolate or lancet-like, infundibuliform or funnel-like, grooved, forked, fimbriate and spatulate or spoon-like.

4. The shape and size of the head varies with species ranging from strongly convex dorsally or depressed as in many species; it may be much longer than broad or as broad as long or strongly transverse, rarely spherical (*Uzelothrips*). Rarely the head and prothorax form a compact spherical mass (*Franklinothrips*) or head and prothorax almost rectangular (*Mymarothrips*). Anterior margin of head may be straight or rounded, rarely produced into a distinct cephalic process in the Terebrantia and more commonly so in the Tubulifera. Eyes with varying number of ommatidia, convex or flattened, sometimes considerably extended ventrally or contiguous in front (*Macrophthalmothrips*).

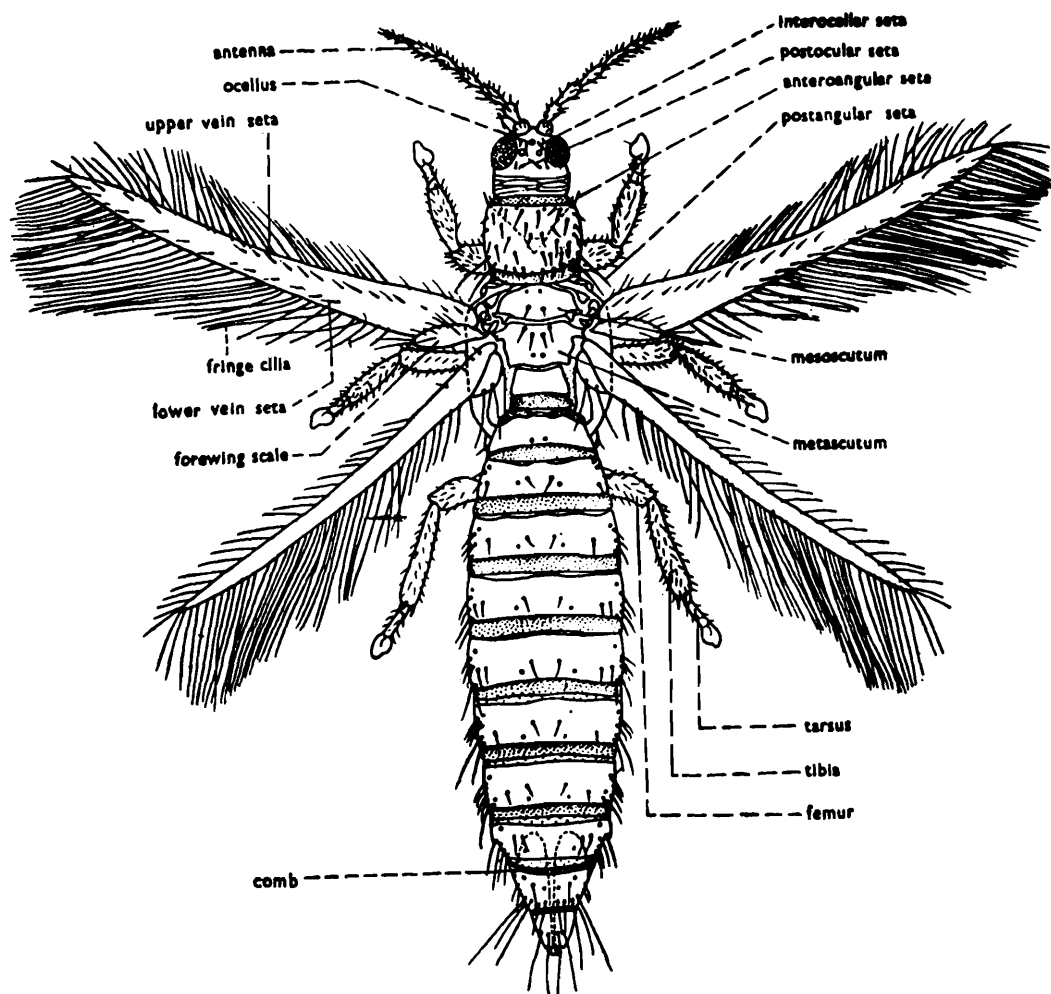
5. Cephalic chaetotaxy forms an essential consideration in taxonomic assessment, the major setae being the *anteocellars* one or two pairs in front of median ocellus; *interocellars*—one pair between the ocelli and the *postocellars* often forming a series from below the ocelli and reaching the cheeks or genae (Text-fig. 1). One pair of well developed *postoculars* (rarely two pairs) present in Tubulifera and cheek setae are frequently well developed, sometimes placed on prominent warts. *Anteocellars* and *interocellars* may or may not be present.

6. The number of antennal segments may vary from 6–9 in the Terebrantia and are 4–8 segmented in the Tubulifera. The terminal segments or the style may be 1, 2 or 3 segmented in the Terebrantia and some of the apical segments in aeolothripids may form a unit. The shape, size of the segments, their chaetotaxy and number and nature of sense-cones are important taxonomic feature. The sensoria may take the form of sensory areas or cones, better developed in segments 3 & 4 and more poorly developed in other segments. The sense cones may be simple or forked and may be short to very much elongate (Text-fig. 10). Sexual dimorphism is sometimes characteristic of antennal segments — segments 4 and 5 asymmetrical in male (*Exothrips*) or segment 6 very much enlarged and highly setose (*Rhopalandrothrips*).

7. The nature of the mouthcone, whether short or broad or long and pointed or very narrowly pointed or biconcave is an essential consideration. Very rarely the mouthcone is very short and the maxillary stylets confined to mouthcone, while at the other extreme, the stylets may be so long and extended as to be kept coiled within the head. The presence or absence of the maxillary bridge connecting the maxillary stylets is also important.

8. The shape, size and the presence or absence of sutures on the prothorax are taxonomically important. While it is undivided in the majority of Terebrantia (except in *Aeolothrips*, *Merothrips* etc.), in the Tubulifera there is a large notal plate at the posterior angles of which are the triangular epimeral plates. The nature of the probasisternum (Text-fig. 4B) and the presence or absence of praepectus or breast plate and the spinasternum are of taxonomic value. Prothoracic chaetotaxy is an important taxonomic criterion, the setae being referred to as *anteroangulars*, *anteromarginals*, *midlaterals*, *postangulars*, *posteromarginals* and *surfacial setae*; of the two pairs of postangular setae in the Tubulifera, the outer pair form the epimerals situated on the epimeral plate, the inner being the *postangulas* (Text-figs. 1 & 2).

9. The nature of the pterothoracic endosternites and the presence or absence of the median spinula (Text-figs. 4A) are of taxonomic value as also the notal sculpture and the shape of the sternites.

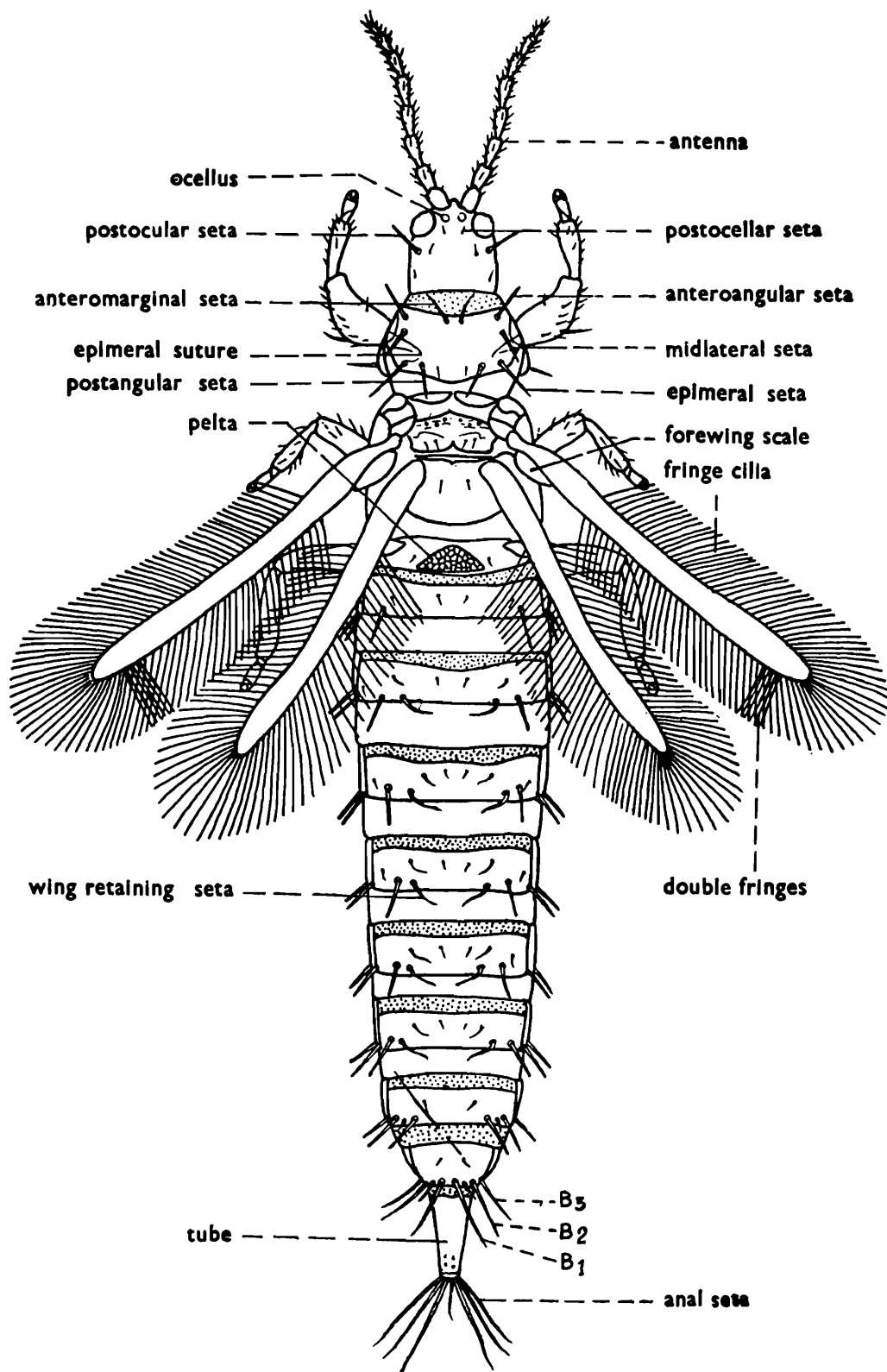


*Text-fig. 1.* Dorsal view of a typical Terebrantian.

10. The nature of the forelegs in both sexes, the extent of specialisation of the femora, tibiae and tarsi in the possession of various degrees of armature, from setal clothing to strong, bizarre teeth are important from the taxonomic view point, a large series of individuals being often necessary to assess the degree of intraspecific variation, taking into consideration the impact of oedymmerism and gynaecoidism in males and of major and minor forms in females.

11. The shape of the wing, whether broadly rounded or pointed, parallel-sided or constricted at middle, racket-like or more expanded at apex or more or less uniformly narrow, pointed or rounded at apex are aspects meriting taxonomic value. The straight or curved nature of the fore and hind margins of wing of Terebrantia as also their clear, transparent or banded nature, presence or absence of microtrichia and rarely of reticulations and callosities are important considerations. The number and position of cross veins in the Aeolothripidae and to a limited extent in the Thripidae and the chaetotaxy of the forewing, with the costal upper and lower vein setae are equally important.

The wings are better defined in the Tubulifera and taxonomically identifiable into the haplothripine (with a median constriction), mesothripine (narrow form base to middle and then parallel-sided), stictothripine (twisted at middle) and phlaeothripine (uniformly parallel-sided) types. The number



*Text-fig. 2.* Dorsal view of a typical Tubuliferan.

of duplicate cilia or double fringes on the hind margin of the forewing of Tubulifera and the number and position of basal wing setae of the forewings are of taxonomic value.

12. The nature of the pleurites in the Thripodea with the numerous teeth-like processes ranging from blunt teeth to a typically dentate form has a taxonomic basis. Glandular areas on sterna III–VII are very characteristic in the males of Terebrantia—their shape, size, number and distribution being significant features (Text-fig. 11A–F). Well developed cuticular appendages (Text-fig. 11G, H, L) on segment IX in males of some genera of Terebrantia are notable characters for determination, these being in the form of dark, stout, chitinous, thorn-like setae or lateral horn-like productions. Dense rows of microtichia (Text-fig. 14G) on tergites near the hind margin provided with a comb of hair-like or tooth-like prominences, or comb plates or scallops (Text-fig. 11E and Text-fig. 12G) or broad triangular lobes or a continuous or discontinuous posterior marginal flange have significant taxonomic implications, besides the number and nature of the accessory setae of tergites and sternites (Text-fig. 16G). The number of setae on the dorsum of segment IX as well as the 3 pairs of lateral setae  $B_1$ ,  $B_2$ ,  $B_3$  are equally significant, particularly their shape, size and arrangement. The reduced tergite I in Tubulifera called pelta (Text-fig. 2) which assumes different shapes is an useful taxonomic character. Small bristleless pores often called *haplopores* on the tergites I–IX of Tubulifera is an additional feature. In the Tubulifera, the shape and size of tube as well as the degree of development of the anal setae are considered good taxonomic characters.

13. The nature of the ovipositor whether upwardly or downwardly directed, whether vestigial or well developed is often an important feature for identification of species in many cases. The shape and size of the aedeagus as well as the lateral parameres in the male, the nature and degree of armature of the epiphallus are equally useful features.

14. The degree of differentiation of the cephalic and thoracic plates, the disposition of cephalic and thoracic setae, presence or absence of chitinous plate around setal origin, size and shape of antennal segments, size, shape and chaetotaxy of terminal abdominal segments of the II<sup>nd</sup> instar larvae add considerably to the confirmation of the taxa (Text-figs. 5, 6 & 7).

#### METHODS OF COLLECTION AND PRESERVATION

Thrips inhabit a variety of habitats like flowers, leaves, dry leaf litter, decaying bark and twigs, aerial roots, grass and within plant galls. The methods of collection vary according to their habitat.

The common method of collecting thrips is by beating foliage or inflorescence, dead and decaying or fungus infested branches of trees on a stiff white paper/hard board or plastic sheet and picking the material by a fine moistened camel hair brush.

A number of fixatives are in use, some of which commonly used are as follows:—

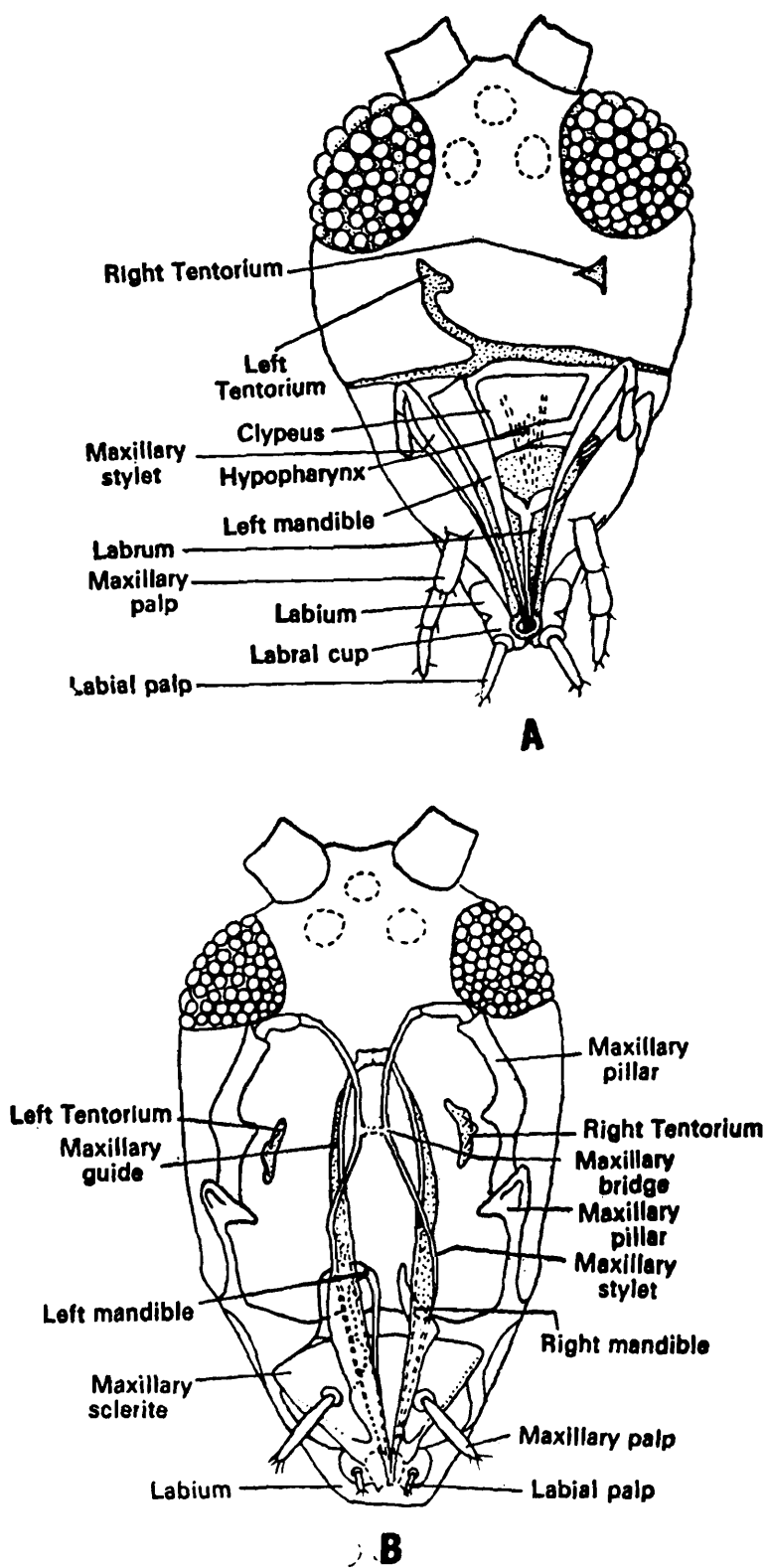
(1) *AGA fluid*: Prepared by adding 90% ethyl alcohol 8 parts, distilled water 5 parts, glycerine 1 part and glacial acetic acid 1 part. Mound and Pitkin (1972) recommended 60% ethyl alcohol 10 parts instead of 90% alcohol 8 parts. Specimens preserved in AGA need to be mounted or transferred to 70% alcohol within one month to avoid decoloration and disintegration of internal parts.

(2) 10% ethanal + 0.1% Triton X (1 in 100 part of 10% ethanol) solution. The advantage of the solution is that all the appendage including the male genitalia is extended. It is necessary to transfer the material in 70% alcohol within one month.

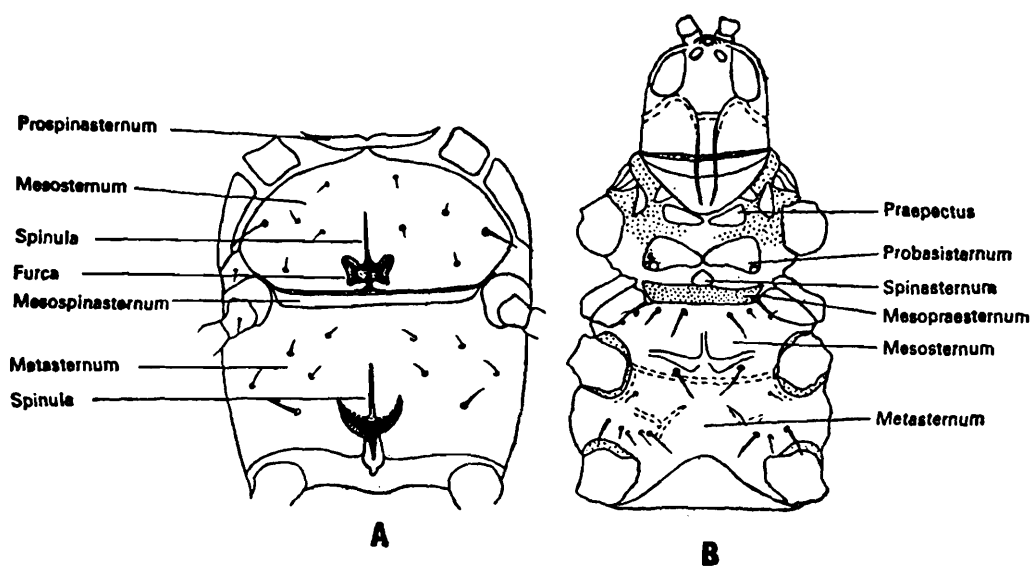
(3) 50–60% alcohol with 0.5% ethyl acetate to prevent stiffness and stored in 60–70% alcohol.

The stored material after dehydration is cleared in clove oil and mounted in xylol-canada balsam. Xylol, though advocated, tends to shrink the material. Oil of cloves has yielded very good results as it does not harden the specimens very much and allows easy manipulation of parts while in balsam. Priesner (1960) advocated the use of carboxyl (1 part of phenol to 3 parts of xylol) for clearing.

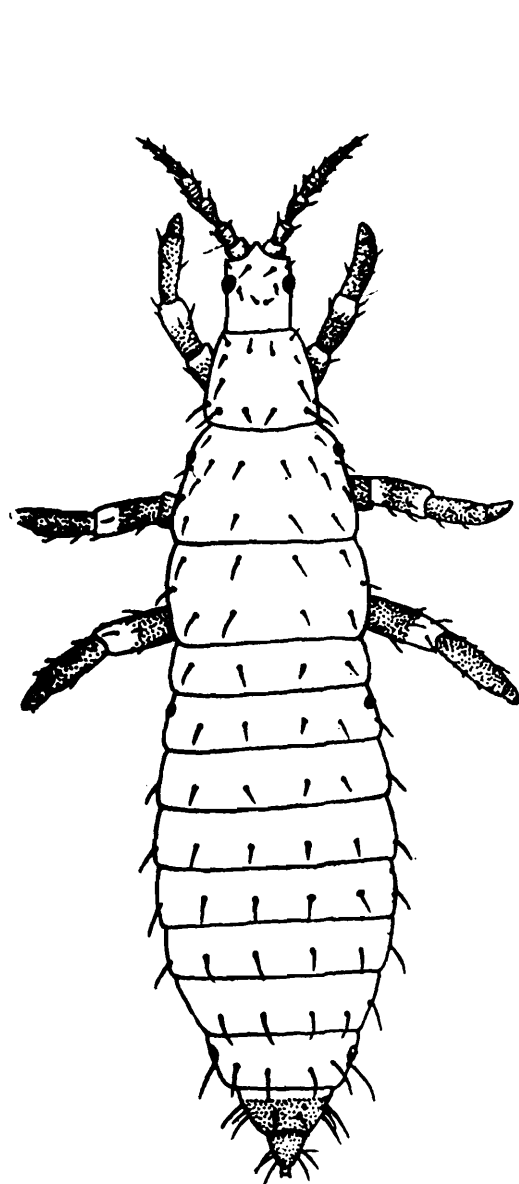
In bigger, dark specimens with a highly sclerotized cuticle, it is better to pierce a small hole through the abdomen of every specimen, to allow better penetration of the liquids, whether the specimens are to be macerated in sodium hydroxide or not. Specimens well macerated in sodium hydroxide, but not losing all shape and form, not retaining a certain amount of colour, and with wings and legs well spread are very valuable for study. For purpose of maceration 5–10% sodium hydroxide is used. The material is then washed in 10–15% acetic acid to neutralise the base, next in distilled water and subsequently passed through 30, 50, 70, 90 and 98% alcohols for dehydration, cleared in clove oil and mounted in xylol-canada balsam. The time sequence in the alcohol series may be one hour in 70% (for material in 70%), 2–4 hours in 96% according to the size of the specimens, 1–2 hours in absolute alcohol-clove oil mixture to avoid shrinkage while clearing, 1–2 hours in clove oil in the case of very small specimens and 10–12 hours in the case of large specimens. Good results have also been obtained from using a mixture of two parts of hydrogen peroxide and one part of sodium hydroxide, giving 5–20 hours according to the size of the specimen and washing cleared material for 3–4 hours in distilled water and subsequently through the alcohol series. Heming (1969) recommends a slightly modified technique which is basically that of Hartwig as modified by Faure.



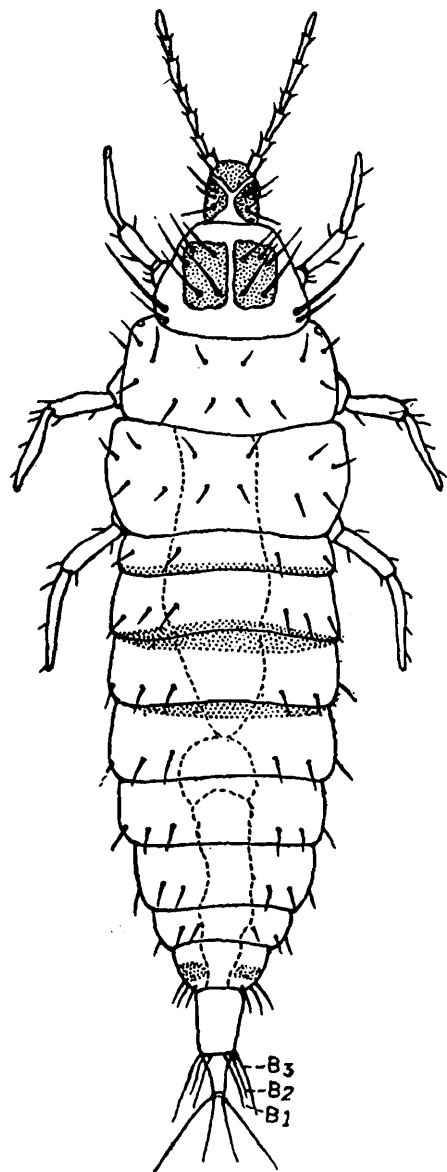
Text-fig. 3. Mouth parts of Thysanoptera. A. Terebrantian B. Tubuliferan.



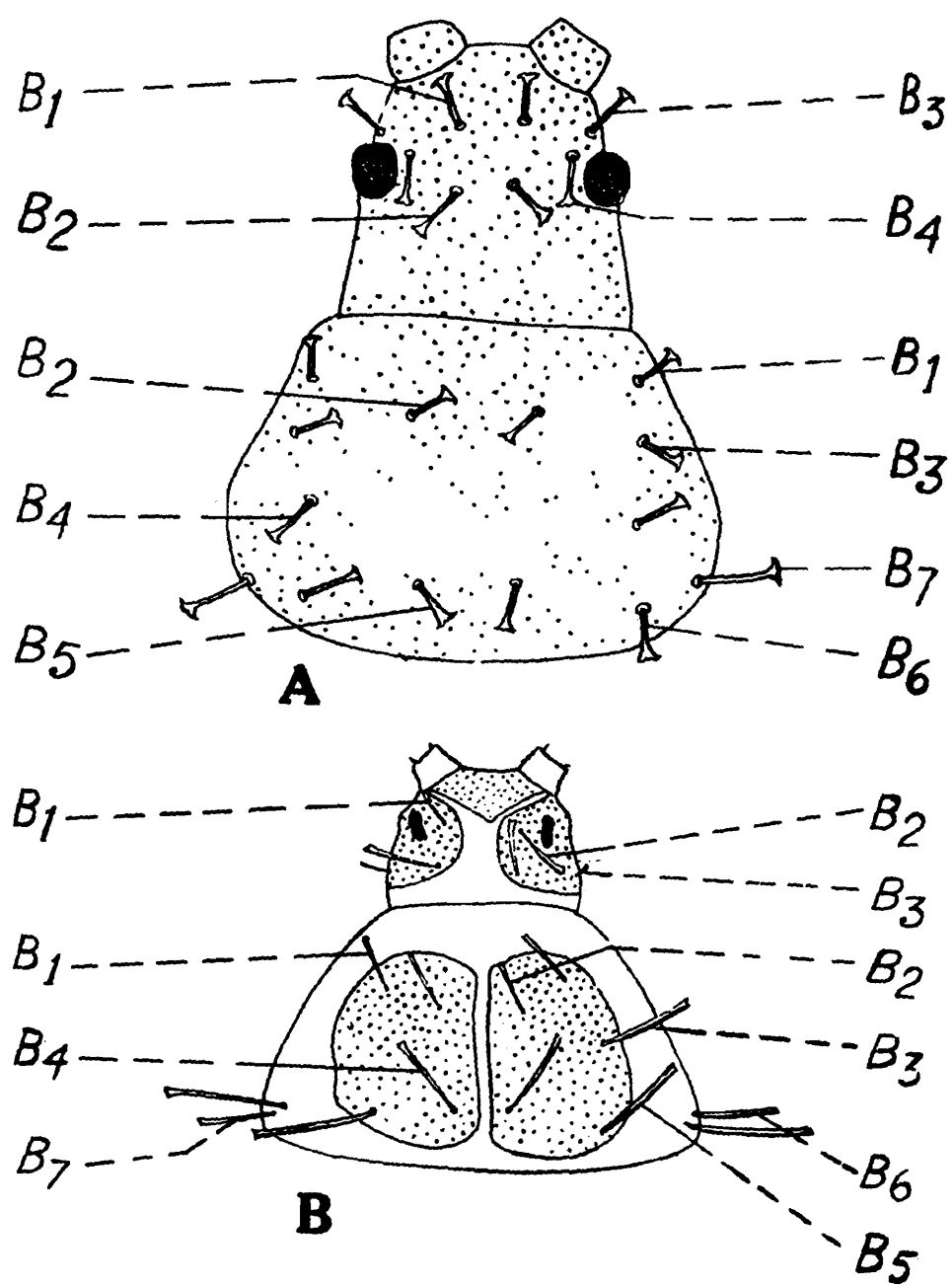
*Text-fig. 4.* A. Pterothorax of Terebrantia depicting different structures. B. Ventral view of head & thorax of Tubulifera depicting different structures as adopted in the key.



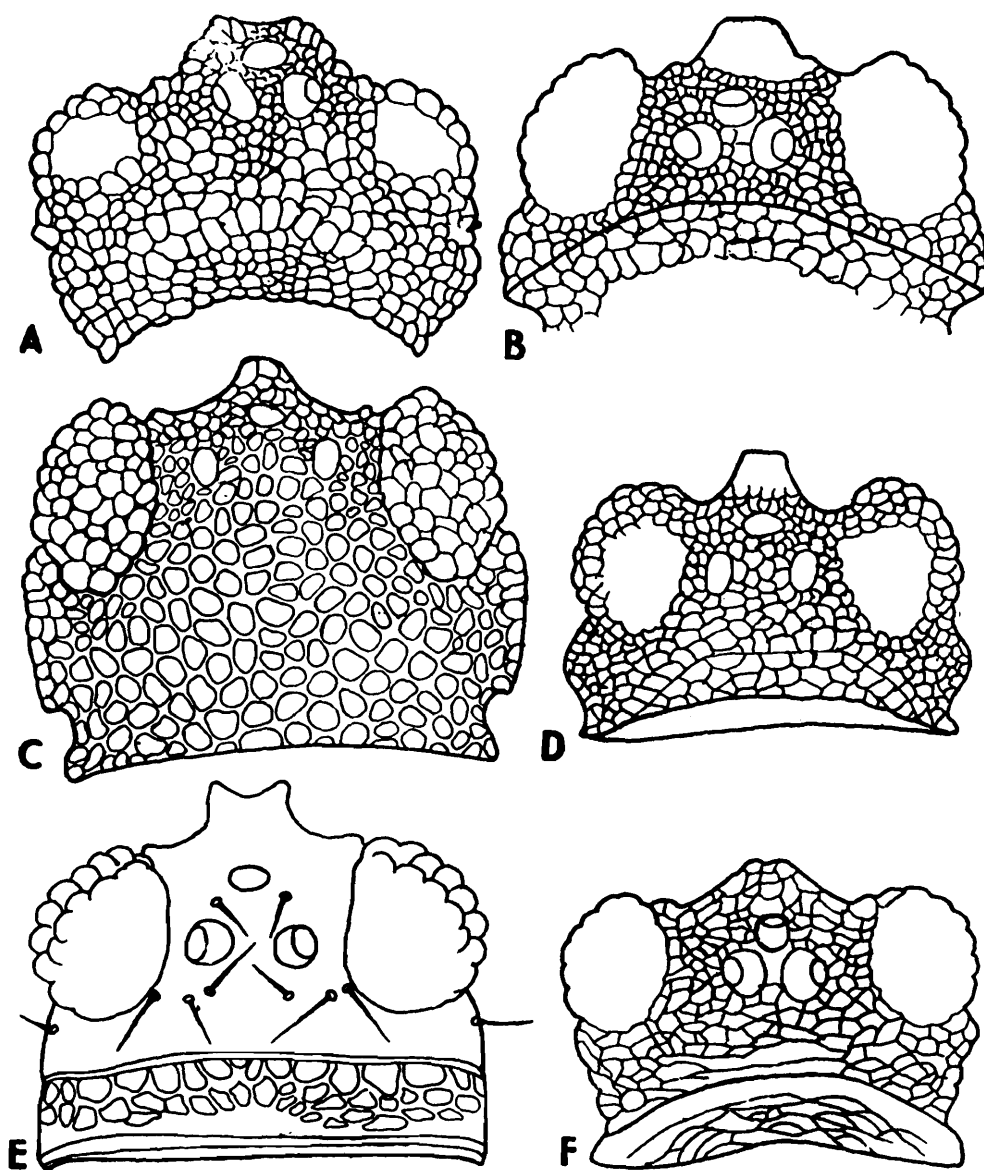
*Text-fig. 5.* Dorsal view of a typical Terebrantian second instar larva.



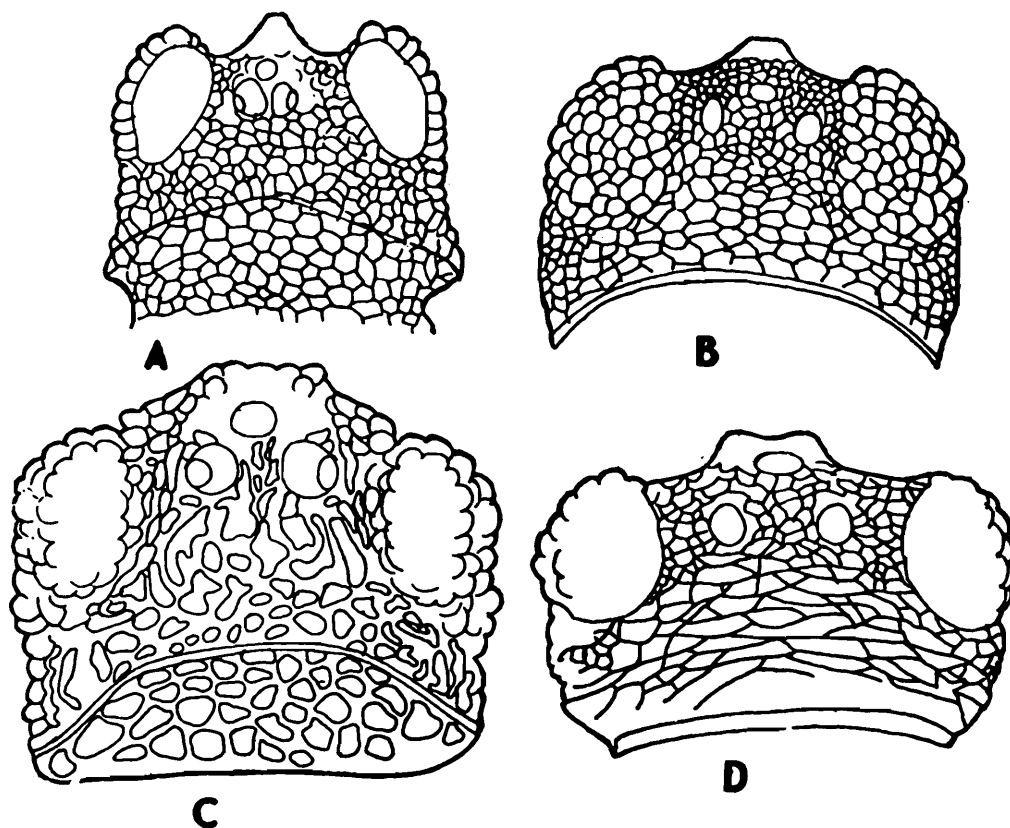
*Text-fig. 6.* Dorsal view of a typical Tubuliferan second instar larva.



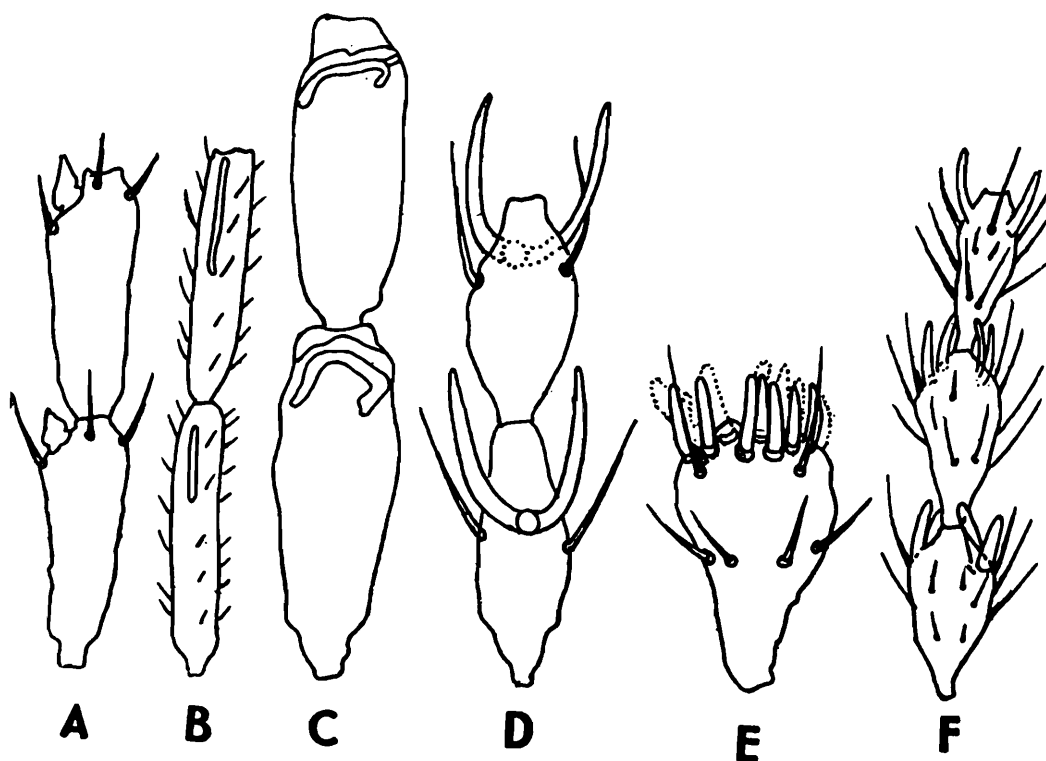
*Text-fig. 7.* Dorsal view of head & pronotum of second instar larva of Thysanoptera.  
A. Terebrantian. B. Tubuliferan.



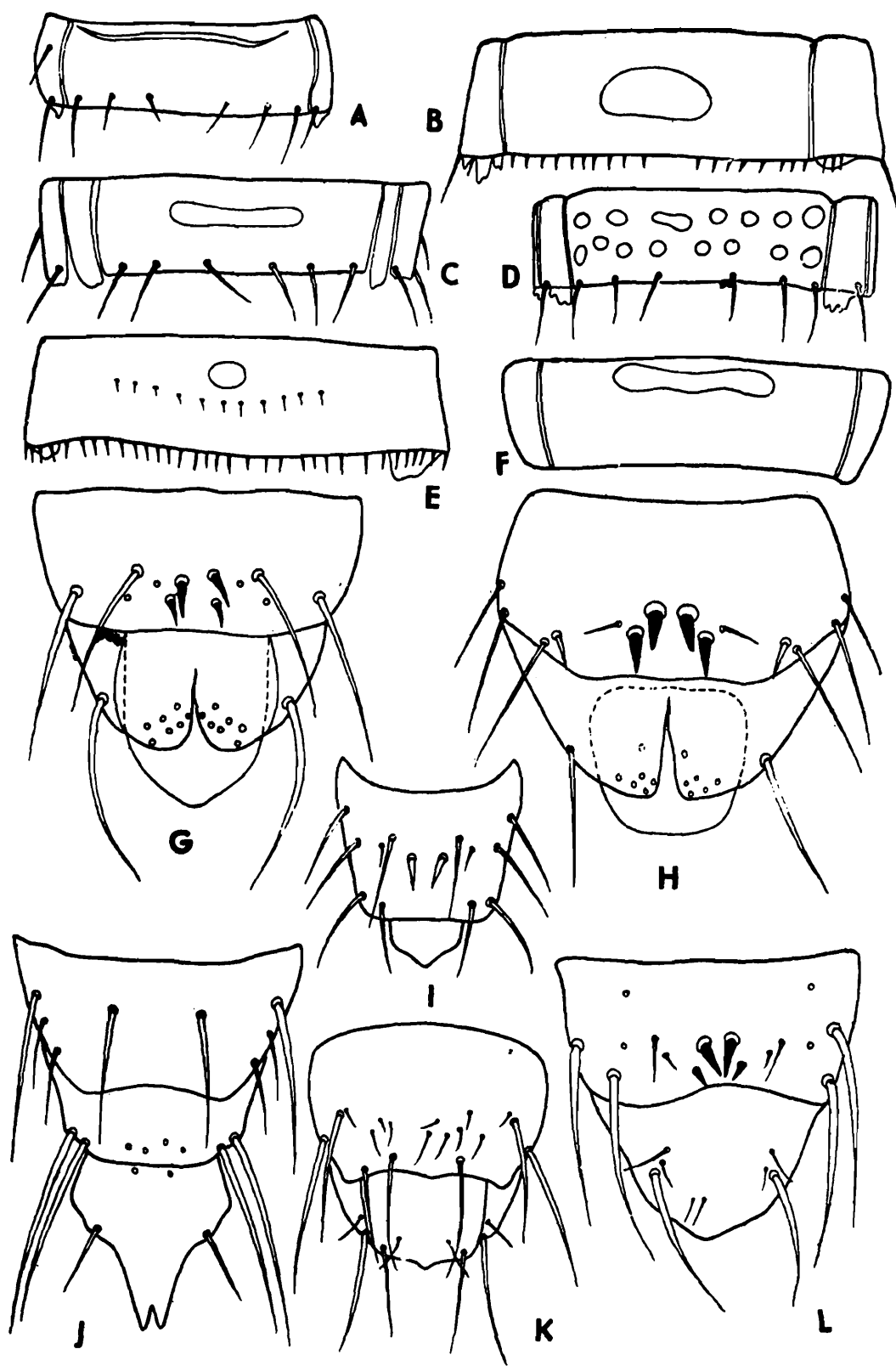
Text-fig. 8. Sculpture of head of Terebrantian. A. *Astrothrips parvilimbus*.  
 B. *Helionothrips kadaliphilus*. C. *Heliothrips haemorrhadalis*. D. *Hercinothrips bicinctus*.  
 E. *Monilothrips kemp*i. F. *Panchastothrips indicus*.



Text-fig. 9. Sculpture of head of Terebrantian. A. *Phibalothrips peringnei*. B. *Retithrips syriacus*. C. *Rhipiphorothrips cruentatus*. D. *Selenothrips rubrocinctus*.



Text-fig. 10. Different types of sensoria of antennal segment 3 & 4. A. *Adiheterothrips jambudripae*, B. *Aeolothrips nigricornis* C. *Melanthrips affluens*. D. *Megaphysothrips subramanii*. E. *Ecacanthothrips tibialis* (segment 3). F. *Hoplandrothrips indicus*.



Text-fig. 11. Figures A-F. Abdominal sternite VI of male of Teribrantia showing glandular area. A. *Bathrips jasmineae*. B. *Sciothrips cardamomi*. C. *Thrips (Isothrips) orientalis*. D. *Taeniothrips claratris*. E. *Microcephalothrips abdominalis*. F. *Retithrips syriacus*. Figures G-L. Terminal abdominal segments of male of Terebrantia. G. *Anaphothrips sudanensis*. H. *Monilothrips kempi*. I. *Bathrips jasmineae*. J. *Taeniothrips claratris*. K. *Thrips (Isothrips) orientalis*. L. *Sciothrips cardamomi*.

## KEY TO THE SUPERFAMILIES AND FAMILIES OF INDIAN TEREBRANTIA

1. Ovipositor curved upwards; forewings broad and rounded at apex, with two longitudinal veins, front margin without the fringe of long hairs. Antennae 9-segmented [Larvae: Antennae 7 segmented, segments 3-7 elongate parallel sided, microsetulae on segments 3-7 distinct]. ... .. Superfamily Aeolothripidae Hood  
Family Aeolothripidae Uzel
- Ovipositor curved downwards. Wings more or less pointed at apex; foremargin with the fringe of hairs present. Antennae 6 to 9-segmented. ... .. 2
2. Antennal segments moniliform, 8 or 9 segmented, style absent; segments 3 and 4 with a tympanum-like area at apex, without sense cone; fore and hind femora greatly enlarged; ovipositor weak, abdomen blunt. ... .. Superfamily Merothripidae Pries-  
ner, Family Merothripidae Hood
- Antennal segments not moniliform; style 1 to 3-segmented, distinct. Ovipositor well developed. ... Superfamily Thripidae Hood

## KEY TO THE FAMILIES OF THRIPOIDEA

- Antennae without sense cones or with short triangular ones. Antennae 9-segmented. Foretarsus usually with a claw-like appendage at base of second segment. ... .. Family Heterothripidae  
Bagnall
- Antennae with slender sense cones, which are simple or forked. Antennae 6 to 9-segmented. Foretarsus sometimes with a claw-like appendage [Larvae: Antennae 6 or 7 segmented, segments 3-5 much shorter, never parallel sided]. ... .. Family Thripidae Uzel

## KEY TO THE SUBFAMILIES OF AEOLOTHRIPIDAE

- Antennal segments clearly separate, not forming a close unit at apex, body with prominent setae; vertex of head with at least one pair of conspicuous setae; foretibiae without tooth, but mostly with a strong spur at apex. [Larvae: Median pair of dorsal spines of abdominal segment IX longer than lateral pair.] ... .. Subfamily Melanthripinae  
Bagnall
- Antennae more or less slender, with some of the terminal segments forming a unit. Segments 3 and 4 without raised setae. Body without conspicuous setae. Wings about parallel-sided, sometimes slightly narrowed in basal half, but never distinctly racket-like. [Larvae: Dorsal spines of abdominal segment IX subequal.] ... .. Subfamily Aeolothripinae  
Bagnall
- Antennae stout, with conspicuous rigid setae on intermediate segments. Wings distinctly widened towards apex, racket-shaped. Head not produced in front of eyes; a pair of long interocular setae distinct. Prothorax not reduced. [Larvae: Abdominal segment IX without dorsal spines.] ... Subfamily Mymarothripinae  
Bagnall

KEY TO THE SUBFAMILIES OF THRIPIDAE

- Dorsum of body not polygonally reticulate, almost with transverse striae. Antennae 7 or 8 segmented, rarely 9; terminal antennal segments not long and thin. [Larvae: Antennae 6 segmented, segments 5 and 6 short Abdominal segment X never tubiform, blunt or conical, without anal ring.] ... Subfamily Thripinae Karyn
- Dorsum of body deeply reticulate, with polygonal areas; terminal antennal segments long and thin, needle-like. [Larvae: Antennae 7 segmented, terminal segments elongate, 7 needle-like. Abdominal segment X always tubiform with a distinct anal ring.] ... Subfamily Panchaetothripinae Karyn

KEY TO THE GENERA OF THE FAMILY AEOLOTHRIPIDAE

- 1. Forewings almost parallel sided, with or without cross bars ... 2
- Forewings not parallel sided, but clearly widened at apex. ... 7
- 2. Sensoria on 3 and 4 not linear, but circumpolar. Head and pronotum with conspicuous setae. Distal antennal segments clearly separate; Foretibia at apex with a strong spur. Maxillary and labial palp 2-3 segmented (Tribe Melanthripini). [Larvae: Antennal segment 2 with 2-4 rows of microsetulae. Cheeks arched. Pronotum with 7 pairs of setae. Body setae long. Integument with microsetulae, but devoid of plaques. Spines on abdominal segment IX large.] ... *Melanthrips* Haliday
- Forewings without cross bars. ... Subgenus *Melanthrips* s.str.
- Forewings with cross bars ... Subgenus *Dichropterothrips* Priesner
- Sensoria on 3 and 4 linear or sinuate. Head and pronotum with conspicuous setae. ... 3
- 3. Terminal antennal segments not forming a close unit. Sensoria on 4 apically curved. Accessory setae present laterally on abdominal sternites VI and VII. Forewings with cross bars. ... *Gelothrips* Bhatti
- Terminal antennal segments forming a close unit... ... 4
- 4. Head produced in front of eyes; antennae 7-9 segmented, bearing rigid setae, 3 & 4 ventrally at apex with a broad lens-shaped sensory area; maxillary palp 2-segmented, labial palpi 3-segmented. Wings moderately broad, fringe straight, more on costal margin ... *Indothrips* Bhatti
- Head not produced. Antennae without rigid setae. Forwing with cross bars on longitudinal bars. Maxillary palp 3-segmented, labial palp 4 segmented, (Tribe Aeolothripini) ... 5
- 5. Forewings with cross bars. ... 5
- Forewings with a dark longitudinal band along posterior margin. Last three antennal segments forming a unit; sensory areas on 3 and 4 clearly sinuate, confining to the entire length of the segments and incompletely encircling the apex of each

- segment like a hook; sensory areas on 5, 6, 7 and 8 clearly elongate. Segments 5-8 clearly shorter than 4 and 5. Maxillary palp 5-segmented. [Larvae: Pronotum with 6 pairs of setae. Antennal segment 2 without microsetulae. Head with 3 pairs of setae Abdominal segment IX with 2 pairs of subequal spines.] ... .. *Erythrothrips* Moulton  
Subgenus *Aduncothrips*  
Ananthakrishnan
6. Sternite VII of female with two pairs of accessory setae close to mid line and no accessory setae laterally on VII sternite. Sternites III-VI without accessory setae. Males with abdominal segment IX with or without claspers. ... .. *Aeolothrips* Haliday
- Only one pair of accessory setae present laterally on sternite VI. Chaetotaxy of abdominal sternum VII differing from *Aeolothrips*. Metanotum with a very characteristic sculpture giving a 'V' pattern. Foretibia with a pair of stout spine like setae at apex. ... .. *Streothrips* Bhatti
7. Forewings very much widened at apex, racket-like; antennae stout with conspicuous rigid bristles. Maxillary palp 8-segmented; labial palp 4-segmented. [Larvae: Antennal segment 2 devoid of microsetulae B<sub>1</sub> of head short; B<sub>2</sub> much longer. Head with 4 pairs of setae. Abdominal segment IX without spines.] ... .. *Mymarothrips* Bagnall
- Forewings not very much widened at apex. ... .. 8
8. Antennae long and thin; segment 3 nearly ten times as long as wide; sensory areas on 3 and 4 extending along the whole length of the segments, sinuate or vermiform. Head rounded, retracted within prothorax. Basal abdominal segments narrow, appearing ant-like in the females, not constricted in the males. Maxillary palp 3-segmented (Tribe Franklinothripini). [Larvae: B<sub>1</sub> & B<sub>2</sub> of head subequal. Antennal segment 2 without microsetulae. Head with 4 pairs of setae. Abdominal segment IX without spines.] ... .. *Franklinothrips* Back
- Antennae not long and thin. Maxillary palp with 7-8 segments, a large basal segment, followed by repeatedly divided terminal segments. Labial palp 3 to 5 segmented (Tribe Orothripini). ... .. 9
9. Forewings narrowest beyond scale, gradually widening at apex. Antennal segments 6-9 forming a close unit. Segments 3 and 4 with sinuate or vermicular sensory areas. Maxillary palp 8-segmented, sutures separating the distal segments indistinct... .. *Allelothrips* Bagnall
- Forewings clearly widened at apex. Maxillary palp 7-segmented, labial palp 3 to 5-segmented. Antennal segments 3 and 4 with two elongate sensory areas. ... .. *Orothrips* Moulton

### Family MEROTHRIPIDAE

1. Head longer than pronotum. Antennae 9-segmented. Pronotum rectangular, without longitudinal suture; posterior margin with at least 6 pairs of setae. Fore and hind femora enlarged; foretibiae at inner margin at apex with a hook-like tooth. Abdominal sternites without accessory setae. ... .. *Erotidothrips* Priesner

- . Head usually shorter than pronotum. Antennae 8-segmented. Eyes normal in macropterous forms, reduced (sometimes to 4 ommatidia per eye) in the apterous form. Pronotum trapezoidal, widest at posterior margin with a line of suture in each lateral margin. Fore and hind femora enlarged; foretibiae at apex with a small to moderate sized tooth, largest in males. Males are always apterous, females macropterous rarely brachypterous and apterous. Forewings when present without microsetae. ... .. *Merothrips* Hood

Family HETEROTHRIPIDAE

- 1. Prothorax with a series of posteromarginal setae, outermost longest and two prominent setae at each anterior angle. Mouthcone short. Maxillary palpi 3-segmented. Forewings with two long veins, regularly set with setae. ... .. *Holarthrothrips* Bagnall
- . Prothorax without conspicuous setae at posterior margin, with one very short pointed seta at each anterior angle, sides arched. Mouthcone extended to the middle of prosternum. Maxillary palpi 5-segmented, long. Forewings upper vein with 18–20 and lower with 15 setae. ... .. *Adiheterothrips* Ramakrishna

Family THRIPIDAE  
Subfamily THRIPINAE

- 1. Wings dendrothripoid, with posterior margins of forewings straight, costal margins curved at apex. Sides of abdomen devoid of microtrichia (except in *Pseudodendrothrips*) (Tribe Dendrothripini). ... .. 2
- . Wings not dendrothripoid; forewings with costal margins straight; fringes mostly inserted on costal margin. ... .. 6
- 2. Abdominal tergites VII and VIII with a complete ciliary fringe arranged closely, the rest with fringes wanting only at middle third of each segment. Maxillary palp 3-segmented. Antenna 7-segmented. ... .. *Projectothripoides* Shumsher
- . Abdominal tergites VII and VIII without a complete ciliary fringe. ... .. 3
- 3. Maxillary palp 2-segmented. ... .. 4
- . Maxillary palp 3-segmented, Antenna 8-segmented, 3 and 4 with forked sense cones. Abdominal terga reticulate at sides. Transverse sclerotisation of prosternum entire. ... .. *Parsiiothrips* Bhatti
- 4. Abdominal tergites II–VIII with a short median pair of closely placed setae. Antennae 7–9 segmented. Metathoracic furcae greatly enlarged. Males without sternal glandular areas. Fringe cilia straight inserted on costal margin. ... .. 5
- . Abdominal tergites without the short median pair of setae. Antennae 8-segmented. Wings with fringe cilia arising near margin and cilia of hind margin wavy. ... .. *Asprothrips* Crawford

|     |                                                                                                                                                                                                                                                                                                                                                                                                                                                            |     |     |     |     |                                      |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|-----|-----|--------------------------------------|
| 5.  | Antenna long, narrow, 9-segmented, 3 and 4 with forked sense cones. Prothorax with well developed transverse striae and with a pair of moderately well developed posterolateral setae. Hind tarsi much elongate. Forewings narrow with only a faint upper vein. Abdominal tergite laterally sculptured, weakly so. [Larvae: Antenna 7 segmented. Pronotum with 7 pairs of setae. Abdominal segment III-VII each with 2 pairs of lateral chitinised areas.] | ... | ... | ... | ... | <i>Pseudodendrothrips</i><br>Schmutz |
| —.  | Antenna 7-9 segmented, with a complete or partial suture across segments 6 or 7 in 9-segmented antennae. Prothorax striate, without major setae. Sense cones on 3 and 4 simple or forked. Abdominal tergites predominantly hexagonally reticulate, with granules within reticules generally. Forewings better developed with one or two veins bearing a varying number of setae. [Larvae: Antenna 6 segmented; abdomen without chitinised areas.]          | ... | ... | ... | ... | <i>Dendrothrips</i> Uzel             |
| 6.  | Abdomen with dense rows of microtrichia (Tribe Sericothripini).                                                                                                                                                                                                                                                                                                                                                                                            | ... | ... | ... | ... | 7                                    |
| —.  | Abdomen without dense rows of microtrichia.                                                                                                                                                                                                                                                                                                                                                                                                                | ... | ... | ... | ... | 17                                   |
| 7.  | Prothorax with a more strongly sclerotized central plate. Abdominal segments at posterior margin with a partial or complete comb. Segment IX with more than four pairs of setae. Antenna 7 or 8-segmented (Subtribe Sericothripina).                                                                                                                                                                                                                       | ... | ... | ... | ... | 8                                    |
| —.  | Prothorax without a central sclerotized plate. Abdominal segments without a comb at posterior margin, but with a fine pubescence of minute microsetulae. Segment IX with only three pairs of setae. Antenna 7 or 8-segmented (Subtribe Scirtothripina).                                                                                                                                                                                                    | ... | ... | ... | ... | 15                                   |
| 8.  | Primary setae on abdominal sterna II-VI inserted far ahead of posterior margin. Macropterous.                                                                                                                                                                                                                                                                                                                                                              | ... | ... | ... | ... | 9                                    |
| —.  | Primary setae on abdominal sterna II-VI inserted marginally. Macropterous or brachypterous.                                                                                                                                                                                                                                                                                                                                                                | ... | ... | ... | ... | 10                                   |
| 9.  | Median pair of setae on abdominal terga II-V inconspicuous. Antennal segment 2 with dorsal subbasal seta. Pronotum with a thick transverse apodeme across middle, without blotch. Metasternum with a strong 'V' shaped apodeme. Abdominal terga with all setae inserted far ahead of posterior margin. Sterna II with 2 pairs and other with 3 pairs of setae each.                                                                                        | ... | ... | ... | ... | <i>Corcythrips</i> Bhatti            |
| —.  | Median pair of setae on abdominal terga strongly developed. Antennal segment 2 without dorsal subbasal setae. Pronotum with a well defined blotch area. Metasternum with 'V' shaped apodeme.                                                                                                                                                                                                                                                               | ... | ... | ... | ... | <i>Elbuthrips</i> Bhatti             |
| 10. | Comb of microtrichia along posterior margin complete on abdominal terga I-VIII, comb hair similarly formed throughout each tergum. Metascutum and scutellum completely fused. Pronotum without major setae. Forewings generally with only one longitudinal vein; setae on vestigial lower vein very scarce. Antennae 8-segmented. [Larvae: Setae highly expanded and fan-like. Antennal segment 3 with a pair of expanded setae.]                          | ... | ... | ... | ... | <i>Sericothrips</i> Haliday          |

- |     |                                                                                                                                                                                                                                                                                                                                     |     |     |                               |    |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|-------------------------------|----|
| —.  | Comb of microtrichia on posterior margin of abdominal terga I–VI absent in middle, if present the comb hair much shorter than those laterad of $S_2$ . Metascutum and scutellum separated by a suture, often partial.                                                                                                               | ... | ... | ...                           | 11 |
| 11. | Metasternum medially with a strong 'V' shaped apodeme.                                                                                                                                                                                                                                                                              | ... | ... | ...                           | 12 |
| —.  | Metasternum without such apodeme.                                                                                                                                                                                                                                                                                                   | ... | ... | ...                           | 13 |
| 12. | Antennae 8-segmented. Postoccipital apodeme running along the dorsal series of postocular setae, cutting off a crescentic postociput. Median pair of setae on abdominal terga II–VI not similarly placed. Abdominal sterna III–VII with 3 pairs of primary setae, setae on segment VII placed far ahead of the posterior margin.    | ... | ... | <i>Hydatothrips</i> Karny     |    |
| 13. | Dorsum of head and prothorax sculptured usually with transverse lines. Pronotum often with reticulate sculpture. All setae on female abdominal sternum VII ahead of posterior margin.                                                                                                                                               | ... | ... | ...                           | 14 |
| 14. | Antennae 7-segmented                                                                                                                                                                                                                                                                                                                | ... | ... | <i>Kazinothrips</i> Bhatti    |    |
| —.  | Antennae 8-segmented.                                                                                                                                                                                                                                                                                                               | ... | ... | <i>Neohydatothrips</i> John   |    |
| 15. | Prothoracic setae short, spinula present only on mesosternum. Wings with two longitudinal veins, lower vein with only very few scattered setae.                                                                                                                                                                                     | ... | ... | ...                           | 16 |
| —.  | Pronotum with two strong setae at each posterior angle. Spinula present on both meso- and metasterna. Lower vein setae of forewings numerous.                                                                                                                                                                                       | ... | ... | <i>Ajothrips</i> Bhatti       |    |
| 16. | Antenna 8-segmented, style 2-segmented. Males sometimes with a sickle-like lateral appendage on segment IX of abdomen. [Larvae: Setae mostly pointed $B_8$ of pronotum fimbriate, rest pointed. Only $B_2$ of abdominal segment IX fimbriate.]                                                                                      | ... | ... | <i>Scirtothrips</i> Shull     |    |
| —.  | Antenna 7-segmented, style one segmented. Males without a sickle-like lateral appendage on IX abdominal segment. [Larvae: All setae fimbriate.]                                                                                                                                                                                     | ... | ... | <i>Anascirtothrips</i> Bhatti |    |
| 17. | Body flattened. Head often with a prolongation between foremargin of eyes and bases of antennae. Cheeks converging anteriorly. Antennal segment 2 often produced exteriorly at apex. Eyes flat (Tribe Chirothripini).                                                                                                               | ... | ... | ...                           | 18 |
| —.  | Body seldom flattened. Head rarely with a conspicuous prolongation in front. Eyes not flattened. Antennal segment 2 normal (Tribe Thripini).                                                                                                                                                                                        | ... | ... | ...                           | 24 |
| 18. | Head small, narrow, mouthcone broadened, cheeks short. Antennae stout, with segment 2 often produced exteriorly at apex. Forelegs enlarged; forefemur often produced into a hook like structure at exterior apical angle. Abdominal tergites and sternites often broken with separate scallops at posterior margin. Body depressed. | ... | ... | <i>Chirothrips</i> Haliday    |    |
| —.  | Head normal, not narrow, cheeks longer than eyes; antennae never short and stout, segment 2 normal; forefemur not enlarged. Body not depressed.                                                                                                                                                                                     | ... | ... | ...                           | 19 |
| 19. | Posterior angles of prothorax each with only one seta.                                                                                                                                                                                                                                                                              | ... | ... | ...                           | 20 |
| —.  | Posterior angles of prothorax each with two setae....                                                                                                                                                                                                                                                                               | ... | ... | ...                           | 21 |

|     |                                                                                                                                                                                                                                                                                                                             |                                                    |    |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|----|
| 20. | Sense cones on antennal segment 3 & 4 forked. Vertex drawn forward between bases of antennae. Eyes large, protruding; cheeks more or less corrugated; a conspicuous row of spines along inner margin of each eyes. Abdominal sternites with a transverse row of setae and without the extra pairs of stout bristles. ... .. | <i>Neocorynothrips</i> Ramakrishna and Margabandhu |    |
| 21. | Antennal segments 3 & 4 with forked sense cones. ... ..                                                                                                                                                                                                                                                                     | ...                                                | 22 |
| —.  | Antennal segments 3 & 4 with simple sense cones... ..                                                                                                                                                                                                                                                                       | ...                                                | 23 |
| 22. | Antennal segment 6 enlarged in males. Lower vein of forewing with a series of setae. Teeth on sides of abdominal terga absent. Tergum IX of male with stout spines. ... ..                                                                                                                                                  | <i>Sorghothrips</i> Priesner                       |    |
| —.  | Antennal segment 6 similar in both sexes. Forewings with only 5–6 lower vein setae. Abdominal terga I–V along posterior margin with triangular pointed teeth. Tergum IX of male with stout spines. [Larvae: Head with a distinct anteocular production. Antennal segments widest at apex.] ... ..                           | <i>Sciothrips</i> Bhatti                           |    |
| 23. | Mouthcone long and narrow. Maxillary palp 3-segmented. Abdominal tergites I–VII with complete, but sparse fringe of teeth at hind margin. ... ..                                                                                                                                                                            | <i>Gnomonothrips</i> Ramakrishna                   |    |
| —.  | Abdominal tergites with comb plates as scallops indistinct or absent. Maxillary palpi apparently 2-segmented; males with or without stout, thorn like setae on abdominal tergite IX. [Larvae: Antennal segment 3 longer than wide. Integument smooth.] ... ..                                                               | <i>Neolimothrips*</i> Shumsher                     |    |
| 24. | Prothorax without any major setae, sometimes with one or more moderately long setae at hind angles. Wings with weak setae (Subtribe Anaphothripina). ... ..                                                                                                                                                                 | ...                                                | 25 |
| —.  | Prothorax with major setae and with one or two conspicuous setae at hind angles and usually with 2–6 pairs of postero-marginals (Subtribe Thripina). ... ..                                                                                                                                                                 | ...                                                | 38 |
| 25. | Pronotum without any strong setae ... ..                                                                                                                                                                                                                                                                                    | ...                                                | 26 |
| —.  | Pronotum with at least one conspicuous seta at hind angle. ... ..                                                                                                                                                                                                                                                           | ...                                                | 31 |
| 26. | Body short and broad. Head transverse; wings broad, apex pointed, veins conspicuous, setae very small. Setae on apex of abdomen short. ... ..                                                                                                                                                                               | <i>Psilothrips</i> Hood                            |    |
| —.  | Body not short and broad. Head not transverse. Wings when present without conspicuous veins. Apex of abdomen not very short. ... ..                                                                                                                                                                                         | ...                                                | 27 |
| 27. | Wings and ocelli lacking in both sexes. ... ..                                                                                                                                                                                                                                                                              | ...                                                | 28 |
| —.  | Wings and ocelli present in both sexes. ... ..                                                                                                                                                                                                                                                                              | ...                                                | 29 |
| 28. | Body elongate. Antenna 6 to 8 segmented. Abdominal tergites with many small scattered setae; sternites with accessory setae. Dorsal setae of segment IX fine. ... ..                                                                                                                                                        | <i>Aptinothrips</i> Haliday                        |    |

\* The name *Neolimothrips* is retained in view of the Type of *Bregmatothrips* Hood having distinct scallops on abdomen.

- . Body depressed. Antenna 8-segmented. Eyes strongly protruding. Abdominal tergites I–VIII with transverse row of 8 weak setae on hind margin; sternites II–V with 12–15 minute teeth on hind margin along sides; dorsal setae on segment IX stout. ... .. *Caprithrips* Faure
29. Microtrichia on abdomen well developed. Head not clearly reticulate. Wings not opaque. Setae of apical abdominal segments pointed. [Larvae: Antennal segment 3 clearly longer than 4. Setae grey, short and fimbriate.  $B_1$  and  $B_2$  of abdominal segment IX subequal, fimbriate, borne on raised prominences and alternating with 3 hyaline spines. Posterior margin of abdominal segment IX with cuticular spines or teeth.] ... .. *Dendrothripoides* Bagnall
- . Microtrichia on abdomen vestigial or absent. ... .. 30
30. Head distinctly reticulate. Wings unicolourous, opaque. Setae of apical abdominal segments dilate and fringed. [Larvae: Body with dense red hypodermal pigment. Antennal segments 5 & 6 brown. Integument without microsetulae.] ... .. *Indusiothrips* Priesner
- . Head somewhat reticulate, antenna very short and thick; wings without conspicuous veins. Setae on abdominal apex weak. ... .. *Aneurothrips* Karny
31. Pronotum with one conspicuous seta at hind angle... .. 32
- . Pronotum with two conspicuous setae at hind angle... .. 33
32. Head distinctly produced into a conical process; cheeks below eyes distinctly concave. Antenna 8-segmented, segments 3 and 4 with simple sense cones. Prothorax with one conspicuous and 3 pairs of other small setae at hind angles. Maxillary palp 3-segmented, mouth-cone broadly rounded. ... .. *Amalothrips* Ananthakrishnan
- . Head not produced in front; antenna 8-segmented, the male showing various degrees of sexual dimorphism, with segment IV or V clearly asymmetrical; segment 1 sometimes enlarged in males. Foretibia in one or both sexes with a tooth at apex. [Larvae:  $B_2$  and  $B_3$  of abdominal segment IX and  $B_1$  of abdominal segment X pointed. Antennal segment 3 fusiform. Integument without microsetulae.] ... .. *Exothrips*\* Priesner
33. Antenna 7 segmented. Head much longer than prothorax. Maxillary palpi 2 segmented. Pronotum with 5 pairs of posterior marginal setae (including those at angles). Fera divided. Spinula present on mesosternum. Forewings with series of upper vein setae broadly interrupted and lower vein with only 4 setae. Primary setae  $S_1$  and  $S_2$  on sterna III–VI inserted ahead of posterior margin. ... .. *Capitothrips* Bhatti
- Antenna 6 or 9 segmented ... .. 34
- Antenna 8-segmented. ... .. 35
34. Antenna 9-segmented, style 3 segmented. Upper vein series of setae broadly interrupted.... .. *Palmiothrips* Bhatti

\* Bhatti (1970) has rightly synonymised the genera *Parexothrips* Priesner, *Dantabahuthrips* Shumsher and *Pexothrips* Bhatti under *Exothrips*.

- . Antenna 6-segmented, segment 6 much longer than the rest; upper vein series of setae interrupted; spinulae absent; head a little produced in front. [Larvae: Vertex of head slightly produced between antennae. Body yellow.] ... .. *Priesneriola*  
Ananthakrishnan
35. Head small, strongly transverse; prothorax very long and mouthcone reaching much beyond prosternum. ... .. 36  
Head, mouthcone and prothorax normal. ... .. 37
36. Foretibia at apex with a tooth, more conspicuous in the males Abdominal segment I without serrations. Antennal style not very long. ... .. *Rhamphothrips* Karny
- . Foretibia in both sexes without teeth. Posterior margin of abdominal tergum I serrate without minute teeth. Antennal style long and slender. ... .. *Salpingothrips* Hood
37. Abdominal tergum IX of female without a pair of well developed mediodorsal setae. Antenna 8-segmented (rarely with an incomplete ventral suture across 6 as in *Anaphothrips* s. str. or without it as in *Neophysopus* Schmutz). Wings not very broad, setae on veins weak Males often with one or two pairs of stout thorn like setae on abdominal segment IX. [Larvae: Body with yellow or orange hypodermal pigment. All pronotal setae and B<sub>1</sub>, B<sub>2</sub> and B<sub>3</sub> of abdominal segment IX knobbed.] ... .. *Anaphothrips* Uzel
- . A pair of well developed mediodorsal setae present on female abdominal tergum IX. Antennal segment 1 without setae dorsally near apex. Fenna divided. Mesothoracic sternopleural suture present. Laterotergites and pleurite areas not marked out. Terga and sterna without posterior flanges. Special appendages present on male abdominal segment IX. ... .. *Ascirtothrips* Priesner
- . Wings broad with conspicuous veins and clearly hyaline setae; numerous setae on lower vein. Males with numerous glandular areas in the form of spots or transverse rows of small circular areas. Tergite IX of abdomen without strong setae. [Larvae: Integument with chitinised areas, 1 pair on head and 5 pairs on pronotum.] ... .. *Alathrips* Bhatti
38. Antenna 7-segmented, very rarely 8-segmented due to a secondary split in the style ... .. 73
- . Antenna always 8-segmented, style 2-segmented. ... .. 39
39. Maxillary palp 2-segmented. ... .. 40
- . Maxillary palp 3-segmented. ... .. 47
40. Head with a short process; wings slender, strongly curved. ... .. 41
- . Head without process, wings not curved. ... .. 44
41. Meso-and metasterna without spinula ... .. 42
- . Meso-and metasterna with spinula. ... .. 43
42. Antennal segments 3 and 4 with simple sense cones. Foretibiae at inner apex with long trifid spur. Fenna divided. Wings sparsely set with (costa with 8-11 setae, upper vein with 6-7 and lower vein with 4-5 setae). Posterior margin with a comb of

- microtrichia, complete on posterior terga; post-marginal flanges absent on terga and sterna. Males with multiple gland areas on abdominal sterna. ... .. *Organothrips* Hood
43. Abdominal segment VIII in males with lateral horn like process (cf. *Apothrips* Bhatti). ... .. *Dorcadothrips* Priesner  
Males without the lateral process on VIII. No prominent setae at anterior margin of pronotum. Body vividly coloured. ... .. *Trichromothrips* Priesner
44. Spinula present on mesosternum, absent on metasternum ... .. 45  
— Spinula present on meso-and metasternum ... .. 46
45. Pronotum and head partly with polygonal reticulations. Anteroangulars of pronotum longer than anteromarginals. Wings banded, narrow with strong setae. Antenna very slender, style thin. [Larvae: Integument with microsetulae  $B_2$  &  $B_3$  of abdominal segment IX and  $B_1$  of abdominal segment X knobbed.] ... .. *Ayyaria* Karny
- Head and prothorax without reticulations; antenna not very slender; wings not banded; setae moderately developed, upper vein with a bristles interval. Ocelli placed far back. ... .. *Diarthrothrips* Williams
46. Head and pronotum transversely striate. Ferna undivided. Forewings with long costal setae, uppervein with a few basal setae and three scattered distal setae. Abdominal terga on sides covered with dense rows of microtrichia. Sterna II–VI of females (II–VIII of males) completely covered with microtrichia. Segment IX of abdomen with at least 9 pairs of major setae in females and 6 pairs in male on dorsum; segment X with at least 4 pairs of major setae. Sterna II with 2 pairs of primary setae and III–VII each with 3 pairs; accessory setae absent. ... .. *Biltothrips* Bhatti
47. Forewings with a regular series of setae in both veins. ... .. 48  
— Forewings without a regular series of setae. ... .. 50
48. Abdominal segment X tube-like and longitudinally split through its entire length. Metascutum, abdominal tergites and sternites strongly hexagonally reticulate. Head constricted behind eyes, cheeks bulged. Males with subapical glandular area one on each of abdominal sternite, III–VIII. Terminal setae on abdominal tergite X long and stout. Abdominal sternites without accessory setae. ... .. *Ctenothrips* Franklin
- Abdominal segment X not tube-like. Metascutum and abdomen not hexagonally reticulate. ... .. 49
49. Interocellar setae placed just behind ocellar triangle; second postocular setae well developed. Anteromarginals longer than anteroangulars. Meso-and metanotal plates unsculptured medially. Spinula variable in mesosternum, present or absent; absent on metasternum. ... .. *Karsibothrips* Kudo
- Interocellar setae not placed below the ocellar triangle. Second postocular setae absent. Pronotum with 4 strong setae on each side—an anteroangular, an anteromarginal, and two postangulars; anteromarginals shorter than anteroangulars. ... .. *Frankliniella* Schmutz

|     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |     |                                        |    |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----------------------------------------|----|
| 50. | Pronotum always with 6 long setae on each side<br>Forewings with 2 brown spots, sometimes taking the<br>form of bands. ... ..                                                                                                                                                                                                                                                                                                                                           | ... | <i>Scolothrips</i> Hinds               |    |
| —.  | Pronotum mostly with 2 long setae at posterior<br>angles (rarely anterior marginal conspicuous). ...                                                                                                                                                                                                                                                                                                                                                                    | ... | ...                                    | 51 |
| —.  | Pronotum with only one long seta at posterior<br>angles. ... ..                                                                                                                                                                                                                                                                                                                                                                                                         | ... | ...                                    | 67 |
| 51. | Abdominal segments II–VII with an incomplete<br>comb; VIII with a complete comb. Antennal<br>segment 6 enlarged; segment 2 of style very long. ...                                                                                                                                                                                                                                                                                                                      |     | <i>Projectothrips</i> Moulton          |    |
| —.  | Atmost VIII with a comb, complete or incomplete....                                                                                                                                                                                                                                                                                                                                                                                                                     | ... | ...                                    | 52 |
| 52. | Lower vein with a regular series of setae. ...                                                                                                                                                                                                                                                                                                                                                                                                                          | ... | ...                                    | 53 |
| —.  | Lower vein with only 4 setae at most. ... ..                                                                                                                                                                                                                                                                                                                                                                                                                            | ... | ...                                    | 68 |
| 53. | Apex of abdomen (IX & X) in the females with<br>strong, dark, pointed setae weaker in the males.<br>Tergite VIII also with 2 pairs of well developed<br>spines. Pronotum without anteroangular setae<br>Forewings banded. (Gall form) [Larvae: Body<br>with yellow or orange hypodermal pigment.<br>Antennal segment 5 & 6 not brown. All body<br>setae pointed. Integument without microsetulae.<br>Posterior margin of abdominal segment IX without<br>teeth.] ... .. |     | <i>Amphithrips</i><br>Ananthakrishnan  |    |
| —.  | Apex of abdomen without strong setae in females.<br>Males at times with thorn like setae on tergite IX....                                                                                                                                                                                                                                                                                                                                                              | ... | ...                                    | 54 |
| 54. | Spinula on meso- and metasternum absent. Cepha-<br>lic and thoracic setae short, weak. Sense cones on<br>antennal segments 3 and 4 simple. Mouthcone<br>long, reaching base of prosternum. Foretibiae at<br>apex of inner angle with a more or less pronounced<br>protuberance. Abdominal pleurites blunt. Males<br>with abdominal sternites III–VII with glandular<br>areas in the form of irregular scattered patches. ...                                            |     | <i>Agriothrips</i><br>Ananthakrishnan  |    |
| —.  | Spinula on mesosternum distinct, absent on meta-<br>sternum. ... ..                                                                                                                                                                                                                                                                                                                                                                                                     | ... | ...                                    | 55 |
| 55. | Wings narrow. Antennal segments 6–8 forming a<br>unit. Anteromarginals longer than anteroangulars...                                                                                                                                                                                                                                                                                                                                                                    |     | <i>Micothrips</i><br>Ananthakrishnan   |    |
| —.  | Wings not narrow. Antennal segments 6–8 not<br>forming a unit. ... ..                                                                                                                                                                                                                                                                                                                                                                                                   | ... | ...                                    | 56 |
| 56. | Foreveins joined to costa at two or more places.<br>Segment 6 of antenna in males very much enlarged,<br>highly setose; segment 5 always reduced ...                                                                                                                                                                                                                                                                                                                    |     | <i>Rhopalandrothrips</i> * Priesner    |    |
| —.  | Forevein not joined to costa; segment 6 normal in<br>males. ... ..                                                                                                                                                                                                                                                                                                                                                                                                      | ... | ...                                    | 57 |
| 57. | Antenna of the <i>Cricothrips</i> type with intermediate<br>segments (generally 3 and 4) elongate, bottle-like,<br>with long, slender sense cones. ... ..                                                                                                                                                                                                                                                                                                               | ... | ...                                    | 58 |
| —.  | Antenna normal; sense cones on 3 and 4 moderately<br>long (except in the males of <i>Taeniothrips aethiops</i> )....                                                                                                                                                                                                                                                                                                                                                    | ... | ...                                    | 60 |
| 58. | Segment 2 of style very long $2\frac{1}{2}$ –3 times as long as<br>segment 1; segment 4 more bottle-like. Antero-<br>marginals longer than anteroangulars. ... ..                                                                                                                                                                                                                                                                                                       |     | <i>Aroidothrips</i><br>Ananthakrishnan |    |

\* Bhatti treats this as a synonym of *Mycterothrips* Priesner (1964), Stannard (1968) and Bailey (1957) treat them as distinct genera.

|     |                                                                                                                                                                                                                                                                                               |     |     |     |                                                      |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|-----|------------------------------------------------------|
| —.  | Style shorter, segments 3 and 4 more elongate and bottle-like.                                                                                                                                                                                                                                | ... | ... | ... | 59                                                   |
| 59. | Segment 5 broad at apex, 6 broadest near base and broadly joined to 5. Sense cones on 3 and 4 mostly a broad 'U'.                                                                                                                                                                             | ... | ... | ... | <i>Dichromothrips</i> Priesner                       |
| —.  | Segment 5 narrowed at apex, 6 narrowed at base sense cones more curved and lateral.                                                                                                                                                                                                           | ... | ... | ... | <i>Cricothrips</i> Trybom                            |
| 60. | Abdominal tergites along sides set with dense rows of microtrichia. Head with 4 pairs of anteocellars.                                                                                                                                                                                        | ... | ... | ... | <i>Florithrips</i> Bhatti                            |
| —.  | Abdominal tergites without microtrichia. Head with 1 or 2 pairs of anteocellars.                                                                                                                                                                                                              | ... | ... | ... | 61                                                   |
| 61. | Mouthcone normal, not surpassing prosternum.                                                                                                                                                                                                                                                  | ... | ... | ... | 62                                                   |
| —.  | Mouthcone long, usually surpassing prosternum.                                                                                                                                                                                                                                                | ... | ... | ... | 65                                                   |
| 62. | Abdominal sternal glandular areas in males absent. Antennal segment 3 in both sexes short and stalked; segments 4–6 in males much enlarged and setose.                                                                                                                                        | ... | ... | ... | <i>Craspedothrips</i> Zur Strassen                   |
| —.  | Abdominal sternal glandular areas distinct in males, mostly as transverse or circular areas, rarely in the form of numerous scattered circular or irregular areas. Antennal segments 3–6 in males of many species more elongate and narrowed.                                                 | ... | ... | ... | 63                                                   |
| 63. | Head with 3 pairs of anteocellars.                                                                                                                                                                                                                                                            | ... | ... | ... | 64                                                   |
| —.  | Head with only one pair of anteocellars. Abdominal tergite VIII with or without a comb.                                                                                                                                                                                                       | ... | ... | ... | <i>Taeniothrips</i> <sup>1</sup><br>Amyot & Serville |
| 64. | Postoculars in two rows. Males with 6 spines on tergum IX.                                                                                                                                                                                                                                    | ... | ... | ... | <i>Amblythrips</i> Bangall                           |
| —.  | Postoculars in a single row. Head out constricted behind eyes, parallel sided, males with cheeks delicately narrowed posteriorly. Antenna showing sexual dimorphism.                                                                                                                          | ... | ... | ... | <i>Megalurothrips</i> <sup>2</sup> Karny             |
| 65. | Spinula present on meso- and metasternum.                                                                                                                                                                                                                                                     | ... | ... | ... | 66                                                   |
| —.  | Spinula absent on meso- and metasternum. Tergite IX of male with a conical, narrow upraised process bearing two thick horns.                                                                                                                                                                  | ... | ... | ... | <i>Tusothrips</i> Bhatti                             |
| 66. | Antennae of male rarely 7 segmented. Antennal segment 1 with a pair of dorsal setae near distal margin. Pronotum with 2 pairs of posteromarginal setae.                                                                                                                                       | ... | ... | ... | <i>Mycterothrips</i> Trybom                          |
| —.  | Antennal segment 1 with a pair of dorsal setae near distal margin. Pronotum without specially strong setae at posterior angle. Fera entire. Forewings with a small number (7) of lower vein setae. Males without special appendages on abdominal tergite IX and gland areas absent on sterna. | ... | ... | ... | <i>Foliothrips</i> Bhatti                            |
| 67. | Cheeks behind eyes notched. Fera undivided. Costal setae at middle of wing more than twice as long as width of wing at middle. Postmarginal flange on abdominal terga and sterna absent.                                                                                                      | ... | ... | ... | <i>Laplothrips</i> Bhatti                            |

<sup>1, 2</sup> The genera *Taeniothrips* and *Thrips* have been treated in this work as distinct and not as *Thrips* (with *Taeniothrips* as its synonym) (Bhatti, 1969). It may perhaps be more logical to break up the *Taeniothrips* complex into sections in view of the overlapping of characteristics of several species.

- Cheeks not notched behind eyes. Mesospinasterum separated from metasternum by suture. Abdominal tergite VIII without a posterior comb of setae. Abdominal tergite X often elongated and pointed. ... *Oxythrips* Uzel
68. Posteromarginal flanges on abdominal terga and sterna distinct. Abdominal tergum X longitudinally split in females. Sternites III-VII in males with a narrow, transverse glandular area. Intermediate abdominal terga not sculptured at middle. Pronotum with 5 pairs of posteromarginals including those at angles. ... *Chaetanaphothrips* Priesner
- Posteromarginal flanges on abdominal tergites absent. ... 69
69. Pronotum with 7 pairs of posteromarginal setae including those at angles. Abdominal sternites of males without glandular areas. Intermediate abdominal tergites sculptured at middle. Segment X not split longitudinally in females. ... *Danothrips* Bhatti
- Pronotum with only 4 pairs of posteromarginal setae including those at angles. ... 70
70. Wings banded, wing setae moderately long; scale of wing with only 3 setae. [Larvae: Body with yellow or orange hypodermal pigment. Antennal segment 5 & 6 not brown B<sub>7</sub> of pronotum and B<sub>1</sub> and B<sub>2</sub> of abdominal segment IX knobbed. Integument without microsetulae. ... *Bathrips* Bhatti
- Wings with or without bands. Setae on wing veins very long. Sense cones on 3 and 4 very long. ... 71
71. Spinula lacking on both meso- and metasterna. Forked sense cones on 3 and 4 as long as the segments. Head with small interocellar setae and a pair of long anteocellars. Three pairs of posteromarginal prothoracic setae. Abdominal terga and sterna with continuous postmarginal extension. ... *Arathrips* Bhatti
- Spinula present on mesosternum, absent on metasternum. ... 72
72. Anterior marginal and posterior marginal setae on prothorax poorly developed (4 pairs of anterior marginals and 4 or 5 pairs of posterior marginals). Wing setae comparatively long, but not extraordinarily well developed. Abdominal apex forming an elongated cone. [Larvae: Setae hyaline fimbriate. B<sub>2</sub> of abdominal segment IX much longer than B<sub>1</sub>; abdominal segment IX with 8 cuticular spines in the posterior margin.] ... *Euphysothrips* Bagnall
- Anterior and posterior marginal setae well developed, with 6 pairs of anterior and 6 pairs of posterior marginals. Setae on wing veins, particularly on lower vein extraordinarily developed. Abdominal apex not forming an elongated cone. ... Subgenus *Megaphysothrips* Margabandhu & Ramakrishna
73. Head produced in front ... 74
- Head not produced in front. ... 75
74. Sense cones on antennal segments 3 & 4 simple. Wings banded. Maxillary palpi 3-segmented. ... *Bolacidothrips* Priesner

|     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |     |     |                                            |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|-----|--------------------------------------------|
| —.  | Sense cones on antennal segments 3 & 4 forked. Head longer than broad. Postoculars well developed, apparently in 2 rows. Maxillary palpi 3-segmented. Fenna undivided. Spinula absent on meso-and metasternum. Wings not banded. Setae $S_3$ - $S_5$ on abdominal terga III-V arranged in a straight line. Sternum II: with 2 pairs of primary setae; III-VIII with 3 pairs those on II-VI inserted marginally; accessory setae absent. Tergite X split longitudinally. ... .. | ... | ... | ... | <i>Smilothrips</i> Bhatti                  |
| 75. | Spinula on meso-and metasternum absent or weakly developed on mesosternum only. Maxillary palpi 2-segmented. ... ..                                                                                                                                                                                                                                                                                                                                                            | ... | ... | ... | 76                                         |
|     | Spinula on mesosternum distinct, absent on metasternum. ... ..                                                                                                                                                                                                                                                                                                                                                                                                                 | ... | ... | ... | 77                                         |
| 76. | Antennal segment 2 with middorsal seta. ... ..                                                                                                                                                                                                                                                                                                                                                                                                                                 | ... | ... | ... | <i>Baliothrips</i> Uzel                    |
| —.  | Antennal segment 2 without middorsal seta. Fenna undivided. Mesothoracic sternopleural suture absent. Spinula weakly developed on mesosternum only. Abdominal sternum II with 2 pairs of primary setae; III-VII with 3 pairs each; all primary setae on III-VI inserted at posterior margin; accessory setae absent. Tergum X split longitudinally. ... ..                                                                                                                     | ... | ... | ... | <i>Ednathrips</i> Bhatti                   |
| 77. | Posterior margins of abdominal tergites I-VIII with teeth or scallops. Head small. ... ..                                                                                                                                                                                                                                                                                                                                                                                      | ... | ... | ... | <i>Microcephalothrips</i> Crawford         |
| —.  | Atmost abdominal tergite VIII with a comb. ... ..                                                                                                                                                                                                                                                                                                                                                                                                                              | ... | ... | ... | 78                                         |
| 78. | Forefemora and foretibia armed, tarsi unarmed. ... ..                                                                                                                                                                                                                                                                                                                                                                                                                          | ... | ... | ... | <i>Ctenidothrips</i> Priesner              |
| —.  | Forelegs unarmed. ... ..                                                                                                                                                                                                                                                                                                                                                                                                                                                       | ... | ... | ... | 80                                         |
| 79. | Abdominal tergites II-VII with a continuous posterior marginal flange, that on sterna produced into ill-formed teeth. ... ..                                                                                                                                                                                                                                                                                                                                                   | ... | ... | ... | <i>Ernothrips</i> Bhatti                   |
| —.  | Abdominal tergites without posterior marginal flange. Sternites with or without glandular areas in males; accessory setae on abdominal sternites in both sexes may or may not be present. [Larvae: Posterior margin of abdominal segment IX with a row of minute teeth. Vertex of head not produced. Antennal segment 3 fusiform. ... ..                                                                                                                                       | ... | ... | ... | <i>Thrips</i> Haliday                      |
| a.  | Mouthcone long and narrow surpassing base of prosternum. ... ..                                                                                                                                                                                                                                                                                                                                                                                                                | ... | ... | ... | **Subgenus <i>Oxyrrhinothrips</i> Priesner |
| —.  | Mouthcone moderately long. ... ..                                                                                                                                                                                                                                                                                                                                                                                                                                              | ... | ... | ... | b.                                         |
| b.  | Postangular prothoracic setae well developed, almost subequal, sometimes short. ... ..                                                                                                                                                                                                                                                                                                                                                                                         | ... | ... | ... | c.                                         |
| c.  | Upper vein of forewing with an almost continuous but irregular row of setae. ... ..                                                                                                                                                                                                                                                                                                                                                                                            | ... | ... | ... | Subgenus <i>Isotnrips</i> Priesner         |
| —.  | Upper vein setae with a distinct interval. ... ..                                                                                                                                                                                                                                                                                                                                                                                                                              | ... | ... | ... | d.                                         |
| d.  | Posterior margins of abdominal sternites with 3 pairs of setae. ... ..                                                                                                                                                                                                                                                                                                                                                                                                         | ... | ... | ... | Subgenus <i>Thrips</i> s.str.              |
| —   | Posterior margins of abdominal sternites with 6 pairs of setae. Postangular prothoracic setae short. ... ..                                                                                                                                                                                                                                                                                                                                                                    | ... | ... | ... | Subgenus <i>Ramaswamihiella</i> * Karny    |

\* Very close to this subgenus is *Athrips* Priesner, with very short postangular prothoracic setae, four pairs of posteromarginals, but with only three pairs of sternal setae on abdomen.

\*\* Zur Strassen (1973) treats *Oxyrrhinothrips* a genus, not a subgenus under genus *Thrips*.

## Subfamily PANCHAETOTHRIPINAE

|                                                                                                                                                                                                                                                                                                                                                                                   |                                       |    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|----|
| 1. Body without polygonal reticulations, but with strong wrinkles. [Larvae: Body yellow with red hypodermal pigment only along lateral margins. Abdominal segment X with 19-20 anal setae.] ... ..                                                                                                                                                                                | <i>Rhipiphorothrips</i> Morgan        |    |
| — Body distinctly polygonally reticulate. ... ..                                                                                                                                                                                                                                                                                                                                  | ...                                   | 2  |
| 2. Antenna 7-segmented, style 1-segmented. ... ..                                                                                                                                                                                                                                                                                                                                 | ...                                   | 3  |
| — Antenna 8-segmented, style 2-segmented. ... ..                                                                                                                                                                                                                                                                                                                                  | ...                                   | 5  |
| 3. Forewings with callosities. Body short and stout. Four terminal segments of antenna fused to form a conical unit. [Larvae: Body uniformly with dense red hypodermal pigment. Abdominal segment X with 16-18 anal setae.] ... ..                                                                                                                                                | <i>Retithrips</i> Marchal             |    |
| — Forewings without callosities. Body not short and stout. ... ..                                                                                                                                                                                                                                                                                                                 | ...                                   | 4  |
| 4. Antennal segments 5-7 forming a unit. Head narrowed, posteriorly rounded, vertex with a hump-like production. Sense cones on 3 and 4 simple in both sexes. Males with glandular areas on abdominal sterna. [Larvae: Head and pronotum with large chitinated areas. Integument of head and pronotum smooth. Setae blunt. Abdominal segment X devoid of long anal setae.] ... .. | <i>Astrothrips</i> Karny              |    |
| — Vertex scarcely produced and antennal segments 5 and 6 not forming a compact unit. ... ..                                                                                                                                                                                                                                                                                       | <i>Proxothrips</i> Bhatti             |    |
| 5. Wings without veins or setae but with microtrichia... ..                                                                                                                                                                                                                                                                                                                       | <i>Phibalothrips</i> Hood             |    |
| — Wings with or without conspicuous veins but with short and well developed setae. ... ..                                                                                                                                                                                                                                                                                         | ...                                   | 6  |
| 6. Wings broad, with stout longitudinal veins and with a netlike sculpture. ... ..                                                                                                                                                                                                                                                                                                | <i>Parthenothrips</i> Uzel            |    |
| Wings normal, without net-like sculpture, with or without cross bands. ... ..                                                                                                                                                                                                                                                                                                     | ...                                   | 7  |
| 7. Sense cones on 3 and 4 forked. Sides of abdominal tergum II reticulate and with narrow triangular process. Costal setae much longer than fringe. ... ..                                                                                                                                                                                                                        | <i>Noathrips</i> Bhatti               |    |
| — Abdominal segment II without lamelliform projection or triangular processes. ... ..                                                                                                                                                                                                                                                                                             | ...                                   | 8  |
| 8. Segment X of abdomen with a rounded apex carrying a pair of hyaline, fimbriate setae. Broad 'U' like sense cones present only on segment 4, absent on segment 3. Segments 4-8 forming a unit. ... ..                                                                                                                                                                           | <i>Euidothrips</i><br>Ananthakrishnan |    |
| — Segment X of abdomen normal, with normal bristles. ... ..                                                                                                                                                                                                                                                                                                                       | ...                                   | 9  |
| — Segment X cylindrical or stout. Bristles on IX and X exceptionally stout. Wings with long, dark spines. ... ..                                                                                                                                                                                                                                                                  | <i>Panchaetothrips</i> Bagnall        |    |
| 9. Head without a raised transverse ridge; wings very narrow to much broadened at base and without prominent setae on costal margin; sense cones on 3 and 4 simple. ... ..                                                                                                                                                                                                        | <i>Heliothrips</i> Haliday            |    |
| — Head usually with a raised transverse ridge at base; wings wider; antennal segments 3 and 4 with forked sense cones. ... ..                                                                                                                                                                                                                                                     | ...                                   | 10 |

- |     |                                                                                                                                                                                                                                                                                                                                                                                            |     |     |                              |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|------------------------------|
| 10. | Head without a collar-like band at posterior margin.                                                                                                                                                                                                                                                                                                                                       | ... | ... | 11                           |
| —.  | Head with a conspicuous reticular collar-like band at posterior margin.                                                                                                                                                                                                                                                                                                                    | ... | ... | 13                           |
| 11. | Head near base with tooth-like projection. Forewings wider, with 2 pale cross bands; apex pale; costal setae prominent. Vertex without arched ridge. Anterior and posterior wing veins with an almost continuous row of setae.                                                                                                                                                             | ... | ... | <i>Hercinothrips</i> Bagnall |
| —.  | Head without a tooth-like projection at base.                                                                                                                                                                                                                                                                                                                                              | ... | ... | 12                           |
| 12. | Cheeks shorter than eyes. Vertex with an arched ridge. Forewings with 2 pale cross bands. Apex brown. Anterior vein with a gap between setae. Abdominal tergites II–VII with prominently scalloped areas.                                                                                                                                                                                  | ... | ... | <i>Helionothrips</i> Bagnall |
| —.  | Forewings dark, with 2 pale bands apex dark; strong setae on costa and forevein; anterior wing vein with a clear gap between setae. Legs banded. Segments 3 and 4 of antennae with forked sense cones. Abdominal tergites II–VII without prominently scalloped areas. [Larvae: Abdominal segment X with 6 hyaline anal setae. Sides of head and thorax often with red hypodermal pigment.] | ... | ... | <i>Caliothrips</i> Daniel    |
| 13. | Antenna 8-segmented, segment 2 of style nearly thrice as long as 1. Head more elongate. Tergite IX with 2 pairs of stout, black, thorn-like setae. [Larvae: Head with weakly chitinated areas along cheeks. Integument of head and pronotum with round plaques. Setae fimbriate. Abdominal segment X devoid of long anal setae.]                                                           | ... | ... | <i>Monilothrips</i> Moulton  |
| —.  | Antenna 7 to 8 segmented; segment 4 very characteristic, broad at base, with a narrow elongated neck beyond middle. Pronotal setae long and well developed. Males with 3 pairs of thorn-like setae and tubercles on tergum IX.                                                                                                                                                             | ... | ... | <i>Zaniothrips</i> Bhatti    |

## SUBFAMILIES OF INDIAN TUBULIFERA

- |    |                                                                                                                                                                                                      |     |     |                                 |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|---------------------------------|
| 1. | Distance between hind coxae less than that between middle coxae. Anal setae rarely very long.                                                                                                        | ... | ... | 2                               |
| —. | Distance between hind coxae greater than that between fore and mid coxae. Anal setae exceptionally long, several times longer than tube (segment IX of abdomen elongate. Antennae 4 to 8-segmented). | ... | ... | <i>Urothripinae</i> * Priesner  |
| 2. | Maxillary stylets slender, never broadened, narrower than labial palps.                                                                                                                              | ... | ... | <i>Phlaeothripinae</i> Priesner |
| —. | Maxillary stylets broadened at apex, broader than labial palps.                                                                                                                                      | ... | ... | <i>Idolothripinae</i> Bagnall   |

## GENERA OF PHLAEOTHRIPIDAE

- |    |                                                                                     |     |     |   |
|----|-------------------------------------------------------------------------------------|-----|-----|---|
| 1. | Distance between hind coxae greater than that separating either of the other coxae. | ... | ... | 2 |
|----|-------------------------------------------------------------------------------------|-----|-----|---|

\* Stannard (1968) does not recognise *Urothripinae* as a sub-family; following Priesner (1960) this subfamily is retained here.

|     |                                                                                                                                                                                                              |     |     |     |                                         |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|-----|-----------------------------------------|
| —.  | Distance of hind coxae less than that of middle coxae.                                                                                                                                                       | ... | ... | ... | 8                                       |
| 2.  | Vertex without any setae; antennae 7–8 segmented....                                                                                                                                                         | ... | ... | ... | 3                                       |
| —.  | Vertex with prominent setae; antennae 5–8 segmented.                                                                                                                                                         | ... | ... | ... | 4                                       |
| 3.  | Antenna 8-segmented. Cephalic production very prominent; head and thorax with frilled margins, bearing transparent, clubbed setae. Cheeks strongly convex.                                                   | ... | ... | ... | <i>Habrothrips*</i> Ananthakrishnan     |
| —.  | Antenna 7-segmented. Head not produced; Pro- and mesothoracic epimera each with a well differentiated, well developed seta; foretarsi with a hamus. Antennal segments 4–5 strongly and narrowly pedicellate. | ... | ... | ... | <i>Ananthakrishnaniella</i> Stannard    |
| 4.  | Vertex of head with only one pair of prominent setae. Antenna 7-segmented. Only 4 anal hairs present.                                                                                                        | ... | ... | ... | <i>Bradythrips</i><br>Hood and Williams |
| —.  | Vertex with 4–6 prominent setae. Tube with 6 long anal setae.                                                                                                                                                | ... | ... | ... | 5                                       |
| 5.  | Antennae 5-segmented. Vertex with 4–6 prominent setae. Fore and hind tarsi with a downwardly directed claw at tip.                                                                                           | ... | ... | ... | <i>Stephanothrips</i> Trybom            |
| —.  | Antennae 8-segmented, rarely with an incomplete stuture between segment 7 and 8.                                                                                                                             | ... | ... | ... | 6                                       |
| 6.  | Two pairs of anterior cephalic setae, the lateral pair very short, about half as long as the median pair.                                                                                                    | ... | ... | ... | <i>Bournieria</i> Ananthakrishnan       |
| —.  | Three pairs of cephalic setae, two lateral and one median pair, both well developed.                                                                                                                         | ... | ... | ... | 7                                       |
| 7.  | Head comparatively short. Lateral abdominal bristles and tergal accessories dark, stronger. Forelegs yellow.                                                                                                 | ... | ... | ... | <i>Baenothrips</i> Crawford             |
| 8.  | Maxillary stylets slender, never broadened (Subfamily Phlaeothripinae).                                                                                                                                      | ... | ... | ... | 9                                       |
| —.  | Maxillary stylets broad, band-like (Subfamily Idolothropinae).                                                                                                                                               | ... | ... | ... | 108                                     |
| 9.  | Antennae 7-segmented.                                                                                                                                                                                        | ... | ... | ... | 10                                      |
| —.  | Antennae 8-segmented.                                                                                                                                                                                        | ... | ... | ... | 12                                      |
| 10. | Head distinctly broader than long, cheeks convex; major body setae exceptionally long, fine, knobbed. Foretarsi unarmed in both sexes. Tube very short. Macropterous.                                        | ... | ... | ... | <i>Trichinothrips</i> Bagnall           |
| —.  | Head roughened with irregular ridges or is reticulate. Apterous and without ocelli, rarely macropterous.                                                                                                     | ... | ... | ... | 11                                      |
| 11. | Antennal segment 7 much smaller and slenderer than 6; segments 3 and 5 whitish, others dark. Forefemora and foretibiae of oedymorous males more elongate; gynaeccoid males with vestigial foretarsal tooth.  | ... | ... | ... | <i>Idiothrips</i> Faure                 |

\* Stannard (1971) places this genus near *Neurothrips* Hood.

- Antennal segment 7 longer than 6 and distinctly conical; segment 3 shorter and wider than 4 and 5. Oedymorous males with a distinct metathoracic spur and an apical foretibial tubercle. Forelegs of oedymorous males as in *Idiothrips*. Macropterous form rather than others. ... .. *Strepterothrips* Hood
- 12. Terminal setae of tube very long, 2–2½ times tube length. Integument strongly sculptured. Wing retaining bristles lanceolate. ... .. *Neurothrips* Hood
- Terminal setae of tube not very long. ... .. 13
- 13. Forewings banded, narrow, more widened at base. Males with a well developed spur or tooth on inner side of forefemora; major females also with weakly developed spur. Pronotal setae not expanded at apex. ... .. *Aleurodothrips* Franklin
- Wings not banded, pronotal setae expanded. ... .. 14
- 14. Wings clearly reticulate; forewings narrowed about middle, twisted. Integument strongly sculptured. Major body setae short, expanded. ... .. *Stictothrips* Hood
- Wings not twisted, uniformly broad or constricted at middle or slightly at apex and parallel sided beyond middle. ... .. 15
- 15. Eyes unusually large, contiguous in front, antennae inserted below eyes; mouthcone very long and pointed, reaching beyond middle of mesosternum. Wings uniformly parallel-sided, rarely narrow with a fold at middle. ... .. *Macrophthalmothrips* Karny
- Eyes normal. ... .. 16
- 16. Body setae (at least prothoracic; basal wing setae) expanded, spatulate or fimbriate, with sometimes clubbed setae on legs. ... .. 17
- Body setae pointed, knobbed or blunt. ... .. 20
- 17. Prothoracic setae long, well developed. ... .. 18
- Prothoracic setae very short, expanded.... ... .. 19
- 18. Integument strongly sculptured. Cheeks and general body surface irregularly reticulate. Pronotal and lateral abdominal setae long, fimbriate. Legs clothed with clubbed bristles. [Larvae: Cephalic, pronotal and body setae spatulate; cephalic and pronotal plates present; setae on abdominal segment IX spatulate.] ... .. *Thilakothrips* Ramakrishna
- Body polygonally reticulate; body surface not tuberculate. Epimerals long and well developed, soalmnt fimbriate, placed on a raised tubercle. Foretarsi unarmed in both sexes. ... .. *Pyknothrips* Ananthakrishnan
- 19. Foretarsi in both sexes with a tooth; fore femora of female weak. Head reticulate; pronotum 0.6 times head length; maxillary stylets oculed, meeting at middle. Eyes directed forward. Basal wing setae expanded, short and arranged in a straight line. ... .. *Azaleothrips* Ananthakrishnan
- Foretarsi unarmed in both sexes. Head reticulate; pronotum 2/3 head length; maxillary stylets meeting at middle. Eyes directed forward. Prothoracic setae poorly developed, only epimerals moderately long (43 µ). Lateral abdominal setae expanded. ... .. *Stannardiana* Ananthakrishnan

|     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |     |                                        |    |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----------------------------------------|----|
| 20. | Maxillary stylets very short, confined to the mouth-cone. ... ..                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | ... | ...                                    | 24 |
| —   | Maxillary stylets well retracted into head. ... ..                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | ... | ...                                    | 23 |
| 21. | Prothorax enlarged, often longer than pterothorax... ..                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | ... | ...                                    | 21 |
| —   | Prothorax not enlarged. ... ..                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | ... | ...                                    | 22 |
| 22. | Antennae slender, nearly twice as long as head; sense cones on segments 3 & 4 rather long and fine. Cheeks with a few weak spines, especially in posterior third. Mouthcone short, rounded. Eyes large; postoculars long. Forefemora of female distinctly, of male strongly enlarged; foretarsi of both sexes with a tooth stouter in the male. ... ..                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | ... | <i>Ramboosiella</i><br>Ananthakrishnan |    |
| —   | Intermediate antennal segments short, thick slightly pedicellate, segments 7 & 8 almost subequal, 8 long and thin; sensecones on segment 3 & 4 short. Cheeks very weakly indented below eyes, slightly setose. Eyes angular at base, ventrally prolonged; postoculars much shorter than eyes. Mouthcone broadly rounded. Forefemora short moderately stout, foretarsi unarmed in both sexes. Forewings uniformly broad; basal wing setae B <sub>1</sub> very short and B <sub>2</sub> longest. Abdominal Sternum VIII with a row of six strong spines on either side, increasing in length towards middle; segment VII with three spines on either side. [Larvae: Body setae with chitinised bases; cephalic and pronotal plates evident. Setae 1-3 on abdominal segment IX pointed. Anal setae shorter than tube.] ... .. | ... | <i>Ayyarothrips</i><br>Ananthakrishnan |    |
| 23. | Head wider than long. Antennal segment 3 as long as 2; segment 6 longest and longer than 7 & 8 together; 7 and 8 closely joined but completely separated by a suture. Major males with a ventral horn like projection between the bases of antennae. Praepectus and mesopraesternum present or absent. Fore wings without double fringes. Abdominal tergites with or without wing retaining setae. ... ..                                                                                                                                                                                                                                                                                                                                                                                                                  | ... | <i>Nanothrips</i> Faure                |    |
| 24. | Antennal segments (at least intermediate segments) short and thick, almost moniliform. ... ..                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | ... | ...                                    | 25 |
| —   | At least intermediate antennal segments more elongate. ... ..                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | ... | ...                                    | 30 |
| 25. | Head dorsally convex. Antennal segments distinctly pedicellate, with short, thick, sense cones. Mouthcone more elongate, pointed. Foretarsi unarmed in females, males with a small tooth. ... ..                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | ... | <i>Pygmaethrips</i> Karny              |    |
| —   | Head not dorsally convex. ... ..                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | ... | ...                                    | 26 |
| 26. | Antenna placed on a very short process. Cephalic setae poorly developed, atmost postoculars well developed. ... ..                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | ... | <i>Margaritothrips</i> Prienser        |    |
| —   | Cephalic setae well developed. ... ..                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | ... | ...                                    | 27 |
| 27. | Head with 2 pairs of strongly developed postoculars. Foretarsi with a small denticle, not tooth like. ... ..                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | ... | <i>Phiarothrips</i><br>Ananthakrishnan |    |
| —   | Head with 1 pair of postoculars. ... ..                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | ... | ...                                    | 28 |
| 28. | Prothorax swollen, enlarged about 1.4 times as long as head in females and 1.2 times in males Probasisternum small compared to pronotal size; praepectus absent; mesopraesternum well developed. Forefemora strongly enlarged, swollen; foretibiae very short, about half as long as forefemora and with a short but distinct tooth at apex                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |                                        |    |

- within in the females; foretarsi armed in both sexes; the females with a long stout strongly curved tooth, much smaller in males. ... *Byctothrips* Ananthakrishnan
- Prothorax not enlarged. Forefemora not strongly enlarged; foretarsi unarmed in both sexes. ... 29
29. Basal wing setae of fore-wings arranged peculiarly, the proximal 2 almost one below the other the distal one reduced and vestigial. Antennal segments 4–6 globular, segment 8 narrow, constricted at base. Head not constricted at base. Postoculars moderately developed. Mouthcone elongate, rounded. Tube much longer than head. [Larvae: Cephalic & pronotal plates present; Body setae pale brown, knobbed and with broad chitinated based. Mouthcone broadly rounded. Pronotal setae 1–4 comparatively shorter and 7 longer.]... *Dixothrips* Ananthakrishnan
- All basal wing bristles of forewings well developed, arranged not in the same line (proximal 2 not arranged one below the other). Antennal segments 4–5 globular, segment 8 constricted at base. Head constricted at base. Postoculars weak. Mouthcone short, broadly rounded. Tube shorter than head. ... *Neodixothrips* Sen & Muraleedharan
30. Sensecones on antennal segment 3 numerous, arranged in a ring. Forefemora with a stout tooth at base on inner margin in females. Males with a strong tooth at base and one at apex. Forecoxae prolonged considerably in oedymorous males. ... *Ecacanthothrips* Bagnall
- Sensecones on antennal segment 3 atmost 2 or 3 in number. ... 31
31. Head distinctly produced in front of eyes; postocular and prothoracic setae strongly spoon-shaped, bent and roughened at tip. Body inclusive of legs coarsely reticulate. Foretarsus with a conspicuous but slender, curved tooth in both sexes.... *Mystrothrips* Priesner
- Head not produced in front; major body setae not bent at tip, body weakly reticulate. ... 32
32. Eyes more often ventrally prolonged in macropterous forms. Mesopraesternum degenerate. Intermediate antennal segments much elongate. Foretarsi unarmed, very rarely armed in males. ... *Adraneothrips* Hood
- Eyes not prolonged ventrally. ... 33
33. Intermediate antennal segments thin and long. Mesopraesternum degenerate to well developed. Foretarsi unarmed in both sexes. ... *Stigmothrips* Ananthakrishnan
- Intermediate antennal segments well developed and elongate. ... 34
34. Head with a clear notch behind eyes. ... 35
- Head without notch behind eyes. ... 37
35. All tibiae or foretibiae alone with a series of bristles bearing tubercles. Head very slightly produced in front of eyes; vertex narrowly produced between antennae. Three terminal segments of antennae forming or not forming a club. Mouthcone short, broadly rounded. Anteromarginals short, other prothoracic setae well developed, blunt to expanded at tip; all setae emerging from tubercles. Posterior half of epimeron fused with pronotum. Foretarsi armed in both sexes. ... *Tylothrips* Hood

- All tibiae without series of bristle bearing tubercles. Head not produced. Eyes large, bulged. ... 36
36. Postoculars 2 pairs, outer pair long and thin. Mouthcone elongate rounded; maxillary stylets at the level of postoculars wide apart. Pronotal setae well developed, long, thin and pointed. Foretarsi unarmed in females. Forewings parallel-sided, without double fringes. Abdomen with long, thin almost flagelliform lateral setae about as long as  $B_1$ - $B_3$  of segment IX. ... *Ocythrips*  
Ananthakrishnan
- Postoculars 1-pair dilated at apex. Body bicolorous. Head usually projecting in front. Antennal segment 8 constricted at base. Mouthcone mostly broadly rounded. Maxillary stylets ocular, closely meeting at middle. Pronotal setae well developed dilated at apex; anteroangulars and midlaterals closer. Foretarsi generally unarmed in both sexes very rarely with a small tooth in the males. Apterous, brachypterous or macropterous; forewings slightly narrowed at middle. Abdomen without long flagelliform lateral setae. Abdominal segment IX with well developed accessory setae between  $B_1$  &  $B_2$ . ... *Apelaunothrips* Karny
37. Cheeks always with a few warts mostly at base, carrying small spines or non-warty, but with 1-4 strong spines or cheeks crenulate. ... 38
- Cheeks without strong spines, atmost with small scattered setae or smooth. ... 48
38. Cheeks warty with small spines, mostly at base. ... 39
- Cheeks not warty, atmost strongly crenulate or with 1-4 strong spines. ... 41
39. Forefemora and foretibiae unarmed in both sexes. Mouthcone broadly rounded to pointed. Wings broad, parallel-sided. ... *Phlaeothrips* Haliday
- Forefemora unarmed, foretibia of female with a distinct tubercle at apex; foretarsus with a strong tooth. Head elongate, nearly twice as long as broad. Mouthcone narrowly rounded; maxillary stylets inserted below postoculars, closely set, not meeting at middle. Prothoracic setae expanded at apex. Wings broad, double fringes numerous. Tube shorter than head. ... *Socothrips*  
Ananthakrishnan
- Forefemora and foretibiae or foretibiae alone armed in males or oedymorous males only. ... 40
40. Forefemora and foretibiae armed only in the males with two subapical femoral teeth and a basal, median and apical tibial teeth, well developed in oedymorous males. Mouthcone pointed. Wings narrower, parallel sided, with a weak median fold.... *Hoplandrothrips* Hood
- Forefemora well developed in both sexes, stronger in oedymorous males; foretibiae in oedymorous males with a distinct tubercle on inner margin. Mouthcone broadly rounded. Prothorax heavy, twice as wide at hind margin inclusive of coxae as at foremargin forewings broad. Tube longer than head. [Larvae: Cephalic & pronotal plates present. Mouthcone pointed, maxillary stylets widely separated. Antennal segment 6 & 7 fused; suture indistinct. Body setae hyaline.] ... *Psenothrips*  
Ananthakrishnan

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                             |     |                                          |    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------------------------------------------|----|
| 41. Cheeks mostly crenulate. Forefemora strongly enlarged in both sexes, often much wider than head....                                                                                                                                                                                                                                                                                                                                                     | ... | ...                                      | 42 |
| — Cheeks with 1-4 strong spines. Forefemora not very much enlarged, moderately so, or atmost enlarged in the males. ... ..                                                                                                                                                                                                                                                                                                                                  | ... | ...                                      | 46 |
| 42. Mouthcone pointed and foretibiae with or without an apical tubercle. ... ..                                                                                                                                                                                                                                                                                                                                                                             | ... | ...                                      | 44 |
| — Mouthcone rounded. ... ..                                                                                                                                                                                                                                                                                                                                                                                                                                 | ... | ...                                      | 43 |
| 43. Maxillary stylets retracted oculad and almost meeting at middle. Forefemora strongly enlarged in females; foretarsal tooth well developed, never dagger-like. Foretibiae with an apical tubercle. Postoculars as long as eyes. B <sub>2</sub> of abdominal segment IX of males not exceptionally stout. ...                                                                                                                                             |     | <i>Mallothrips</i> Ramakrishna           |    |
| — Maxillary stylets mesad, wide apart. Head much broader, cheeks slightly but distinctly indented behind eyes. Eyes slightly bulged behind forming an angular projection. Postoculars longer than eyes. Areola of segment 2 of antennae at extreme apex. Foretibiae much shorter with an inner tubercle at apex; foretarsi with a strong dagger-like tooth in both sexes. B <sub>2</sub> of abdominal segment IX of male short but exceptionally stout. ... |     | <i>Pegothrips</i><br>Sen & Muraleedharan |    |
| 44. Foretibiae without an apical tubercle; foretarsal tooth exceptionally strong dagger-like and straight in females; males with weaker femora and foretarsal tooth. Maxillary stylets retracted at middle. [Larvae: Pronotal setae 6 very long, other pronotal setae moderately long. Mouthcone broad maxillary stylets meeting at middle. Body setae hyaline, pointed.] ... ..                                                                            | ... | <i>Scelothrips</i> Priesner              |    |
| — Foretibia with an apical tubercle. ... ..                                                                                                                                                                                                                                                                                                                                                                                                                 | ... | ...                                      | 45 |
| 45. Mouthcone not very long and thin. Maxillary stylets retracted at middle, broadly separate. Foretarsal tooth very strong; forefemora in female much wider than head; foretibia at apex with a small tubercle to a well developed bifid tooth. [Larvae: Cephalic & pronotal plates mostly present; if absent antennal segments all yellow. Body setae hyaline, knobbed.] ... ..                                                                           | ... | <i>Arrhenothrips</i> Hood                |    |
| — Mouthcone very long and thin beyond middle and reaching mesosternum. Maxillary stylets retracted near eyes, almost meeting at middle. Forefemora almost as wide to a little wider than head in both sexes. Foretibia at apex with an emphasised tubercle; foretarsus with a stout tooth. ...                                                                                                                                                              | ... | <i>Bunothrips</i><br>Ananthakrishnan     |    |
| 46. Cheeks strongly constricted at base with 2-4 pairs of spines of which one pair is strong. ... ..                                                                                                                                                                                                                                                                                                                                                        | ... | ...                                      | 47 |
| — Cheeks not constricted at base, with one conspicuous pair of spines. Foretarsus of females often with a weak tooth, well developed in the males. Mouthcone broadly rounded. ... ..                                                                                                                                                                                                                                                                        |     | <i>Ramakrishniella</i> Karny             |    |
| 47. Mouthcone pointed, foretarsus with a small tooth in both sexes. Foretibia unarmed. [Larvae: Cephalic & pronotal plates present. Body setae knobbed with chitinised bases. Setae 1-3 on abdominal segment IX knobbed.] ... ..                                                                                                                                                                                                                            | ... | <i>Mesicothrips</i> Prienser             |    |

|     |                                                                                                                                                                                                                                                                                                                                                                                                               |     |     |                                                                   |    |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|-------------------------------------------------------------------|----|
| —   | Mouthcone broadly rounded. Foretibia unarmed in females and strongly armed in the males. Forewings with over 30 double fringes. [Larvae: Cephalic & pronotal plates present. Cephalic, pronotal & body setae blunt with chitinated bases. Setae 1-3 on abdominal segment IX blunt.] ...                                                                                                                       | ... | ... | <i>Sphingothrips</i><br>Ananthakrishnan                           |    |
| 48. | Head distinctly broader than long. ...                                                                                                                                                                                                                                                                                                                                                                        | ... | ... | ...                                                               | 49 |
| —   | Head as broad as long or distinctly longer. ...                                                                                                                                                                                                                                                                                                                                                               | ... | ... | ...                                                               | 55 |
| 49. | Cephalic, thoracic and abdominal bristles very long and knobbed. Antennal segments 4-6 pedicellate, 8 elongate. Accessory epimeral very well developed. Females macropterous, males brachypterous or apterous. [Larvae: Pronotal setae 1-4 comparatively longer and 7 shorter. Cephalic & pronotal plates present. Body setae brown, knobbed and with large distinct chitinated bases.] ...                   | ... | ... | <i>Austrothrips</i> * Brethes                                     |    |
| —   | Body setae not very long, atmost postoculars and drothoracic setae long. ...                                                                                                                                                                                                                                                                                                                                  | ... | ... | ...                                                               | 50 |
| 50. | B <sub>2</sub> of abdominal segment IX of female not short, of males always short. ...                                                                                                                                                                                                                                                                                                                        | ... | ... | ...                                                               | 51 |
| —   | B <sub>2</sub> of abdominal segment IX short in both sexes. ...                                                                                                                                                                                                                                                                                                                                               | ... | ... | ...                                                               | 54 |
| 51. | Foretarsi unarmed in both sexes. Antennal segment compact. Mouthcone long and rounded with the labrum very long and pointed extending beyond the middle of mesosternum. Maxillary stylets oculad, meeting at middle. Forefemora not enlarged. ...                                                                                                                                                             | ... | ... | Nov. Gen.**<br>( <i>Brachythrips dhirgavadana</i><br>Ramakrishna) |    |
| —   | Foretarsi armed in both sexes or at least armed in the males. ...                                                                                                                                                                                                                                                                                                                                             | ... | ... | ...                                                               | 52 |
| 52. | Mouthcone heavy, elongate, narrowly rounded at apex. ...                                                                                                                                                                                                                                                                                                                                                      | ... | ... | ...                                                               | 53 |
| 53. | Antennal segment 8 constricted at base, 4-7 distinctly pedicellate. Maxillary stylets oculad, meeting at middle; maxillary guides distinct. Prothorax heavy, much longer than head anteroangulars, anteromarginals and midlaterals very short or vestigial, other prothoracic setae well developed, Forelegs moderately enlarged. Basal wing setae of forewings arranged in triangular fashion. ...           | ... | ... | <i>Corycidothrips</i><br>Ananthakrishnan                          |    |
| 54. | Mouthcone broadly rounded. Antennal segments 5 and 6 not pedicellate. Epimerals about twice as long as postangulars Foretarsus with a tooth in both sexes. [Larvae: Pronotal setae 3-5 longer; setae, 1, 2 & 4 on abdominal segment IX longer. Body setae pointed or blunt.] ...                                                                                                                              | ... | ... | <i>Crotonothrips</i><br>Ananthakrishnan                           |    |
| 55. | Tube peculiar, short, longitudinally ribbed. Foretibia short, with a short apical tooth in both sexes. Prothorax heavy; foretarsus with a stout tooth in both sexes. Antennal segments short and compact. [Larvae: Cephalic & pronotal plates absent. Body setae hyaline knobbed, without chitinated bases. Setae 6 of pronotum very short. Setae 1-3 on abdominal sigment IX short. Tube short, yellow.] ... | ... | ... | <i>Alocothrips</i> Priesner                                       |    |

\*The genus *Ocuothrips* Ananthakrishnan known through only two males, is without accessory epimerals. Otherwise it is similar to *Austrothrips*. It is also macropterous.

\*\*A possible new genus.

- Tube normal, not longitudinally ribbed. ... .. 56
- 56. Antennal segment 8 constricted at base. Mouth-  
cone short, pointed. ... .. *Eurhynchothrips* Hood  
Foretarsi unarmed. Two epimeral setae on  
each side. ... .. Subgenus *Mimothrips*  
Priesner
- Antennal segment 8 usually not constricted at base.... .. 57
- 57. Prothorax unusually short. Eyes large. Mouthcone  
very long, extending beyond prosternum, narrowly  
rounded. Foretarsus unarmed. ... .. *Stannardothrips*  
Ananthakrishnan
- Prothorax never unusually short, as long as or a  
little shorter than head or slightly longer. ... .. 58
- 58. Foretarsi unarmed in both sexes. ... .. 59
- Foretarsi armed in both sexes or armed only in  
males. ... .. 67
- 59. Mouthcone elongate, pointed to narrowly rounded.... .. 60
- Mouthcone never elongate, mostly broadly rounded... .. 61
- 60. Head 1.1–1.7 times as long as wide and almost  
twice as long as pronotum. Forefemora mostly  
thin. [Larvae: Mouthcone pointed or narrowly  
rounded. Pronotal seta 2 shorter, 3 & 5 compara-  
tively long, 6 very long. Cephalic & pronotal  
plates usually present, absent in some. Anal setae  
1.11–1.38 times longer than tube.] ... .. *Liothrips* Uzel
- Head shorter, pronotum heavy and much longer  
than head. Forefemora slightly enlarged in both  
sexes. ... .. *Rhynchothrips* Hood
- 61. Head with a slight, but distinct notch behind eyes.... .. 62
- Head without notch behind eyes. ... .. 63
- 62. Antennal segment 8 elongate fusiform. Eyes  
angular behind exteriorly due to posterior omma-  
tidia being enlarged. Postoculars and prothoracic  
setae well developed. ... .. *Thlibothrips* Priesner
- 63. Eyes flat, narrowed in front. Sides of pronotum  
arched; epimera slightly fused with pronotum. ... .. *Carissothrips*  
Ananthakrishnan
- Eyes normal, not flat, Sides of pronotum not arched  
and epimera mostly separate and not fused with  
pronotum. ... .. 64
- 64. Cheeks strongly narrowed at base or constricted. ... .. 65
- Cheeks not narrowed or constricted at base but more  
parallel sided. ... .. 66
- 65. Postoculars vestigial. Head about as long as wide.  
Antennae slender, sense cones long and fine. Fore-  
wing with double fringes. ... .. *Pnigmothrips* Priesner
- Postoculars distinct. Head distinctly wider than  
long. Forewings without double fringes. ... .. *Phylladothrips* Priesner
- 66. Antennal segment 7 longer than 3, 4 or 5 which  
are short. Anteroangulars, anteromarginals, and  
midlaterals of prothorax poorly developed.  
[Larvae: Body setae pointed without chitinised  
bases; cephalic & pronotal plates absent. Setae 1–3  
on abdominal segment IX blunt. Anal setae  
shorter than tube.] ... .. *Lygothrips*  
Ananthakrishnan
- Antennal segment 7 not longer than 3, 4 or 5; seg-  
ments 4–6 usually short. Prothoracic setae mostly  
well developed. ... .. *Eothrips* Hood

67. Tube short and stout. Eyes small with a few facets. Antennal segments 7 and 8 broadly united, forming an unit. Mouthcone long and pointed. Foretarsi with a small tooth. ... *Neothrips* Hood
- Tube not short and stout. ... 68
68. Head elongate, distinctly constricted at base; cheeks, strongly spinose. Antennal segment 7 and 8 forming an unit. Postoculars shorter than eyes. Mouthcone long and pointed. Prothoracic setae very well developed. Forefemora moderately enlarged in both sexes, foretarsi unarmed in females; armed with a forwardly directed tooth in the males. Forewings uniformly wide with numerous double fringes. ... *Synergothrips* Ananthakrishnan
- Head not constricted at base, antennal segment 7 and 8 not forming an unit. ... 69
69. B<sub>1</sub> and B<sub>2</sub> of abdominal segment IX always knobbed. ... *Liophaleothrips* Priesner
- B<sub>1</sub> and B<sub>2</sub> of IX pointed and fine. ... 70
70. Forefemora strongly enlarged in the males. Foretarsus of females mostly unarmed, always armed in males; foretibiae of oedymorous males and sometimes the forefemora, with one or two well developed teeth or tubercles. Mouthcone rounded to pointed... *Hoplothrips* Serville
- Oedymorous males, when present without foretibial or forefemoral teeth; foretarsus of females usually armed. ... 71
71. Antennal segments 5 and 6 usually obliquely truncate. Forefemora moderately enlarged in both sexes and foretarsi always with a well developed tooth. [Larvae: Mouthcone pointed; maxillary stylets wide apart. Pronotal setae 2 very short 3 & 5 comparatively shorter; 6 moderately long. Setae 1-3 on abdominal segment IX very short.] ... *Teuchothrips* Hood
- Antennal segments 5 and 6 not obliquely truncate... 72
72. B<sub>2</sub> of abdominal segment IX not short in the males. Forefemora strongly enlarged in both sexes. (gall thrips). [Larvae: Cephalic, pronotal & body setae pointed; setae with weak chitinised bases. Cephalic & pronotal plates present. Setae 1-3 on abdominal segment IX knobbed.] ... *Schedothrips* Ananthakrishnan
- B<sub>2</sub> of abdominal segment IX always short in the males. Forefemora atmost enlarged in the males... 73
73. Cheeks rounded; antenna wholly black; segment 8 subpedicellate. Foretarsi in both sexes with a conspicuous tooth. ... *Treherniella* Priesner
- Cheeks mostly parallel-sided. Antenna not completely black. ... 74
74. Two pairs of postoculars. Head a little narrowed or constricted at base. Mouthcone elongate, rounded. Foretarsi armed in both sexes. ... *Aclystothrips* Ananthakrishnan
- Usually one pair of postoculars, often two pairs in *Gynaikothrips*. ... 75
75. Foretarsal tooth blunt, upwardly directed. Anterior marginals of prothorax short. Antennal segments 5-7 with well developed sense cones, longer than those on 3 and 4. Mouthcone narrowly rounded, with labrum pointed. ... *Phorinothrips* Ananthakrishnan

- Foretarsal tooth, not upwardly directed, always pointed. Sensecones on 3 and 4 better developed. Mouthcone mostly broadly rounded. ... 76
- 76. Pronotum often with twisted striae. Foretarsus in both sexes armed or unarmed. Epimeral suture complete or incomplete. Mouthcone very broadly rounded. [Larvae: Mouthcone broadly rounded. Cephalic & pronotal plates usually absent.] ... *Gynaikothrips* Karny
- Pronotum without twisted striae, atmost with transverse striae. ... 77
- 77. Foretarsus of female unarmed, that of male with a scarcely recognizable tooth. Antennal segment 4 shorter than 3 or 5. Postoculars very small. Cheeks with a notch behind eyes. Double fringes absent. [Larvae: Mouthcone rounded; maxillary stylets wide apart. Pronotal setae long & pointed. Anal setae 2 times longer than tube.] ... *Tetradothrips* Priesner
- Foretarsus armed or unarmed in both sexes. ... 78
- 78. Tube very much longer than head ... 79
- Tube shorter than head or about as long. ... 82
- 79. Body setae very long, strong, heavy, infundibuliform and arising from broadened bases. Forewings narrow. Epimeral suture incomplete. Tube about 1.3–1.6 times as long as head. [Larvae: Cephalic, pronotal and body setae long, more spatulate than knobbed, on raised prominences. Cephalic and pronotal plates absent. Anal setae longer than tube.] ... *Kochummania* Ananthakrishnan
- Body setae not very long, stout or infundibuliform. Tube much longer than head. ... 80
- 80. Head very little produced, with a clear notch behind eyes. Cheeks wide behind eyes and with or without spines. Tube pilose. Integument strongly sculptured. [Larvae: Body setae without chitinised bases. Cephalic and pronotal plates absent. Setae 1–3 on abdominal segment IX blunt. Anal setae shorter than tube.] ... *Leeuwenia* Karny
- Cheeks without notch behind eyes. Integument not strongly sculptured. Tube not pilose. ... 81
- 81. Abdominal segments not flattened, laterally. Setae on IX fine, not short and blunt. Ocellar hump produced. Prothorax with blunt setae at hind angles. [Larvae: Anal setae as long as tube. Antennal segment 3 very long.] ... *Gigantothrips* Zimmerman
- 82. Wings uniformly broad, parallel-sided; head not constricted at base. ... 83
- Forewings slightly narrowed at apex and parallel sided beyond middle (Mesothripine) or with a distinct constriction at middle (Haplothripine). Head sometimes with a distinct constriction at base...
- 83. Pronotum reduced to a shield with more extensive membranous areas. Foretibia short. ... 86
- Pronotum normal, more uniformly sclerotized. Head about as long as wide, cheeks strongly convex; postoculars short, pointed. Antenna 8-segmented. Mouthcone long, broadly rounded at apex; maxillary stylets retracted, on a level with the postoculars, closely apposed, not meeting at middle. Prothorax ... 84

- heavier, longer than head. 2 pairs of epimerals on each side. Forefemora very much enlarged, foretarsus at base with a strong tooth. Basal wing setae vestigial. ... .. *Opidothrips*  
Ananthakrishnan
84. Antennal segment 2 produced exteriorly as in *Chirothrips*. Antennal segment 8 distinctly longer than the 3rd, intermediate segments short. ... Ramakrishna and Margabandhu *Chirothrips*
- Antennal segment 2 not produced. ... .. 85
85. Head elongate, with a short but distinct anteocular process. Mouthcone short and pointed. Anteromarginals and anteromarginals of pronotum reduced. Tibial spurs absent. ... .. *Glubothrips*  
Ananthakrishnan
- Head about as long as wide; pronotum further reduced to a shield with only epimeral setae well developed. Mid and hind tibiae with strongly developed spurs. Mouthcone short, rounded. ... .. *Pleurothrips* Hood
86. Forewings Mesothripine. ... .. 87
- Forewings Haplothripine. ... .. 91
87. Cheeks convex. Mouthcone rounded, maxillary stylets mesad, wide apart. Prothorax much shorter than head. Foretarsi unarmed. Basal wing setae and double fringes on forewings absent. ... .. *Callothrips*  
Ananthakrishnan
- Cheeks not convex. Basal wing setae and double fringes usually well developed. ... .. 88
88. Forefemora at middle with a pointed tooth; foretibia with one or two tooth-like projections near middle, foretarsi armed. ... .. *Euoplothrips* Hood
- Forefemora and foretibia unarmed. ... .. 89
89. Head long and parallel sided, more than twice as long as prothorax. Cheeks with 3-4 short spines; antennal segments 7 and 8 forming a close unit. Maxillary stylets oculad, closely approximate. Foretarsi unarmed in both sexes. ... .. *Ablemothrips*  
Ananthakrishnan
- Head not elongate and parallel sided, at most as long as prothorax. ... .. 90
90. Cheeks slightly spinose, invariably constricted at base. Wings narrower. Forefemora usually enlarged. ... .. *Mesothrips* Zimmerman
- Cheeks smooth; mouthcone very short. ... .. *Mesandothrips* Priesner
91. Mouthcone short, broadened. ... .. 92
- Mouthcone pointed. ... .. 104
92. Apterous in both sexes. Ocelli absent. Tube short, only half the head length. ... .. *Apterygothrips* Priesner
- Macropterous, brachypterous or apterous. Tube normal, about as long as head. ... .. 93
93. Head very short, broader than long. Cheeks converging anteriorly. Forewings with 3 basal wing setae. No double fringes. ... .. *Euryaplothrips*  
Ramakrishna and Margabandhu
- Head not very short, but wider than long and slightly constricted behind eyes; antennals 4-7 short, almost moniliform; only two basal wing setae and no double fringes. ... .. *Phenothrips*  
Ananthakrishnan

|      |                                                                                                                                                                                                                                                                                      |     |     |                                                  |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|--------------------------------------------------|
| —    | Head about as long as broad or a little longer, not converging anteriorly; with or without double fringes.                                                                                                                                                                           | ... | ... | 94                                               |
| 94.  | Forefemora, foretibia and foretarsi variously armed...                                                                                                                                                                                                                               | ... | ... | 95                                               |
| —    | Forefemora and foretibia unarmed; foretarsi armed or not.                                                                                                                                                                                                                            | ... | ... | 96                                               |
| 95.  | Forefemora in females with a blunt tooth or hump at base, often crenulate or roughened distally. Foretibia with a flat scale at apex. Tarsi armed. [Larvae: Setae 1-3 on abdominal segment IX knobbed.]                                                                              | ... | ... | <i>Androthrips</i> Karny                         |
| —    | Foretibia without a scale at apex, very short, about half the length of the forefemora. Foretibia with a distinct tubercle. [Larvae: Cephalic and pronotal plates absent. Body setae knobbed without chitinated bases. Setae 1-3 on abdominal segment IX knobbed. Tube transparent.] | ... | ... | <i>Aeglothrips</i><br>Ananthakrishnan            |
| —    | Foretibia not very short and with one or two distinct teeth. Forefemora sometimes with a hump at base...                                                                                                                                                                             | ... | ... | <i>Podothrips</i> Hood                           |
| —    | Forefemora without hump. Body unicolorous or bicolourous. Antennal segment 3 without subbasal ring.                                                                                                                                                                                  | ... | ... | Subgenus <i>Podothrips</i> s.str.                |
| —    | Forefemora with a distinct hump at base. Antennal segment 3 with only one sense cone.                                                                                                                                                                                                | ... | ... | Subgenus <i>Kentronothrips</i><br>Moulton        |
| —    | Forefemora without hump at base. Segment 3 of antenna with one or two sense cones.                                                                                                                                                                                                   | ... | ... | Subgenus <i>Melampodothrips</i><br>Priesner      |
| —    | Cheeks with a distinct indentation below eyes, its outer edge projecting as a sharp spine.                                                                                                                                                                                           | ... | ... | Subgenus <i>Neopodothrips</i><br>Ananthakrishnan |
| —    | Forefemora without hump. Antennal segment 3 with distinct subbasal ring.                                                                                                                                                                                                             | ... | ... | Subgenus <i>Saucrothrips</i><br>Ananthakrishnan  |
| 96.  | Foretibia without teeth or tubercle, but pointed interiorly at apex. Cheeks evenly convex. Mouthcone very short and broad.                                                                                                                                                           | ... | ... | <i>Praepodothrips</i> Priesner                   |
| —    | Cheeks convex, serrate, Maxillary stylets short, retracted just above mouthcone. Foretarsus with tooth only in the male. Mostly apterous, rarely macropterous.                                                                                                                       | ... | ... | <i>Antillothrips</i> Stannard                    |
| —    | Cheeks not convex, mouthcone not very short; maxillary stylets more often connected by a maxillary bridge. Foretibia normal. Foretarsus with or without teeth.                                                                                                                       | ... | ... | 97                                               |
| 97.  | Forefemora at apex of outer margin with a small tooth-like projection as in <i>Chirothrips</i> . Antennal segment 3 with only one sense cone and 4 with 2 cones. Legs short and stout.                                                                                               | ... | ... | <i>Chiraplothrips</i> Priesner                   |
| —    | Forefemora normal, apex of outer margin not projecting tooth-like. Foretarsi usually with teeth, rarely without. Antennal segment 3 with 0-2 sense cones and segment 4 always with 4 cones.                                                                                          | ... | ... | 98                                               |
| 98.  | Prominent setae on head and pronotum absent. Only epimerals developed, dilated at apex.                                                                                                                                                                                              | ... | ... | <i>Ananthakrishnana</i> Bhatti                   |
| —    | Cephalic and pronotal setae usually developed.                                                                                                                                                                                                                                       | ... | ... | 99                                               |
| 99.  | Pronotum about as long as head.                                                                                                                                                                                                                                                      | ... | ... | 100                                              |
| —    | Pronotum much shorter than head.                                                                                                                                                                                                                                                     | ... | ... | 102                                              |
| 100. | Antennal segment 3 with a distinct shelf-like thickening at base above pedicel.                                                                                                                                                                                                      | ... | ... | <i>Agrothrips</i><br>Jacot-Guillarmod            |
| —    | Antennal segment 3 normal.                                                                                                                                                                                                                                                           | ... | ... | 101                                              |

|      |                                                                                                                                                                                                             |     |     |                                      |     |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|--------------------------------------|-----|
| 101. | Cephalic and pronotal setae usually well developed. Epimerals mostly pointed or blunt.                                                                                                                      | ... | ... | <i>Haplothrips</i> Serville          |     |
| a.   | Antennal segment 3 almost symmetrical. Forefemora of females enlarged; those of gynaecoid males reduced, of oedymorous males more enlarged. Foretarsal tooth when present direct forwards.                  | ... | ... | ...                                  | b.  |
| —    | Antennal segment 3 not very symmetrical. Forefemora of females usually simple, almost enlarged in males.                                                                                                    | ... | ... | ...                                  | c.  |
| b.   | Antennal segment 8 constricted at base. Tube setae not very long, almost as long as tube. Small forms.                                                                                                      | ... | ... | <i>Cylaplothrips</i> * Priesner      |     |
| —    | Antennal segment 8 broad at base 7 and 8 closely united. Tube setae long and fine, almost twice as long as tube. Hind femora usually enlarged.                                                              | ... | ... | <i>Karnyothrips</i> * Watson         |     |
| c.   | Forewings with or without double fringes.                                                                                                                                                                   | ... | ... | Subgenus <i>Haplothrips</i> * s.str. |     |
| 102. | Head about as long as wide; foretarsus armed in both sexes; the female with a smaller tooth; body bristles dark and blunt.                                                                                  | ... | ... | <i>Alloiothrips</i>                  |     |
| —    | Head distinctly longer than wide about 1.3–1.7 times as long as wide. Foretarsus unarmed. Mouthcone broadly rounded.                                                                                        | ... | ... | Ananthakrishnan                      |     |
| 103. | Head 1.4 times as long as wide and twice as long as pronotum. Epimeral suture complete. Pronotal setae short and dilated. Foretarsi unarmed in both sexes.                                                  | ... | ... | ...                                  | 103 |
| —    | Head 1.3 times as long as wide and 1.7 times as long as pronotum. Intermediate antennal segments elongate. Maxillary stylets retracted to about middle with a maxillary bridge. Epimeral suture incomplete. | ... | ... | <i>Chlarathrips</i>                  |     |
| 104. | Mouthcone very long and narrow, beak-like, extending much beyond prosternum.                                                                                                                                | ... | ... | Ananthakrishnan                      |     |
| —    | Mouthcone not very narrow but more biconcave or triangular.                                                                                                                                                 | ... | ... | <i>Segnothrips</i>                   |     |
| 105. | Mouthcone triangular, pointed, reaching base of prosternum. Head about as in <i>Haplothrips</i> or a little longer.                                                                                         | ... | ... | Ananthakrishnan                      |     |
| —    | Mouthcone distinctly biconcave. Head more elongate. Body long and slender, abdomen narrow and tapering.                                                                                                     | ... | ... | <i>Calamothrips</i>                  |     |
| 106. | Forefemora a little enlarged foretarsus with a distinct tooth.                                                                                                                                              | ... | ... | Ananthakrishnan                      |     |
| —    | Forefemora not enlarged. Foretarsus with or without small tooth; other features as in <i>Dolichothrips</i> .                                                                                                | ... | ... | ...                                  | 105 |
| 107. | Abdominal segment X tubiform, not parabolic in outline.                                                                                                                                                     | ... | ... | <i>Neoheegeria</i> Schmutz           |     |
| —    | Abdominal segment X not tubiform, parabolic in outline.                                                                                                                                                     | ... | ... | ...                                  | 106 |
| 108. | Maxillary stylets moderately thick, a little thicker than the Phlaeothripines.                                                                                                                              | ... | ... | <i>Dolichothrips</i> Priesner        |     |
| —    | Maxillary stylets thickened, at least as stout as labial palps.                                                                                                                                             | ... | ... | <i>Dolicholepta</i> Priesner         |     |
| 109. | Maxillary stylets thickened, at least as stout as labial palps.                                                                                                                                             | ... | ... | ...                                  | 108 |
| 110. | Maxillary stylets thickened, at least as stout as labial palps.                                                                                                                                             | ... | ... | <i>Pygothrips</i> Hood               |     |
| 111. | Maxillary stylets thickened, at least as stout as labial palps.                                                                                                                                             | ... | ... | ...                                  | 109 |
| 112. | Maxillary stylets thickened, at least as stout as labial palps.                                                                                                                                             | ... | ... | ...                                  | 110 |

\* This genera has been treated as coming under the *Haplothrips* complex in view of the presence of the broad mouthcone.

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|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|-----|
| 109. | Antenna 7 segmented, 7 and 8 forming an unit, sometimes with an indistinct suture. Head elevated along median line, lateral surfaces sloping concavely forward. Head a little longer than wide to more than twice as long. Cheeks somewhat swollen behind eyes. Mouthcone broadly rounded to pointed, tube slender. ... .. | <i>Polyphemothrips</i> * Hood          |     |
| —    | Tube broad at base and slightly warty. Otherwise as in <i>Polyphemothrips</i> . ... ..                                                                                                                                                                                                                                     | <i>Symphiothrips</i> * Hood            |     |
| 110. | Antenna 7-segmented. ... ..                                                                                                                                                                                                                                                                                                | ...                                    | 111 |
| —    | Antenna clearly 8 segmented. ... ..                                                                                                                                                                                                                                                                                        | ...                                    | 113 |
| 111. | Segment 3 of antenna with a distinct sub-basal ring. Maxillary stylets 'V' like. Foretarsus unarmed in the females, armed in males. ... ..                                                                                                                                                                                 | <i>Percnothrips</i><br>Ananthakrishnan |     |
| —    | Segment 3 of antenna without a subbasal ring. ... ..                                                                                                                                                                                                                                                                       | ...                                    | 112 |
| 112. | Head 1.5 times as long as wide, cheeks concave behind eyes, convex at middle. Maxillary stylets meeting at middle. Mouthcone rounded. Foretarsi armed. ... ..                                                                                                                                                              | <i>Stnothrips</i><br>Ananthakrishnan   |     |
| —    | Head not elongate, cheeks not concave behind eyes. Eyes reduced to 4-6 facets in apterous forms. Brachypterous and macropterous forms rare, with larger eyes. ... ..                                                                                                                                                       | <i>Allothrips</i> Hood                 |     |
| 113. | Cheeks incut behind eyes. Head slightly produced. Tube heavy. ... ..                                                                                                                                                                                                                                                       | <i>Loyolaia</i> Ananthakrishnan        |     |
| —    | Cheeks normal. ... ..                                                                                                                                                                                                                                                                                                      | ...                                    | 114 |
| 114. | Head longer than broad narrowing at base, dorsally somewhat convex. Antennal 3 with a distinct subbasal ring. Forefemora of male concave along inner margin. Foretarsus armed in both sexes. ... ..                                                                                                                        | <i>Priesneriana</i><br>Ananthakrishnan |     |
| —    | Segment 3 of antenna without subbasal ring. Foretarsus armed or unarmed in both sexes. ... ..                                                                                                                                                                                                                              | ...                                    | 115 |
| 115. | Head not or very little produced. ... ..                                                                                                                                                                                                                                                                                   | ...                                    | 116 |
| —    | Head distinctly produced. ... ..                                                                                                                                                                                                                                                                                           | ...                                    | 127 |
| 116. | Forefemora and sometimes foretibiae with a series of small to well developed teeth. ... ..                                                                                                                                                                                                                                 | ...                                    | 117 |
| —    | Forefemora without teeth, foretibiae atmost with an apical tooth. ... ..                                                                                                                                                                                                                                                   | ...                                    | 118 |
| 117. | Antenna and tube longer than head; forefemoral teeth small, tubercular; foretibiae with a blunt tooth at apex. ... ..                                                                                                                                                                                                      | <i>Ischyrothrips</i> Schmutz           |     |
| —    | Antenna and tube clearly shorter than head; forefemora at apex with a series of 4 large teeth, proximal one the largest; foretibiae very short with a series of small tubercles. ... ..                                                                                                                                    | <i>Veerahuthrips</i><br>Ramakrishna    |     |
| 118. | Maxillary stylets broadly separate, 'V' like. ... ..                                                                                                                                                                                                                                                                       | ...                                    | 119 |
| —    | Maxillary stylets not 'V' like. Tube not longitudinally ribbed. ... ..                                                                                                                                                                                                                                                     | ...                                    | 121 |
| 119. | Antennal segment 3 with 1 or 2 sense cones; 4 with 3 sense cones, segment 8 elongate. Head rectangular, longer than wide; eyes large. Epimeral suture generally not complete. Foretarsal tooth                                                                                                                             |                                        |     |

\* Both these genera are intermediate between the Idolothripinae and Phlaeothripinae. Stannard includes them under the Phlaeothripinae, while Priesner places them under the Idolothripinae.

|                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                     |     |     |                                        |     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|----------------------------------------|-----|
| present in male, present or absent in female. Metanotal median setae well developed. Tube variable in shape straight sides evenly narrowing to apex or with apex sharply constricted yellow or paler than rest of abdomen. ... .. |                                                                                                                                                                                                                                                                                                                                                     |     | ... | <i>Gastrothrips</i> Hood               |     |
| —                                                                                                                                                                                                                                 | Antennal segment 3 with 2 sense cones, 4 with 4 sense cones. Tube heavy mostly longitudinally ribbed. ... ..                                                                                                                                                                                                                                        | ... | ... | ...                                    | 120 |
| 120.                                                                                                                                                                                                                              | Metanotal median setae usually small. Head broad to oval without conspicuous setae. Antennal segment 8 short and broad. Foretarsal tooth present in male, absent in female. ... ..                                                                                                                                                                  | ... |     | <i>Nesothrips</i> Kirkaldy             |     |
| —                                                                                                                                                                                                                                 | Metanotal median setae stout. Head longer or about as long as wide; Postocular setae elongate, oedymorous males with 2 pairs of postoculars. Foretarsal tooth well developed in both sexes. Mid and hind femora each with one stout dorsal seta. Sigmoid wing-retaining setae well developed on tergites III–VI, nearly straight on II and III. ... |     |     | <i>Nesidiothrips</i> Mound             |     |
| —                                                                                                                                                                                                                                 | Metanotal median setae small and fine. Head variable, longer than wide or slightly wider. Antennal segment 8 never elongate. Foretarsal tooth large in male, small or absent in female. Tube with small setae bearing tubercles laterally, rarely with longitudinal ridges in basal third. ...                                                      |     |     | <i>Neosmerinthothrips</i> Schmutz      |     |
| 121.                                                                                                                                                                                                                              | Sense cones on intermediate antennal segments very long, flagelliform. Head very long and parallel sided, smooth. ... ..                                                                                                                                                                                                                            | ... |     | <i>Aesthesiothrips</i> Ananthakrishnan |     |
| —                                                                                                                                                                                                                                 | Sense cones on intermediate antennal segments short, normal. ... ..                                                                                                                                                                                                                                                                                 | ... | ... | ...                                    | 122 |
| 122.                                                                                                                                                                                                                              | Tube shorter than head or as long; foretibiae unarmed. ... ..                                                                                                                                                                                                                                                                                       | ... | ... | ...                                    | 123 |
| —                                                                                                                                                                                                                                 | Tube longer than head; foretibiae armed or unarmed. ... ..                                                                                                                                                                                                                                                                                          | ... | ... | ...                                    | 124 |
| 123.                                                                                                                                                                                                                              | Tube heavy, conical, nearly thrice as wide at base as at apex. Head parallel-sided, elongate, cheeks smooth; interocellars, anteocellars, post-ocellars absent. Foretarsi unarmed in both sexes. Setae on segment IX of abdomen strong. ... ..                                                                                                      | ... |     | <i>Uredothrips</i> Ananthakrishnan     |     |
| —                                                                                                                                                                                                                                 | Tube not heavy and conical, more parallel-sided and setae on IX normal, thin. Head with distinct inter-and postocellar setae. Foretarsi with a tooth in both sexes. ... ..                                                                                                                                                                          | ... |     | <i>Diceratothrips</i> Hood             |     |
| 124.                                                                                                                                                                                                                              | Forefemora and foretibiae armed in the females, or forefemora unarmed in both sexes, foretibiae at apex within with a tooth or tubercle. ... ..                                                                                                                                                                                                     | ... | ... | ...                                    | 125 |
| —                                                                                                                                                                                                                                 | Forefemora unarmed and foretibia without tooth or tubercle at apex within. Antennal segment 4 distinctly longer than 3. Foretarsi armed in both sexes. ... ..                                                                                                                                                                                       | ... |     | <i>Elaphridia</i> Ananthakrishnan      |     |
| 125.                                                                                                                                                                                                                              | Forefemora in females very much enlarged, with a series of dark, stout teeth; foretibiae in females also with a series of fine tubercles. Males with unarmed femora and tibiae. ... ..                                                                                                                                                              | ... |     | <i>Machatothrips</i> Karny             |     |
| —                                                                                                                                                                                                                                 | Forefemora unarmed in both sexes; foretibiae with a tooth or tubercle at apex within. ... ..                                                                                                                                                                                                                                                        | ... | ... | ...                                    | 126 |

126. Head parallel-sided and sense cones not very long. Foretibiae in both sexes with strongly developed tooth, being almost reduced or lost in the gynaecoid males and minor females and well developed in oedymorous males and major females. ... *Diaphorothrips* Karny
- Head distinctly constricted at base; sense cones on 3 and 4 long and thin. Foretibia in both sexes with an emphasised tubercle at apex within. ... *Deothrips* Ananthakrishnan
127. Head production often short. ... 128
- Head production of varied length, often more pronounced. ... 131
128. Mesonotum without distinct processes. Cheeks without strong setae, set on warts. ... 129
- Mesonotum with a distinct process. Cheek setae more pronounced, set on warts. ... 130
129. Eyes produced ventrally. Head more elongate. Body ant like, head swollen. Pro-and pterothorax reduced. Abdomen enlarged; segment, 6 of male without drepna. ... *Oedaleothrips*\* Hood
- Eyes large, bulging produced ventrally. Body normal not ant like. Abdominal segment VI of male with drepna, VII and VIII bearing teeth or tubercles. Forelegs spinose, occasionally with emphasised chitinised setae. ... *Bactrothrips* Karny
130. Mesothorax of males with a distinct forked process wanting in gynaecoid males; cheeks strongly spinose in oedymorous males, weakly so in gynaecoid. Oedymorous males with very strongly developed highly spinose forefemora; foretibiae with numerous denticles on inner margin and foretarsal tooth very strong. ... *Dinothrips* Bagnall
131. Eyes produced caudad, ventrally. Head production not parallel a little broader at base. Forefemora unarmed in both sexes. Mouthcone very short and broadly rounded; maxillary stylets wide apart... *Pyrgothrips* Karny
- Eyes not produced ventrally. Head parallel. ... 132
132. Antennal segment 3 very long and thin and as long as or longer than head. Forelegs thin and long, forefemora at base on outer margin prolonged tooth-like; foretarsi unarmed. ... *Meiothrips* Karny
- Antennal segment 3 not very thin and not as long as head, except in the oedymorous males of *Tiarothrips*. ... 133
133. Forefemora of males at apex on outer margin with a sickle-like bristle, absent almost always in gynaecoid males. Antennal segment 3 short, 3 and 4 in oedymorous males with strongly developed setae. Eyes not produced ventrally. Genal setae well developed. ... *Elaphrothrips* Buffa
- Forefemora in females always unarmed, without any hump or tooth or conical processes on one or both margin. Oedymorous males strongly armed with a sickle-like bristle (except in *productus*) and inner margin of femora always striaght. ... Subgenous *Elaphrothrips* s.str.
- Forefemora of females with a distinct tooth at middle of inner margin males without. Oedymorous males with the typical sickle-like bristle. ... Subgenous *Cradothrips* Ananthakrishnan

\* Stannard prefers to use the name *Leptogastrothrips*.

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                             |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| —    | Forefemora at apex without the sickle-like bristles in males. ... ..                                                                                                                                                                                                                                                                                                                                                                                       | 134                         |
| 134. | Head production almost parallel sided, shorter than head in females, and in gynaecoid males; oedymorous males with excessively developed head production, 4.5 to 5 times as long as in the gynaecoid males. Antennal segment 3 in oedymorous males very long, sides strongly and asymmetrically sinuate, with deep concavities and carrying strong setae at apex in oedymorous males. Forefemora strongly enlarged and unarmed in oedymorous males. ... .. | <i>Tiarothrips</i> Priesner |
| —    | Head production wider in front much shorter than head. Antennal segment 3 with smooth margins and with a clubbed apex. Forefemora with a tooth or hump at apex. Forefemora in oedymorous males excessively enlarged with a forked chitinous tooth at apex of inner margin; foretarsal tooth variable in shape in oedymorous males. ... ..                                                                                                                  | <i>Mecynothrips</i> Bagnall |

KEY TO THE FAMILIES AND SUBFAMILIES OF  
THYSANOPTERA BASED ON II INSTAR LARVA

|    |                                                                                                                                                                                                                                                                                     |                        |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| 1. | Intermediate antennal segments annulate, clothed with microtrichia. Segment X of abdomen not tubi form, rarely sclerotized (suborder Terebrantia)...                                                                                                                                | 2                      |
| —  | Intermediate antennal segments not annulate, smooth; segment X of abdomen tubiform or conical; segment XI represented by the ring of anal setae, always distinct and carries a pair of long setae; apical abdominal segments more strongly sclerotized (Suborder Tubulifera) ... .. | 6                      |
| 2. | Antennal segments 3–7 elongate, 3–5 more so, parallel sided and with ten or more annuli, microsetulae on the segments (3–7) distinct. Antenna always 7-segmented (Family Aeolothripidae). ... ..                                                                                    | 3                      |
| —  | Antennal segments 3–5 much shorter, with annulations and microsetulae confined only to these segments; segments never parallel sided. Antenna 7-segmented (Subfamily Heliothripinae) or 6-segmented (Subfamily Thripinae). ... ..                                                   | 5                      |
| 3. | Abdominal segment IX without dorsal spines. ... ..                                                                                                                                                                                                                                  | <i>Mymarothripinae</i> |
| —  | Abdominal segment IX with 2 pairs of dorsal spines....                                                                                                                                                                                                                              | 4                      |
| 4. | Dorsal spines of abdominal segment IX subequal. ... ..                                                                                                                                                                                                                              | <i>Aeolothripinae</i>  |
| —  | Median pair of dorsal spines longer than lateral pair...                                                                                                                                                                                                                            | <i>Melanthripinae</i>  |
| 5. | Antenna usually 6-segmented with segments 5 and 6 short. Abdominal segment X never tubiform but blunt or conical, without anal ring. ... ..                                                                                                                                         | <i>Thripinae</i>       |
| —  | Antennae always 7-segmented, terminal segments elongate, 7 needle-like. Abdominal segment X always tubiform with a distinct anal ring. ... ..                                                                                                                                       | <i>Heliothripinae</i>  |
| 6. | Anal setae at least 8–10 times as long as segment X...                                                                                                                                                                                                                              | <i>Urothripinae</i>    |
| —  | Anal setae much shorter (almost longer in <i>Neurothrips</i> ). ... ..                                                                                                                                                                                                              | 7                      |
| 7. | Maxillary stylets thinner than labial palps. Antennal segment 3 narrowed at base, stalked and not broadly attached to 2. ... ..                                                                                                                                                     | <i>Phlaeothripinae</i> |
| —  | Maxillary stylets as broad as or a little broader than labial palps. Antennal segment 3 broadly attached to 2. ... ..                                                                                                                                                               | <i>Megathripinae</i>   |

Order THYSANOPTERA  
Suborder TEREBRANTIA  
Family AEOLOTHRIPIDAE  
Tribe I. MELANTHRIPINI

Genus 1. **Gelothrips** Bhatti, 1967

Bhatti, 1967. *Thysanoptera Nova Indica*: 5

Bhatti, 1971. *Oriental Ins.*, 5 (1): 87

This genus is represented in India by one species *G. cinctus* (Hood, 1918)

Genus 2. **Melanthrips** Haliday, 1836

Haliday, 1836. *Ent. Mag.*, 3 (5): 450

Subgenus 1. **Dichropterothrips** Priesner, 1936

This subgenus is represented in India by one species *D. baileyi* Ananthakrishnan, 1965

Subgenus 2. **Melanthrips** s. str.

KEY TO THE INDIAN SPECIES OF *Melanthrips*

- |    |                                                                                                                                          |                                       |
|----|------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| 1. | Forewings clear white at basal fifth and darker beyond. Body setae dark. ... ..                                                          | <i>affluens</i> Ananthakrishnan, 1966 |
| —  | Forewings uniformly clear. Body setae hyaline. Abdominal sternite III with 2 pairs of accessory setae, absent on other sternites. ... .. | <i>indicus</i> Bhatti, 1967           |

Tribe 2. AEOLOTHRIPINI

Genus 1. **Aeolothrips** Haliday, 1836

Haliday, 1836. *Ent. Mag.* 3: 451

KEY TO THE INDIAN SPECIES OF *Aeolothrips*

- |    |                                                                                                                                                                                                                                                                                                                          |                             |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| 1. | Body predominantly yellow; head, thorax and abdominal segments I–VII golden yellow, VIII–X dark brown; head, thorax and abdominal segments III–VII with dorsal brown shading medially; forewings with 2 narrow dark cross bands, connected posteriorly by a thin dark shading along the posterior margin of wing. ... .. | <i>indicus</i> Bhatti, 1964 |
| —  | General body colouration dark brown, not pale yellow. ... ..                                                                                                                                                                                                                                                             | 2                           |
| 2. | Prothorax dark; abdomen wholly dark or some of the anterior segments paler in immature forms. ... ..                                                                                                                                                                                                                     | 3                           |
| —  | Prothorax pale yellow to orange-brown, sometimes with dark spots ... ..                                                                                                                                                                                                                                                  | 4                           |
| 3. | Antennal segment 5 distinctly shorter than 4 and about as long as the terminal 4 segments together;                                                                                                                                                                                                                      |                             |

- segment 4 about 4–4.5 time as long as broad; segment 2 pale at apex; 3 dark in distal third. Body pigment orange to light crimson. Setae on tergite IX not longer than the claspers. ... .. *intermedius* Bagnall, 1934
- Antennal segment 5 very little shorter than 4 and little longer than terminal four segments together; segment 2 yellowish white in distal half, 3 clear yellowish white, extreme tip dark. Body pigment orange, extreme tip of abdomen crimson. Cross bars on forewings distinctly longer than broad. ... .. *meridionalis* Priesner, 1948
4. Abdomen wholly dark or some of the anterior segments paler in immature specimens. ... .. 5
- Abdominal segments not wholly dark, segments II and III pale whitish; antennal segments 1 and 4–9 dark brown, 2 dark brown in basal fifth rest pale yellow; 3 pale yellow in proximal one third rest brown; legs dark brown including tarsi; forewings with 3 clear areas alternating with 2 dark cross bands. Males without appendices on abdominal tergites, claspers on segment IX or dorsal differentiated plate. ... .. *distinctus* Bhatti, 1971
5. Sensory area of antennal segments 3 and 4 long, extending at least to the middle of the segment. Femora for the greater part pale. Cross bar on forewings short usually as long as broad. ... .. *collaris* Priesner, 1919
- Sensory area on antennal segment 3 extending to less than half the length of the segment and that on 4 extending to two third the length from apex; segment 5 with a small oval sensory area. Head and thorax orangish yellow; head and pronotum with a pair of lateral brownish patches extending from behind eyes to the posterior angle of prothorax and with an additional median longitudinal area. Forefemora yellow with brownish patches along margin mid- and hind femora paler brown at base. Forewings with 2 brownish cross bars, a smaller one in basal half and a longer one in distal half both not connected posteriorly. Prothorax with 8–10 anteromarginal setae and 5–6 pairs of postero-marginal setae. ... .. *nigricornis* Ananthakrishnan, 1968

## Genus 2. *Erythrothrips* Moulton, 1911

Moulton, 1911. *Tech. Ser. U.S. Bur. Ent.*, **21**: 34

This genus is represented in India by one species *E. asiaticus* (Ramakrishna and Margabandhu, 1931)

## Genus 3. *Indothrips* Bhatti, 1967

Bhatti, 1967. *Thysanoptera Nova Indica*: 2

Known only through the type of the genus *I. bhushani* Bhatti, 1967

## Genus 4. *Mymarothrips* Bagnall, 1928

Bagnall, 1928. *Ann. Mag. nat. Hist.*, (10) **1**: 306

### KEY TO THE INDIAN SPECIES OF *Mymarothrips*

1. Head longer than broad, not transverse. Body yellowish brown, cheeks brown, pronotum brown

tinged with red; abdominal segment III–VI with reddish pigment; a bright yellow median longitudinal patch extends from ocellar region to the base of the abdomen, broader at pterothorax. ...

... *garuda* Ramakrishna and Margabandhu, 1931

- Head broader ( $145\mu$ ) than long ( $121\mu$ ). Body brown, head and thorax very dark, intermediate abdominal segments lighter; antennae dark brown; forewings brown with a large colourless area. Forewings with 28 costal, 17–18(9–10+8–9) upper vein and 10–12 lower vein setae. ...

... *bolus* Bhatti, 1967

### Genus 5. **Streothrips** Bhatti, 1971

Bhatti, 1971. *Oriental Ins.*, **5** (1): 89–90

Known only through the type of the enus *S. arorai* (Bhatti, 1967)

## Tribe 3. FRANKLINOTHRIPINI

### Genus 1. **Franklinothrips** Back, 1912

Back, 1912. *Ent. News*, **23**: 73

Represented in India by one species *F. megalops* (Trybom, 1912)

## Tribe 4. OROTHRIPINI

### Genus 1. **Allelothrips** Bagnall, 1932

Bagnall, 1932. *Ann. Mag. nat. Hist.*, (10) **10**: 288

Represented in India by one species *A. pandyani* (Ramakrishna and Margabandhu, 1931)

### Genus 2. **Orothrips** Moulton, 1907

Moulton, 1907. *U.S. Dept. Agri. Tech. Ser.*, **12**: 7

Represented in India by one species *O. raoi* Moulton, 1907

## Family MEROTHRIPIDAE

### Genus 1. **Erotidothrips** Priesner, 1939

Priesner, 1939. *Rev. Zool. bot. Afr.* : 154

Represented in India by one species *E. mirabilis* Priesner, 1939

### Genus 2. **Merothrips** Hood, 1912

Hood, 1912. *Proc. ent. Soc. Wash.*, **14**: 132

## KEY TO THE INDIAN SPECIES OF *Merothrips*

1. Pronotum completely sculptured. Head comparatively short (1.00–1.13 as long as its greatest width). Eyes with 10 ommatidia in apterous specimen. ... *morgani* Hood, 1912
- Pronotum unsculptured in greater part except for about posterior fourth to third with prominent

transverse lines. Head comparatively long (1.17–1.30 as long as its greatest width). Eyes with more than 40 ommatidia in macropterous and 4 ommatidia in apterous specimen. Foretibial tooth small in female and stout in males and also males with forefemora strongly enlarged. ...

*indicus* Bhatti and  
...Ananthakrishnan, 1975

### Family HETEROTHIRIPIDAE

#### Genus 1. **Adiheterothrips** Ramakrishna, 1928

Ramakrishna, 1928. *Mem. Dept. Agri. India Ent. Ser.* **10**: 248

Known only through the type of the genus *A. jambudvipae* Ramakrishna, 1928

#### Genus 2. **Holarthrothrips** Bagnall, 1927

Bagnall, 1927. *Ann. Mag. nat. Hist.*, (9) **20**: 562

Represented in India by one species *H. indicus* Bhatti and Ananthakrishnan (1978)

### Family THIRIPIDAE

#### Subfamily 1. THIRIPINAE

#### Tribe 1. DENDROTHRIPINI

#### Genus 1. **Asprothrips** Crawford, 1938

Crawford, 1938. *Proc. ent. Soc. Wash.*, :109

Represented in India by one species *A. indicus* (Bagnall, 1919)

#### Genus 2. **Dendrothrips** Uzel, 1895

Uzel, 1895. *Monogr. Ord. Thysanoptera* :159

#### KEY TO THE INDIAN SPECIES OF *Dendrothrips*

[Adapted from Bhatti, 1971]

- |                                                                                                                                                                                       |     |                           |   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|---------------------------|---|
| 1. Forewings uniformly covered with microtrichia ...                                                                                                                                  | ... | ...                       | 2 |
| — Forewings not uniformly covered with microtrichia. ...                                                                                                                              | ... | ...                       | 8 |
| 2. Predominantly yellow species. Antennae 7 or 8 segmented. Posterior angles of pronotum with a conspicuous seta. Posterior marginal setae of abdominal terga long and prominent. ... | ... | ...                       | 3 |
| — Predominantly brown species. Antennae 8-segmented. Posterior angles of pronotum without conspicuous setae. Posterior marginal setae of abdominal terga minute. ...                  | ... | ...                       | 7 |
| 3. Antenna 7-segmented. ...                                                                                                                                                           | ... | ...                       | 4 |
| — Antenna 8-segmented. ...                                                                                                                                                            | ... | ...                       | 5 |
| 4. Antennal segment 3, 4 and proximal half of 5 yellowish. Legs pale. Abdominal sterna II–VII shaded only at extreme sides, ...                                                       | ... | <i>albus</i> Bhatti, 1967 |   |

- Antennal segments 2–7 uniformly dark grey brown. Femora and tibiae brown atleast at middle. Abdominal sterna II–VII dark. ... *elixae* Bhatti, 1971
- 5. Forewings with one light grey cross-band and with 30–35 costal setae; scale without discal setae. Head, pterothorax and abdomen mostly yellow. Antennal segments 1 and 2 pale whitish. ... *punctatus* Zur Strassen, 1968
- Forewings with two grey brown cross-bands and with 35–47 costal setae; scale with one discal setae. Head and pterothorax (ventrally) mostly brown. Pterothorax with orange pigmentation and abdomen with brown spots. Antennal segment 1 pale yellow with a dark brown shade ventrally along anterior margin. ... 6
- 6. Forewings with 9–13 lower vein setae and with apex brown. Pronotum with 2 brown spots. ... *cameroni* Priesner
- Forewings with only 5–6 lower vein setae and apex colourless. Pronotum with 4 brown spots. ... *faurei* Bhatti, 1971
- 7. Abdominal segments IV–VI pale yellow. Sense cones on antennal segment 3 lateral in position. ... *sexmaculatus* Bagnall, 1916
- Abdominal segments III–VI dark brown, concolourous with the rest of the abdominal segments. Sense cones on antennal segment 3 ventrolateral in position. ... *strasseni* Bhatti, 1971
- 8. Antennae 7-segmented. ... 9
- Antennae 8-segmented. ... 10
- 9. Body, antennae and major portion of legs dark brown; Forewings brown except at extreme base with 42 costal setae and 5 lower vein setae. ... *stannardi* (Ananthakrishnan, 1957)
- Body, antennal segments 1, 3 and 4 and legs yellow. Forewings transparent with greyish spots and with 34 costal setae and 2 lower vein setae. ... *jasminum* (Ramakrishna and Margabandhu, 1939)
- 10. Sense cone on antennal segment 3 simple. Forewings with 1 to 2 grey brown cross bands (sometimes incomplete); tip of wings hyaline. Head and thorax yellow. ... 11
- Sense cone on antennal segment 3 forked. Forewings with 3 (complete) brown cross bands. Head and thorax mostly brown. ... 12
- 11. Pronotum with transverse lines of sculpture. Forewings at middle with only a narrow naked area bearing transverse wrinkles instead of microtrichia, rest of the surface covered with microtrichia and with 28–29 costal setae and lower vein without setae. Sides of abdominal terga II–VIII partly reticulate and partly with longitudinal lines. ... *minutus* (Ananthakrishnan, 1961)
- Pronotum without distinct lines of sculpture, coarsely granulate all over. Forewing at middle mostly naked, bearing transverse wrinkles with few microtrichia and with 35–39 costal setae and 2 lower vein setae. Sides of abdominal terga II–VIII reticulate without prominent longitudinal lines. ... *aspersus* Bhatti, 1971
- 12. Sides of abdominal terga IV–VIII partly reticulate and partly with longitudinal lines. Prospina-sternum reduced. Forewings with 47–52 costal setae and lower vein with 4–7 setae. ... *cibarius* Ananthakrishnan, 1965

- Sides of abdominal terga IV–VI with semi-circular lines and oval areas and VII and VIII reticulate. Prospinasternum well developed. Forewings with 37–38 costal setae and lower vein without setae. ... *mendax* Bhatti, 1971

**Genus 3. *Parsiothrips* Bhatti, 1970**

Bhatti, 1970. *Oriental Ins.*, 4(2): 205

Known only through the type of the genus *P. fuscus* Bhatti, 1970

**Genus 4. *Pseudodendrothrips* Schmutz, 1913**

Schmutz, 1913. *Sitz. Akad. Wiss. Wien* : 998

KEY TO THE SPECIES OF *Pseudodendrothrips*

1. Body bicolourous; head and thorax reddish brown, abdomen yellow. Antennal segment 6 longer than 4 and 5 and segments 3 and 4 equal. Forewings with 20–24 costal setae and upper vein with a weak seta at base and 5 scattered setae ... *dwivarna* (Ramakrishna and ... Margabandhu, 1931)
- Body golden yellow. Antennal segment 6 about as long as 4 and 5. ... *ornatissima* Schmutz, 1913

Tribe 2. SERICOTHRIPINI

Subtribe 1. SERICOTHRIPINA

**Genus 1. *Corcithrips* Bhatti, 1973**

Bhatti, 1973. *Oriental Ins.*, 7(3): 409

Known only through the type of the genus *C. hartwigi* Bhatti, 1973

**Genus 2. *Elbuthrips* Bhatti, 1973**

Bhatti, 1973. *Oriental Ins.*, 7(3): 410

Known only through the type of the genus *E. latis* Bhatti, 1973

**Genus 3. *Hydatothrips* Karny, 1913**

Karny, 1913. *Wiss. Ergeb. Deutsch. Zentral-Africa Exped.* 1907–1908, 4(10): 281

KEY TO THE INDIAN SPECIES OF *Hydatothrips*  
[Adapted from Bhatti, 1973]

1. Seta  $S_3$  of abdominal terga IV–VI inserted ahead of posterior margin and with 7–9 setae lateral to this, all placed ahead of margin. Sterna completely covered with microtrichia and with a complete comb along posterior margin. Forewings clear at basal fourth and brown beyond. ... *boerhaaviae* (Seshadri and Ananthakrishnan, 1954)
- Seta  $S_3$  of abdominal terga IV–VI inserted marginally and with 3 setae lateral to this, all placed marginally. ... 2

2. Abdominal terga II–VIII with a complete comb of microtrichia along posterior margin. Prospinasternum well developed. Forewings usually with 1 or 2 lower vein setae. ... 3
- Comb of microtrichia on abdominal terga II–VI incomplete, absent medially and complete on terga VIII and rarely on VII. Prospinasternum reduced. Forewings without lower vein setae. ... 4
3. Fore and mid femora yellow, hind femora yellow, often with shaded brown beyond middle; abdominal segment IV yellow. Forewings with 29–37 costal setae and upper vein with 25–34 setae of which 3 form the basal group, rest of setae inserted regularly up to the tip; lower vein with 1–2 setae. ... *dorax* Bhatti, 1973
- Forefemora dark brown along outer margin only, mid femora brown to dark brown except base and apex, hind femora dark brown except basal fourth and extreme apex; abdominal segments IV and V yellow. Forewings with 23–29 costal setae and upper vein with 17–19 setae of which 2 form the basal group, 12–14 form the next group arranged irregularly up to the proximal 2/3rd of wing and rest 3 setae placed thereafter; lower vein with only one seta near apex of wing. ... *ananthakrishnani* Bhatti, 1973
4. Abdominal sterna II–VI with a complete comb of microtrichia along posterior margin, comb absent medially on sterna VII. Major seta  $S_2$  along posterior margin of pronotum stronger and longer ( $37\ \mu$ ) than other setae. ... *atactus* Bhatti, 1973
- Abdominal sterna with incomplete comb of microtrichia, absent medially along posterior margin. ... 5
5. Pronotum in front of blotch polygonally sculptured, not oriented to any directions. Forewings with 26–31 costal setae, upper vein with 27–32 setae arranged along entire length of wing of which the basal group of 3 setae is separated by a short gap from next series of 24–29 setae. Sides of abdominal terga II–VI with longitudinal wrinkles among prominent microtrichia. ... *aureus* Bhatti, 1973
- Pronotum in front of blotch transversely reticulate. Sides of abdominal terga II–VI without longitudinal wrinkles among microtrichia. ... 6
6. Costal setae of forewings at middle of wing ( $47\text{--}49\ \mu$ ) long about 1.32–1.40 as long as the width of wing at middle ( $35\text{--}37\ \mu$ ); upper vein with 22–26 setae ( $3\text{--}4 + 19\text{--}23$ ). Pronotum dark brown, the reticulations around blotch area made of very dark lines. ... *proximus* Bhatti, 1973
- Costal setae of forewings at middle of wing ( $35\text{--}39\ \mu$  long) about 0.88–0.97 as long as the width of wing at middle ( $36\text{--}44\ \mu$ ); upper vein with 28–32 setae ( $3 + 25\text{--}29$ ). Pronotum never dark brown, the reticulations around blotch area made of light brownish lines. ... *ramaswamiahi* Karny, 1926

#### Genus 4. *Kazinothrips* Bhatti, 1973

Bhatti, 1973. *Oriental Ins.*, 7(3): 432

This genus is represented in India by type of the genus *K. luridus* (Ananthakrishnan, 1967)

Genus 5. **Neohydatothrips** John, 1929John, 1929. *Bull. Ann. Soc. Ent. Belgique*, **69**: 33This genus is represented in India by one species *N. raniae* (Bhatti, 1967).Genus 6. **Sericothrips** Haliday, 1836Haliday, 1836. *Ent. Mag.*, **3**: 444KEY TO THE INDIAN SPECIES OF *Sericothrips*

- |                                                  |     |                                     |
|--------------------------------------------------|-----|-------------------------------------|
| 1. Forewings uniformly pale, without cross band. | ... | <i>solanifolii</i> (Shumsher, 1944) |
| — Forewings with a pale cross band.              | ... | <i>lineatus</i> (Schmutz, 1913)     |

## Subtribe 2. SCIRTOTHRIPINA

Genus 1. **Ajothrips** Bhatti, 1967Bhatti, 1967. *Bull. Ent.*, **8**(1): 58KEY TO THE SPECIES OF *Ajothrips*  
(After Bhatti, 1967)

- |                                                                                                                                                                                                                                                                                      |     |     |                           |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|---------------------------|
| — Only abdominal segments 8–10 dark brown; 7 dark except anterolateral part; 2–6 darkening progressively; extensive orange pigment present; body setae slightly shaded. Posteroangulars shorter; outer 42–51 $\mu$ inner 51–63 $\mu$ long respectively. Forefemora 64–66 $\mu$ wide. | ... | ... | <i>karma</i> Bhatti, 1967 |
| — Body strikingly bicolourous with dark brown abdomen. Orange pigment lacking. Body setae quite dark. Posteroangulars longer; outer 55–58 $\mu$ & inner 70–73 $\mu$ long respectively. Forefemora 74 $\mu$ wide.                                                                     | ... | ... | <i>gara</i> Bhatti, 1967  |

Genus 2. **Anascirtothrips** Bhatti, 1961Bhatti, 1961. *Bull. Ent.*, **2**: 26KEY TO THE SPECIES OF *Anascirtothrips*

- |                                                                                                                                                                                                                                           |     |                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----------------------------|
| 1. Antennal segments 2 with orange pigment in distal half, 3 yellowish white infumate with grey, 4–5 yellowish white in proximal half grey distally, 6–7 grey; segments 4 and 5 equal (38 $\mu$ long). Abdominal segments faintly shaded. | ... | <i>arorai</i> Bhatti, 1961 |
| — Antennal segments 2–7 brown; segment 4 (37–39 $\mu$ ) longer than 5 (31 $\mu$ ). Abdominal sterna IV–VII with brown antecostal lines.                                                                                                   | ... | <i>ficus</i> Bhatti, 1967  |

Genus 3. **Scirtothrips** Shull, 1909Shull, 1909. *Ent. News*, **20**: 222KEY TO THE INDIAN SPECIES OF *Scirtothrips*

- |                                                                                                                                             |
|---------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Male with drepana. Abdomen with narrow brownish transverse lines, extending entirely across dorsum of segments III–VIII, rarely II–VIII. |
|---------------------------------------------------------------------------------------------------------------------------------------------|

- Antennal segment 3 as long as 6. Forewings with 2-5 lower vein setae. ... *fulleri* Faure, 1929
- Males without drepana. ... 2
2. Forewings with only 1 lower vein setae, upper vein with 7-8 setae. Metanotum reticulate. Abdominal sternites devoid of microtrichia medially. ... *bispinosus* (Bagnall, 1924)
- Forewings with 1-3 lower vein setae. ... 3
3. Forewings with 10(3+4+3) upper vein setae, lower vein with 2 setae. Antennal segment 3 (28-32  $\mu$  long) about as long as 4 (29-30  $\mu$  long), and shorter than 6 (39-42  $\mu$  long). Abdominal segments III-VIII with a transverse line. ... *oligochaetus* (Karny, 1926)
- Forewings with 10(4+3+1+1+1) upper vein setae, lower vein with 2 setae. Antennal segment 3 (31 $\mu$  long) subequal to 4 (29 $\mu$  long), much longer than 6 (12  $\mu$  long). Abdominal tergites III-VII with dark transverse lines and triangular brownish patches, sternites without the lines. Males with strongly armed parameres. ... *pteridicola* Ananthakrishnan, 1968
- Forewings with 9 (3+3+3) upper vein setae, lower vein with 2-3 setae. Antennal segment 3 (35-39  $\mu$  long) about as long as 4 (35-40  $\mu$  long) and shorter than 6 (39-42  $\mu$  long). Abdominal tergites III-VIII with a basal dark transverse line at middle followed by a light brown blotch. ... *dorsalis* Hood, 1919

## Tribe 3. CHIOTHRIPINI

Genus 1. *Chirothrips* Haliday, 1836Haliday, 1836. *Ent. Mag.* 3(5): 444KEY TO THE INDIAN SPECIES OF *Chirothrips*

1. Sense cone on antennal segment 4 simple. ... 2
- Sense cone on antennal segment 4 forked. Head without distinct prolongation in front of eyes. Antennal segment 2 not strongly produced on outer margin, but drawn out into a sharply pointed angle. Abdominal sternites III-VII of male with circular or subcircular glandular area (20-30  $\mu$  long). ... *meridionalis* Bagnall, 1927
2. Antennal segment 2 not produced on outer margin at apex. Posterior margin of abdominal tergites with short rectangular lobes. ... *capensis* Zur Strassen, 1958
- Antennal segment 2 produced on outer margin at apex. ... 3
3. Foretibiae strongly produced on outer distal edge and the process reaching further the tip of first tarsal segment. Antennal segment 5 slightly broader or rarely as long as broad; segment VII and VIII subequal. Vertex with at most 6 short setae in addition to the interocellars. Pronotum about 1.5-1.7 times as long as head length. Abdominal sternites of male with circular or semicircular glandular area. ... *mexicanus* Crawford, 1909

- Foretibiae simple, not produced on outer distal edge. ... .. 4
- 4. Thin seta like sense cone at the tip of the process on antennal segment 2 exactly terminal. Process on outer margin of antennal segment 2 very long, maximum diagonal dimension 40–43  $\mu$ ; outer margin of the segment distinctly concave; intermediate antennal segments slender; segment 1 pale at base. Lower vein of forewings with only 2 setae. Males brachypterous. ... .. *maximi* Ananthakrishnan, 1957
- Thin seta like sense cone at the tip of process on antennal segment 2 not exactly terminal. Antennal segment 4 longer than broad, rarely as long as broad. Pronotum 1.30–1.40 times as broad as long. Abdominal sternites of male with circular or semicircular glandular area (15–20  $\mu$  in diameter) ... .. *africanus* Priesner, 1932

### Genus 2. **Gnomothrips** Ramakrishna & Margabandhu, 1939

Ramakrishna and Margabandhu, 1939. *Rec. Indian Mus.*, **41**: 28

Known only through the type of the genus *G. coimbatorensis* Ramakrishna and Margabandhu, 1939

### Genus 3. **Neocorynothrips** Ramakrishna & Margabandhu, 1939

Ramakrishna and Margabandhu, 1939. *Rec. Indian Mus.*, **41**: 22

Known only through the type of the genus *N. asiaticus* Ramakrishna and Margabandhu, 1939

### Genus 4. **Neolimothrips** Shumsher, 1942

[(Near *Bregmatothrips*)]

Shumsher, 1942. *Indian J. Ent.*, **4**(2): 118

#### KEY TO THE SPECIES OF *Neolimothrips*

- 1. Forewings with 22 costal setae, upper vein with 4 basal and 2 distal setae; lower vein with 8 setae in a continuous row. Mouthcone long almost reaching base of prosternum. Pronotum more than 1.3 times as long as broad. ... .. *brachycephalus* Shumsher, 1942
- Forewings with 24–26 costal setae upper vein with 6–8 (in two groups of 3 or 4) basal setae and 2 distal setae; lower vein with 9–10 setae. Mouthcone pointed very long surpassing base of prosternum. Pronotum only about 1.2 times as broad as long. ... .. *binervis* (Kobus, 1906)

### Genus 5. **Sciiothrips** Bhatti, 1969

Bhatti, 1969. *Oriental Ins.*, **3**(4): 379

Known only through the type of the genus *S. cardamomi* (Ramakrishna, 1935)

### Genus 6. **Sorghothrips** Priesner, 1936

Priesner, 1936. *Bull. Soc. R. Ent. Egypte*: 88

This genus is represented in India by one species *S. jonnaphilus* (Ramakrishna, 1928)

## Tribe 4. THRIPINI

## Subtribe 1. ANAPHOTHRIPINA

Genus 1. **Agalmothrips** Priesner, 1964Priesner, 1964. *Publ. Inst. Desert Egypte*, **13**: 264Represented in India by type of the genus *A. parviceps* Priesner, 1964Genus 2. **Alathrips** Bhatti, 1969Bhatti, 1969. *Oriental Ins.*, **3**(4): 372.Known only through the type of the genus *A. roonwali* (Bhatti, 1963)Genus 3. **Amalothrips** Ananthakrishnan, 1967Ananthakrishnan, 1967. *Ann. Soc. ent. Fr.*, **3** (N.S.): 227Known only through the type of the genus *A. flaccidus* Ananthakrishnan, 1967Genus 4. **Anaphothrips** Uzel, 1895Uzel, 1895. *Monogr. Ord. Thysanoptera* :142KEY TO THE INDIAN SPECIES OF *Anaphothrips*

- |    |                                                                                                                                                                        |        |                                  |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|----------------------------------|
| 1. | Antennal segment 6 with a ventral suture preapically; segment 4 shorter than 3, about as long as 5, 6 longer than 3. Body yellow with grey brown markings.             | ... .. | <i>obscurus</i> (Muller, 1776)   |
| -- | Antennal segment 6 without suture.                                                                                                                                     | ... .. | ... .. 2                         |
| 2. | Antennal segments 3 and 4 with simple sense cones. Body pale brown, abdominal segments VII-X distinctly darker.                                                        | ... .. | <i>sudanensis</i> (Trybom, 1911) |
| —  | Antennal segments 3 and 4 with forked sense cones. Body yellow, extreme apex of abdomen brown. Abdominal sterna without accessory setae, comb on tergum VIII complete. | ... .. | ... .. <i>latis</i> Bhatti, 1967 |

Genus 5. **Aneurothrips** Karny, 1912Karny, 1912. *Marcellia*, **11** (2-5): 117This genus is represented in India by one species *A. priesneri* Bhatti, 1971Genus 6. **Aptinothrips** Haliday, 1836Haliday, 1836. *Ent. Mag.*, **3**: 445This genus is represented in India by one species *A. rufus* (Gmelin, 1788)Genus 7. **Ascirtothrips** Priesner, 1964Priesner, 1964. *Publ. Inst. Desert Egypte*, **13** (1960): 252KEY TO THE INDIAN SPECIES OF *Ascirtothrips*

1. Abdominal tergite IX of male with a pair of long dark 'S' shaped appendages, smooth not serrate or

- dentate. Body setae fairly stout, particularly in the basal third of the wing. ... *antilope* (Priesner, 1923)
- Appendages on abdominal tergite IX serrate, not smooth. Body setae slender. ... *varius* Bhatti, 1967

KEY TO THE SUBSPECIES OF *varius*

1. Each appendage bifurcated at about its middle inner arm short and stout, about half as long as the outer and barely reaching its middle. ... *varius* Bhatti, 1967
- Each appendage bifurcated at about its middle; inner arm slender and long, slightly shorter than outer and surpassing it. ... *acutus* Bhatti, 1972

Genus 8. **Capitothrips** Bhatti, 1974

Bhatti, 1974. *Oriental Ins.*, 8(4): 481

Known only through the type of the genus *C. subramanii* Bhatti, 1974

Genus 9. **Caprithrips** Faure, 1933

Faure, 1933. *Bull. Brooklyn Ent. Soc.*, 28(1): 12

KEY TO THE INDIAN SPECIES OF *Caprithrips*  
[Adapted from Bhatti, 1973]

1. Antennae 6 segmented, segments 6–8 forming an unit. Basantra weakly chitinated, transversely striate. Mid-dorsal pair of setae of abdominal tergite IX thinner than the long posteromarginal setae and sternite VII with three pairs of posteromarginal setae. ... *melanophthalmus* (Bagnall, 1927)
- Antennae 8 segmented. Basantra largely membranous. Mid-dorsal pair of setae of tergite IX much thicker than the long posteromarginal setae and sternite VII with two pairs of posteromarginal setae. Maxillary palpi usually 2 segmented, when 3-segmented segment 3 subequal to combined length of 1 & 2. Pronotum with 4 pairs of posteromarginal setae, innermost pair much stouter than outer. ... *orientalis* Bhatti, 1973

Genus 10. **Dendrothripoides** Bagnall, 1923

Bagnall, 1923. *Ann. Mag. nat. Hist.*, (9) 12: 625

This genus is represented in India by one species *D. innoxius* (Karny, 1914)

Genus 11. **Exothrips** Priesner, 1939

Priesner, 1939. *Rev. Zool.-bot. Afr.*, 32 (2): 162

KEY TO THE INDIAN SPECIES OF *Exothrips*  
[Adapted from Bhatti, 1975]

1. Interocellars prominent (18  $\mu$  long) inserted between hind ocelli in line with their hind margin. Median pair of setae of tergum I dark and strong (20  $\mu$  long). Median pair of setae ( $S_1$ ) on sternum VII much shorter than submedian pair ( $S_2$ ) ... *ananthakrishnani* Bhatti, 1975

- Interocellars always inserted ahead of hind margin of hind ocelli. Median pair of setae on abdominal tergum I minute, indistinct ... 2
- 2. Head with 3–4 pairs of anteocellars. ... 3
- Head with 2 pairs of anteocellars. ... 5
- 3. Head with a strongly developed anteocular process. Interocellars wide apart, placed each in front of the hind ocellus of its side. Ocellar triangle obtuse angled. Foretibiae unarmed in both sexes. ... *cephalicus* Bhatti, 1975
- Head without anteocular process. Interocellars placed closer together. Ocellar triangle generally right angled (except in *deemax* obtuse angled). ... 4
- 4. Head with 4 pairs of anteocellars. Fore tibiae with a distinct tooth in both sexes. Abdominal terga IV–VII of male with the postmarginal flange produced into laterally directed teeth. Antennal segment 1 of male enlarged. ... *anolis* (Bhatti, 1967)
- Head with 3 pairs of anteocellars. Interocellars inserted between hind ocelli, just behind a line drawn between their fore margin. Ocellar triangle obtuse angled. Median pair of metanotal setae shorter than submedian pair. ... *deemax* Bhatti, 1975
- 5. Median pair of setae ( $S_1$ ) on abdominal sternum VII of female distinctly shorter than submedian pair ( $S_2$ ). Minor sublateral setae of mesonotum well developed subequal to median pair; metanotum without discal pores. ... *ornus* Bhatti, 1975
- Median pair of setae ( $S_1$ ) on abdominal sternum VII of female only slightly shorter than submedian pair ( $S_2$ ) or subequal. Minor sublateral setae on mesonotum reduced, indistinct, metanotum with discal pores. ... 6
- 6. Median and submedian pairs of metanotal setae of either side approximated, gap between setae of median pair much greater than the distance between the median and submedian setae of either side; both pairs marginal. Abdominal tergum II with 4 lateral marginal setae; seta  $S_4$  reduced on tergites VI–VIII. Males without foretibial tooth and with simple postmarginal flange on all abdominal terga; tergum IX without spine like setae. ... *sakimurai* (Ananthakrishnan, 1961)
- Median and submedian pairs of metanotal setae not approximated; gap between setae of median pair subequal to gap between the median and submedian setae of either side; median pair inserted far back of anterior margin. Males (where known) with a distinct foretibial tooth; abdominal tergum IX with a stout spine-like median setae; postmarginal flange of abdominal tergites IV–VII usually with sharp laterally directed teeth. ... 7
- 7. Postocular I well developed, but shorter than II. ... 8
- Postocular I rudimentary. Antennal segment 2 yellow, 5 dark brown except base yellow, 6 completely dark brown. Setae on intermediate abdominal terga slender. ... *hemavarna* (Ramakrishna & Margabandhu, 1931)
- 8. Costal setae at middle of wing 24–25  $\mu$  long, about 0.8 as width of wing at middle (32  $\mu$ ). Antennal

segments 5 and 6 dark grey in distal half. Abdominal terga IV–VII of male with the postmarginal flange formed into laterally directed teeth. ... *redox* Bhatti, 1975

- Costal setae at middle of wing shorter 15–16  $\mu$  long about 0.5 as width of wing at middle (32  $\mu$ ). Antennal segments 4–6 brown dorsally and ventrally except at base. Postmarginal flange of male on abdominal terga on extreme sides of IV–VII formed into blunt lobe-like or tooth like projections and not directed laterally. ... *poorva* Bhatti, 1975

### Genus 12. *Induisiothrips* Priesner, 1951

Priesner, 1951. *Indian J. Ent.*, **13** (1–2): 183

Known only through the type of the genus *I. seshadrii* Priesner, 1951

### Genus 13. *Palmiothrips* Bhatti, 1978

Bhatti, 1978. *Senckenbergiana biol.*, **59** (1–2): 101

Known only through the type of the genus *P. palmae* (Ramakrishna, 1934)

### Genus 14. *Priesneriola* Ananthakrishnan, 1964

Ananthakrishnan, 1964. *Bull. Ent.*, **5**: 52

Known only through the type of the genus *P. o'nielle* Ananthakrishnan, 1964

### Genus 15. *Psilothrips* Hood, 1927

Hood, 1927. *Proc. biol. Soc. Wash.*: 198

The genus is represented in India by one species *P. indicus* Bhatti, 1967

### Genus 16. *Rhamphothrips* Karny, 1913

Karny, 1913. *Zeit. Wiss. Insek. biol.*, **10** (8–9): 123

#### KEY TO THE INDIAN SPECIES OF *Rhamphothrips*

1. Median pair of setae on abdominal sternum VII reduced or almost indiscernable; much shorter than submedian pair of setae. ... 2
- Median pair of setae on abdominal sternum VII not reduced, at least not much shorter than submedian pair of setae. ... 3
2. Foretibiae at apex with two stout short teeth in both sexes. Antennal segment 5 brown except very feebly lighter proximally. Mesosternum of male with a stout dark brown spine-like apically rounded setae on either side and abdominal segment VIII of male laterally bulged on either side. ... *aureus* (Ananthakrishnan, 1954)
- Foretibiae unarmed. Antennal segment 5 yellow in greater part. ... *parviceps* (Hood, 1919)
3. Foretibial tooth fairly stout in both sexes. Pronotum of male 5 times as long as head and that of female 2.74–2.92 times as long as head, ... *pardus* (Bhatti, 1967)

- Foretibial tooth strong in male and small in female.  
Pronotum of male 3.48 times as long as head and  
that of female 1.94–2.20 times as long as head. ... *jasminae* (Bhatti, 1977)

Genus **17. Salpingothrips** Hood, 1935

Hood, 1935. *J. New York ent. Soc.* **43**: 157

This genus is represented in India by one species *S. hoodi* Ananthakrishnan, 1968

Subtribe 2. THIRIPINA

Genus **1. Agriothrips** Ananthakrishnan, 1966

Ananthakrishnan, 1966. *Bull. Ent.*, **7**: 28

Known only through the type of the genus *A. brevisetosus* Ananthakrishnan, 1966

Genus **2. Amblythrips** Bagnall, 1911

Bagnall, 1911. *J. econ. biol.*, **6**: 3

Represented in India by one species *A. firsi* (Uzel, 1895)

Genus **3. Amphithrips** Ananthakrishnan, 1965

Ananthakrishnan, 1965. *Bull. Ent.*, **6**: 20

Known only through the type of the genus *A. argutus* Ananthakrishnan, 1965

Genus **4. Arathrips** Bhatti, 1967

Bhatti, 1967. *Thysanoptera Nova Indica* :16.

Known only through the type of the genus *A. cus* Bhatti, 1967

Genus **5. Aroidothrips** Ananthakrishnan, 1960

Ananthakrishnan, 1960. *J. Bombay nat. Hist. Soc.*, **57** (3): 562

Known only through the type of the genus *A. longistylus* Ananthakrishnan, 1960

Genus **6. Ayyaria** Karny, 1926

Karny, 1926. *Mem. Dept. Agri. India, Ent. Ser.*, **9**: 193

Known only through the type of the genus *A. chaetophora* Karny, 1926

Genus **7. Baliothrips** Uzel, 1895

Uzel, 1895. *Monogr. Ord. Thysanoptera*: 104

KEY TO THE INDIAN SPECIES OF *Baliothrips*

|                                                                                               |     |     |     |   |
|-----------------------------------------------------------------------------------------------|-----|-----|-----|---|
| 1. Abdominal tergites II–VIII with serrations.                                                | ... | ... | ... | 2 |
| — Abdominal tergites II–VIII of females without serrations, serrations present only in males. | ... | ... | ... | 3 |
| → Abdominal tergites II–VIII of both sexes without serrations.                                | ... | ... | ... | 4 |

- |                                                                                                                                                                                                                                                                                                                                                          |                                                       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|
| 2. Comb of setae on abdominal tergite VIII incomplete medially; abdominal segment IX long 1.6 times as long as X. Body including wings uniformly dark brown except foretibiae and all tarsi paler. Head shorter (110 $\mu$ long). ...                                                                                                                    | <i>biformis</i> (Bagnall, 1913)                       |
| 3. Antennal segments 3 and 4 much elongated (72–74 and 64–68 $\mu$ long respectively). Cheeks highly convex with a constriction behind eyes. Glandular areas of male on sternites III–VII stout 65–75 $\mu$ wide, 21–23 $\mu$ long. Forewings with 14–15 lower vein setae. ...                                                                           | <i>glandularis</i> (Ananthakrishnan & Jagadish, 1967) |
| — Antennal segments 3 and 4 not much elongated. Glandular areas of male on sternites III–VII small 23–26 $\mu$ wide, 8–10 $\mu$ long. Forewings with 10–12 lower vein setae. ...                                                                                                                                                                         | <i>graminis</i> (Ananthakrishnan & Jagadish, 1967)    |
| 4. Body uniformly yellow or utmost apex of abdomen dark. ...                                                                                                                                                                                                                                                                                             | 5                                                     |
| — Body light to dark brown. ...                                                                                                                                                                                                                                                                                                                          | 7                                                     |
| — Body distinctly bicolorous; head and thorax yellow, abdomen brown. ...                                                                                                                                                                                                                                                                                 | <i>bicolor</i> (Ananthakrishnan & Jagadish, 1967)     |
| 5. Postoculars well developed 19–30 $\mu$ long. Abdominal apex dark; comb of setae on abdominal tergite VIII very distinct. Glandular areas of male on abdominal sternites 42–66 $\mu$ wide, ...                                                                                                                                                         | <i>faurei</i> (Bhatti, 1962)                          |
| — Postoculars short, subequal. Abdominal apex yellow. ...                                                                                                                                                                                                                                                                                                | 6                                                     |
| 6. Prothoracic postangulars unequal; inner pair (62–64 $\mu$ long) longer than outer (48–50 $\mu$ long). Antennal segments 1, 2 and proximal half of 3 yellow, rest light brown. ...                                                                                                                                                                     | <i>aureus</i> (Ananthakrishnan & Jagadish, 1967)      |
| — Prothoracic postangulars subequal (39–45 $\mu$ long). Antennal segments 1–5 and proximal half of 6 yellow, rest brown. ...                                                                                                                                                                                                                             | <i>indicus</i> (Ramakrishn & Margabandhu, 1931)       |
| 7. Forewings uniformly pale grey. Postangulars subequal (52–54 $\mu$ long). Mouthcone moderately long (117 $\mu$ long). Glandular areas on sternites III–VII of male distinctly dumb-bell shaped. ...                                                                                                                                                    | <i>dissidens</i> (Ananthakrishnana & Jagadish, 1967)  |
| — Basal fourth of forewings pale, rest uniformly grey...                                                                                                                                                                                                                                                                                                 | 8                                                     |
| 8. Prothoracic postangulars short and subequal (42–47 $\mu$ long). Mouthcone shorter (80–83 $\mu$ long). Forewings with 10 (7+1+1+1) upper vein setae and 10–12 lower vein setae. Setae on tergite IX, inner pair (78–80 $\mu$ ), middle pair (83–85 $\mu$ ) and outer pair (83–85 $\mu$ ) long respectively. ...                                        | <i>minutus</i> (Van Devanter, 1906)                   |
| — Postangulars long and subequal. ...                                                                                                                                                                                                                                                                                                                    | 9                                                     |
| 9. Head short (90–98 $\mu$ long). Postangulars 50–52 $\mu$ long. Forewings with 10 (7+1+1+1) upper vein setae and 9–10 lower vein setae. Setae on tergite IX—inner pair (100–104 $\mu$ ), middle pair (108–110 $\mu$ ) and outer pair 92–95 $\mu$ long respectively. Glandular areas on sternites III–VII of male 38–40 $\mu$ wide, 8–10 $\mu$ long. ... | <i>tenebricus</i> (Ananthakrishnan & Jagadish, 1968)  |
| — Head longer (126–140 $\mu$ long); mouthcone long (128–130 $\mu$ ). Postangulars 70–80 $\mu$ long. Forewings with 10 (4+3+1+1+1) upper vein setae and 12–14 lower vein setae. Setae on tergite                                                                                                                                                          |                                                       |

IX-inner and middle pairs (110–112  $\mu$ ), outer pair (100–102  $\mu$ ) long respectively. Glandular areas on sternites III–VII of male 42–55  $\mu$  wide, 10–13  $\mu$  long at middle and 13–16  $\mu$  long at sides. ... *bambusae* (Shumsher, 1945)

**Genus 8. *Bathrips* Bhatti, 1962.**

Bhatti, 1962. *Bull. Ent.*, **3**: 34

KEY TO THE INDIAN SPECIES OF *Bathrips*

1. Antennae uniformly grey; abdominal segment X completely shaded with dark grey slightly darker tinge than intermediate tergites. Mouthcone short and blunt, reaching about middle of prosternum. Postangulars unequal, inner 56  $\mu$  and outer 66  $\mu$  long respectively. ... *melanicornis* (Shumsher, 1945)
- Antennae uniformly dark brown. Body robust and all body setae strong and dark. Mouthcone long (96–104  $\mu$  long) almost reaching base of prosternum. Postangulars well developed, unequal — inner (70  $\mu$ ) and outer (78  $\mu$ ) long respectively. Parameres of male genital armature expanded at apex. *jasminae* Ananthakrishnan, 1968

**Genus 9. *Biltothrips* Bhatti, 1973**

Bhatti, 1973. *Oriental Ins.*, **7**(3): 438

Known only through the type of the genus *B. minutus* (Bhatti, 1967)

**Genus 10. *Bolacidothrips* Priesner, 1930**

Priesner, 1930. *Bull. Soc. ent. Egypte*, **14** (1): 6

KEY TO THE INDIAN SPECIES OF *Bolacidothrips*

1. Forewings with banded wings. ... 2
- Forewings without banded wings. Posterior margin of abdominal tergites I–VII except at middle with very short densely set comb. ... *evittatus* Sakimura, 1958
2. Apex of abdomen deep yellow, not darkened; body pale to deep yellow; antennal segments 5–7 always and sometimes 4 also dark brown. ... *graminis indicus* Ananthakrishnan, 1966
- Apex of abdomen feebly infumated with a greyish tinge, not dark grey; ovipositor orange at apex. ... *oryzae* Moulton, 1942

**Genus 11. *Ceratothripoides* Bagnall, 1918**

Bagnall, 1918. *Ann. Mag. nat. Hist.*, (9) **1**: 201

This genus is represented in India by one species *C. claratris* (Shumsher, 1945)

**Genus 12. *Ceratothrips* Reuter, 1899**

Reuter, 1899. *Acta Soc. Faun. Flor. Fenn.* :65.

Represented in India by one species *C. alis* (Bhatti, 1967)

**Genus 13. Chaetenaphothrips** Priesner, 1925Priesner, 1925. *Konowia*, **4**: 145KEY TO THE INDIAN SPECIES OF *Chaetanaphothrips*

1. Pronotum with only one pair of postangular setae (14–16  $\mu$  long). Antennal segments 4–6 shaded distally; sense cones on antennal segments 3 and 4 short. ... *leeuweni* (Karny, 1914)
- Pronotum with two pairs of well developed postangular setae, outer much shorter than inner. Head with only one pair of antecellars; abdominal sternum II with one or two accessory setae. Abdominal sterna of females without glandular areas. ... *orchidii* (Moulton, 1907)

**Genus 14. Chloethrips** Priesner, 1957Priesner, 1957. *Zool. Anz.*, **159**: 159.Represented in India by one species *C. blandus* Zur Strassen, 1975**Genus 15. Craspedothrips** Zur Strassen, 1966Zur Strassen, 1966. *Senckenbergiana biol.*, **47** (6): 444Represented in India by one species *C. minor* (Bagnall, 1921)**Genus 16. Ctenidothrips** Priesner, 1951Priesner, 1951. *Indian J. Ent.*, **13** (1–2): 186Known only through the type of the genus *C. bambusae* Priesner, 1951**Genus 17. Ctenothrips** Franklin, 1907Franklin, 1907. *Ent. News*, **18**: 247KEY TO THE INDIAN SPECIES OF *Ctenothrips*

1. Head broader than long (134  $\mu$  long, 167  $\mu$  wide at cheeks). Prothoracic anteroangulars 32–34  $\mu$ , inner postangulars 42  $\mu$ , outer 48–51  $\mu$  long respectively. Forewings without fringe cilia and with 6 costal setae, 2 upper vein & 0–1 lower vein setae. ... *smilax* Bhatti, 1976
- Head about as long as broad (170–175  $\mu$  long, 168–178  $\mu$  wide across cheeks). Prothoracic anteroangulars — inner 42–47  $\mu$ , outer 37–38  $\mu$  postangulars — inner 57–68  $\mu$ , outer 52–70  $\mu$  long respectively. Forewings with fringe cilia and with 36–41 costal setae; both veins regularly set with setae, upper vein with 26–30 and lower vein with 21–24 setae. Abdominal segment X tube like. ... *niger* Kudo, 1977

**Genus 18. Danothrips** Bhatti, 1971Bhatti, 1971. *Oriental Ins.*, **5** (3): 338Known only through the type of the genus *D. setifer* Bhatti, 1971**Genus 19. Diarthrothrips** Williams, 1915Williams, 1915. *Bull. ent. Res.*, **6** (3): 269Represented in India by one species *D. nimbus* (Ananthakrishnan, 1965).

Genus 20. **Dichromothrips** Priesner, 1932

Priesner, 1932. *Stylops*, 1: 110

KEY TO THE INDIAN SPECIES OF *Dichromothrips*

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |     |     |     |     |                                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|-----|-----|--------------------------------------|
| 1. Pronotum with 2 pairs of well developed post-angular setae — outer pair 80 $\mu$ and inner pair 95 $\mu$ long respectively. Abdominal tergites II–VII with several microtrichia laterally. Glandular areas on abdominal sterna of male not developed....                                                                                                                                                                                                                                               | ... | ... | ... | ... | <i>nakahari</i> Mound, 1976          |
| — Pronotum with one pair of postangular setae. ...                                                                                                                                                                                                                                                                                                                                                                                                                                                        | ... | ... | ... | ... | 2                                    |
| 2. Fore wings banded with 2 dark brown cross bands one across middle and second at apex. Abdominal tergite I completely sculptured with transverse lines; III–VIII of female with two or more lines of sculpture medially near the antecostal ridge, unsculptured medially in posterior half; II–VIII of male completely sculptured with transverse lines. Sterna without accessory setae. Sternites III–VII of male with a paired glandular areas each paramere with a lateral tooth in distal half. ... | ... | ... | ... | ... | <i>phalaenopsidis</i> Sakimura, 1955 |
| — Forewings not banded, distal two third uniformly dark. ...                                                                                                                                                                                                                                                                                                                                                                                                                                              | ... | ... | ... | ... | 3                                    |
| 3. Pronotal sculpture weak, with a few lines medially near anterior margin. Tergite IX of male with lateral pair of setae thorn like (65 $\mu$ long) and post-angular setae slender and not longer (60–67 $\mu$ long). Sternites III–VII of male with a pair of almost round glandular areas and on VI these are joined medially. Body colour mainly yellow, head brown, meso- & metathorax, abdominal tergite II and median area of III–IV pale brown. ...                                               | ... | ... | ... | ... | <i>indicus</i> Mound, 1976           |
| — Pronotum with sculpture covering at least longitudinal median area. Tergite IX of male with lateral pair of setae stout, much shorter than long and slender postangular setae. Sternites III–VII of male with paired glandular areas. Head dark brown; meso- and metathorax, abdominal segment II, median area of III–VIII light brown; rest of body and legs yellow. ...                                                                                                                               | ... | ... | ... | ... | <i>smithi</i> (Zimmerman, 1900)      |

Genus 21. **Dorcadothrips** Priesner, 1932

Priesner, 1932. *Bull. R. ent. Soc. Egypte*: 49

KEY TO THE INDIAN SPECIES OF *Dorcadothrips*

- |                                                                                                                                                                                                                                                                                                                                                                           |     |     |     |     |                             |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|-----|-----|-----------------------------|
| 1. Abdominal sternites with accessory setae. Forewings with a dark cross-band just before the middle and with 20–24 costal, 7–10 (3+3+2 or 3+3+3 or 4+3+1+2 or 3+2+2) upper vein and 10–11 lower vein setae. Maxillary palpi 2-segmented. Abdominal terga sculptured only on extreme sides, sculpture on intermediate terga extend mesially only upon submedian setae.... | ... | ... | ... | ... | <i>indicus</i> Bhatti, 1978 |
| — Abdominal sternites without accessory setae. ...                                                                                                                                                                                                                                                                                                                        | ... | ... | ... | ... | 2                           |
| 2. Fore wings with cross-bands. ...                                                                                                                                                                                                                                                                                                                                       | ... | ... | ... | ... | 3                           |
| — Fore wings without cross-bands, ...                                                                                                                                                                                                                                                                                                                                     | ... | ... | ... | ... | 4                           |

3. Antennal segments 3-5 mostly dark grey brown, each only with a sub-basal colourless area. Prothoracic postangulars, inner 35  $\mu$  and outer 39-40  $\mu$  long respectively. Forewings with 21 costal, 8-9 (6-7+2) upper vein and 10-11 lower vein setae. Abdominal sterna unshaded or only with a very faint shading on extreme sides; sternites III-VII of male with transversely elongated glandular area in middle just behind antecostal line on 2 rounded areas laterally along each side. ... *fasciatus* Bhatti, 1967
- Antennal segment 3-5 very pale in basal half, brown distally; sides of abdominal segments II-VI with greyish patches. Prothoracic postangulars subequal (52-55  $\mu$ ). Forewings with 20-23 costal, 8(6+2) upper vein and 11-14 lower vein setae. ... *similis* Ananthakrishnan, 1967
4. Head with an elongated constrictions behind eyes. Body pale yellow, head, pronotum except sides brown; antennal segments 1-8 dark brown, except narrow basal part of 3 and subbasal area of 4 & 5 pale; forewings dark brown. Forewings with 27-29 costal, 7-9 (5-7+2) upper vein and 14-18 lower vein setae. Abdominal terga unsculptured, median pair of setae reduced. ... *albus* Bhatti, 1978
- Head without constriction behind eyes. ... 5
5. Postangular prothoracic setae short (39-46  $\mu$ ) and subequal. Body yellow including legs; antennal segments 1 & 3 pale yellow, 2 & 4 yellowish brown, 5-8 dark brown; forewings greyish brown in greater part, lighter in proximal fourth and apically. Costal setae of forewings at middle short (34-38  $\mu$ ) only about 0.87-0.98 as wide of wing at middle; forewings with 24-25 costal, 8-9 (3+3+2-3) upper vein and 12-14 lower vein setae. Metascutum completely sculptured, longitudinally reticulate. ... *flavidus* Bhatti, 1978
- Postangulars comparatively longer (45-64  $\mu$ ). Costal setae at middle of wing long about 1.2-1.4 times as wide of wings at middle. Legs not shaded. ... *nilgiricus* Ramakrishnan & Margabandhu, 1939

## Genus 22. *Ednathrips* Bhatti, 1976

Bhatti, 1976. *Oriental Ins.*, **10** (3): 320

Known only through the type of the genus *E. pardus* Bhatti, 1976

## Genus 23. *Ernothrips* Bhatti, 1969

Bhatti, 1969. *Oriental Ins.*, **3** (4): 376

Known only through the type of the genus *E. lobatus* Bhatti, 1967

## Genus 24. *Euphysothrips* Bagnall, 1926

Genus 24. *Euphysothrips* Bagnall, 1926

Bagnall, 1926. *Ann. Mag. nat. Hist.*, (9) **18**: 646

### KEY TO THE INDIAN SPECIES OF THE SUBGENUS *Euphysothrips* s.str.,

1. Prothorax broadest (more than 1.5 times as broad as long) near the base, convex gradually broadening towards base, Antennal segment 5 much

shorter than 6, style 0.4 as long as 6th. Forewings with 17 costal setae and 8-9 (basal series of 2+2 or 2+3 and 4 scattered distal, upper vein setae. ...

*minozii* Bagnall, 1926

- Prothorax strongly convex, broadest at middle. Antennal segment 5 not much shorter than 6th. Forewings with 18-20 costal setae, upper vein with 8 (5 basal & 3 distal) setae, lower vein with 4 setae, all arranged beyond middle... ... *fungivora* (Ramakrishna, 1928)

The other subgenus *Megaphysothrips* is represented by one species *M. subramanii* Ramakrishna & Margabandhu, 1939

#### Genus 25. *Florithrips* Bhatti, 1969

Bhatti, 1969. *Oriental Ins.*, 3 (4): 377

Known only through the type of the genus *F. traegardhi* (Trybom, 1911)

#### Genus 26. *Foliothrips* Bhatti, 1972

Bhatti, 1972. *Oriental Ins.*, 6 (4): 543

Known only through the type of the genus *F. oratus* Bhatti, 1972

#### Genus 27. *Frankliniella* Karny, 1910

Karny, 1910. *Mitt. Nat. Ver. Univ. Wien.* :46

#### KEY TO THE INDIAN SPECIES OF *Frankliniella*

1. Head usually flat in front or weakly angular between bases of antennae; cheeks nearly straight or slightly arched but not conspicuously narrowed posteriorly. ... .. 2
- Head broadened, occasionally depressed in front or the depressed antennal pits forming in part the frontal margin of head; cheeks straight to clearly arched, conspicuously narrowed posteriorly. Body dark brown; all femora, mid and hindtibiae dark, foretibiae and all tarsi yellow; forewing light brown, clear in basal fourth; antennal segments 1, 2 & 6-8 dark brown, 3-5 mostly yellow. ... *insularis* Franklin, 1908
2. Comb on abdominal tergite VIII present but sparse. Body brown, legs mostly yellow with femora, mid and hindtibiae dark in middle; antennal segments 1 & 2 dark brown, 3-5 yellow, 6-8 brown; forewing clear; males yellow. ... *intonsa* (Trybom 1895)
- Abdominal tergite VIII without comb. Head yellow, thorax orange yellow to orange brown, abdomen brown legs concolourous with body, foretibiae and all tarsi yellowish brown; antennae mostly brown, segment 2 darkest, 3 & 4 lighter; forewings brownish yellow; male coloured as in females but thorax and antennae lighter. ... *schantzei* (Trybom, 1910)

#### Genus 28. *Krasibothrips* Kudo, 1977

Kudo, 1977. *Kontyu*, 45 (1): 4

Known only through the type of the genus *K. coluckus* Kudo, 1977

**Genus 29. *Laplothrips* Bhatti, 1972**Bhatti, 1972. *Oriental Ins.*, 6 (4): 544Known only through the type of the genus *L. bicolor* Bhatti, 1972**Genus 30. *Lefroyothrips* Priesner, 1938**Priesner, 1938. *Treubia*, 16 (4): 499KEY TO THE INDIAN SPECIES OF *Lefroyothrips*

1. Body yellow. Antennal segment 6 about as long as 5. Forewings with 35-40 costal, 8 upper vein and more than 14 lower vein setae. Comb on abdominal segment VIII complete. Males with 3 pairs of stout thorn like setae on abdominal tergite IX. ... .. *... lefroyi* (Bagnall, 19133)
- Body uniformly yellowish brown, terminal abdominal segments darker and with abdominal segments of anterior half with dark bands; antennae brown except segment 3 pale. Antennal segment 6 (70  $\mu$ ) longer than segment 5 (48  $\mu$ ) and shorter than 3 (77  $\mu$ ). Forewings with 32-34 costal, 9(7+2) upper vein with a large gap between the basal and distal series and 15-16 lower vein setae. Comb on tergite VIII continuous with 55-60 teeth. Tergite IX of male with 6 dark short stout setae and glandular areas on sternites III-VIII dumb-bell shaped. ... .. *obscurus* (Ananthakrishnan & Jagadish, 1966)

**Genus 31. *Megalurothrips* Bagnall, 1915**Bagnall, 1915. *Ann. Mag. nat. Hist.*, (8) 15: 589KEY TO THE INDIAN SPECIES OF *Megalurothrips*

1. Comb on abdominal tergite VIII complete. Body uniformly light to dark brown including antennae, segment 3 yellowish to light brown. Forewings brown with a clear distal area and with 12-21 (10-19+2) upper vein setae, 13-14 lower vein setae & 23-26 costal setae. ... .. *... distalis* (Karny, 1913)
- Comb on abdominal tergite VIII interrupted. ... .. 2
2. All abdominal sternites with short stout spiny projections and sternites of male medially with 70-80 lanceolate setae. Body uniformly yellowish to orange brown; basal fourth and near apex of forewing paler making the appearance of the wing banded. Antennal segments 3 & 4 equal (65  $\mu$ ) and longer than 6 (62  $\mu$ ). Forewings with 23-26 costal, 15-16 (13-14+2) upper vein and 13-14 lower vein setae. ... .. *peculiaris* (Bagnall, 1918)
- Abdominal sternites without spiny projection. ... .. 3
3. Antennae uniform brown; body uniformly orangish brown, head darker; forewings pale except base, middle and tip shaded dark making the wing banded. Antennae long and slender, segments 3 & 4 equal and longest (80-83  $\mu$ ). Forewings with a distal clear area and with 26-27 costal, 16-19

(14-17+2) upper vein and 15-16 lower vein setae.

Anteroangular prothoracic setae long (32-38  $\mu$ ).

Abdominal sternites of male with numerous

almost lanceolate setae, thinly drawn out at apices,

sternal setae 3 pairs of same shape but longer.

Hind tibiae with 5-6 spurs ... ..

... *morosus* (Priesner, 1938)

— Antennae not uniformly brown, segments 1 & 2

brown, 3 pale, 4 & 5 proximally pale distally grey,

6-8 light brown; body uniformly light to dark

brown; wings banded basal fourth and distal third

except at tip paler. Forewings with 23-26 costal,

14-18 (12-16+2) and 12-13 lower vein setae.

Abdominal sterna of male unarmed and without

gland areas. ... ..

... *typicus* (Bagnall, 1915)

### Genus 32. *Micothrips* Ananthakrishnan, 1965

Ananthakrishnan, 1965. *Bull. Ent.*, 6: 18

Known only through the type of the genus *M. fasciatus* Ananthakrishnan, 1965

### Genus 33. *Microcephalothrips* Bagnall, 1926

Bagnall, 1926. *Ann. Mag. nat. Hist.*, (9) 18: 113

Represented by the type of the genus *M. abdominalis* (Crawford, 1910)

### Genus 34. *Mycterothrips* Trybom, 1910

Trybom, 1910. *Schultze Sudafr. Exped.* :158

#### KEY TO THE INDIAN SPECIES OF *Mycterothrips*

1. Abdominal sternites with numerous accessory setae and tergites laterally with numerous microtrichia; comb on tergite VIII long and fine. Body dark brown. ... .. *setiventris* (Bagnall, 1918)
- Abdominal sternites without numerous accessory setae. ... .. 2
2. Upper vein of forewings with 3 distal setae and 11 basal setae (4+7); lower vein with 17-18 setae. Body dark yellowish brown; head, prothorax abdominal tip darker; antennal segments 3 & 4 pale. Interocellars strongly curved. ... .. *moultoni* (Seshadri & Ananthakrishnan, 1954)
- Upper vein with 2 distal setae. ... .. 3
3. Mouthcone very long beak-like, surpassing base of prosternum. Maxillary palpi very long, slender; segment 1 (25  $\mu$ ) distinctly longer than 2 & 3 (13 & 20  $\mu$ ). Antennal segment 6 truncate at base. Antennae of male 7-segmented, style 1-segmented. Upper vein of forewings with 9 (4+3+2) setae and lower vein with 11-13 setae. ... .. *acaciae* Priesner, 1932
- Mouthcone almost reaching the base of prosternum. ... .. 4
4. Lower vein of forewings with 16 setae. Antennal segment 6 (211  $\mu$ ) of male much longer than combined length of segments 1-5. ... .. *nilgiriensis* (Ananthakrishnan, 1960)
- Lower vein of forewings with 13 setae. Antennal segment 6 (90  $\mu$ ) of male much shorter. ... .. *ricini* (Shumsher, 1945)

Genus **35. Organothrips** Hood, 1940Hood, 1940. *Proc. Hawaii ent. Soc.*: 423This genus is represented in India by one species *O. indicus* Bhatti, 1974Genus **36. Oxythrips** Uzel, 1895Uzel, 1895. *Monogr. Ord. Thysanoptera*: 133Represented in India by one species *O. kochummani* Ananthakrishnan, 1969Genus **37. Projectothrips** Moulton, 1929Moulton, 1929. *Rec. Indian Mus.*, **31**: 96KEY TO THE INDIAN SPECIES OF *Projectothrips*

1. Prothoracic postangulans shorter, inner 61–70  $\mu$  and outer 31–39  $\mu$  long respectively. Forewings with 26–33 costal, 14–19 upper vein; series irregular beyond proximal half, at least distal 2 separated by a gap and 10–13 lower vein setae. Femora and tibiae brown at outer margin. ... *pruthi* Moulton, 1929
- Prothoracic postangulans longer, inner 81  $\mu$  and outer 52  $\mu$  long respectively. Forewings with 31–33 costal; 13–17 upper vein, distal 2 separated by a gap. Femora light grey brown except extreme base yellow. ... *bhattii* Ananthakrishnan, 1973

Genus **38. Scolothrips** Hinds, 1902Hinds, 1902. *Proc. U.S. Nat. Mus.*, **26**: 157KEY TO THE INDIAN SPECIES OF *Scolothrips*

1. Body bicolourous; head, pterothorax, base of abdominal segments VI–VIII dark grey; rest pale yellow. Body with profuse red pigmentation. Wings with a fuscous infumation up to middle; with a small byaline patch just beyond base; the middle region broadly transparent, next a fuscous almost to apex, extreme apex clear. ... *asura* (Ramakrishna & Margabandhu, 1931)
- Body unicolourous; abdominal tergites with brown shadings at foremargin and with peculiar lateral spots; legs pale yellow. Antennal segment 6 short (35  $\mu$ ). Forewings with 16–17 costal setae; 8–10 upper vein and 5–6 lower vein setae. ... *indicus* Priesner, 1950

Genus **39. Smeringothrips** Priesner, 1938Priesner, 1938. *Treubia*, **16** (4): 507Known only through the type of the genus *S. salaciae* Priesner, 1938Genus **40. Smilothrips** Bhatti, 1976Bhatti, 1976. *Oriental Ins.*, **10** (3): 323Known only through the type of the genus *S. productus* Bhatti, 1976Genus **41. Taeniothrips** Amyot & Serville, 1843Amyot & Serville, 1843. *Hist. Nat. Ins. Hemip.*: 644

KEY TO THE INDIAN SPECIES OF *Taeniothrips*

- |                                                                                                                                                                                                                      |     |     |     |                                            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|-----|--------------------------------------------|
| 1. Upper vein of forewings with 2 distal setae.                                                                                                                                                                      | ... | ... | ... | 2                                          |
| — Upper vein with 3 distal setae.                                                                                                                                                                                    | ... | ... | ... | 3                                          |
| — Upper vein of forewings with 4–8 distal setae. Body colour reddish brown. Abdominal sternites II–VI with sole shaped depressions, constricted at middle.                                                           | ... | ... | ... | <i>gladioli</i> Moulton & Steinweden, 1931 |
| 2. Abdominal sternites with a transverse row of 8–10 accessory setae. Body including antennae uniform dark brown. Antennal segment 3 longer than 6. Interocellars strong, as long as outer prothoracic postangulars. | ... | ... | ... | <i>chaetogastra</i> Ramakrishna, 1934      |
| — Abdominal sternites without accessory setae; pleurotergites with accessory setae. Inter and antecellar setae absent.                                                                                               | ... | ... | ... | <i>immsi</i> (Bagnall, 1926)               |
| 3. Body yellow. Antennal segment 6 yellowish basally. The inner pair of setae on tergite IX of male nearly twice as long outer.                                                                                      | ... | ... | ... | <i>flavidulus</i> Bagnall, 1923            |
| — Body brown; wings infumate. Head as long as broad, with a distinct constriction behind eyes. Inter and antecellar setae well developed. Forewings with 34 costal setae and 16 lower vein setae. Body 2 mm. long.   | ... | ... | ... | <i>major</i> Bagnall, 1916                 |

Genus 42. **Thrips** Linnaeus, 1758Linnaeus, 1758. *Syst. Nat.*: 457KEY TO THE INDIAN SUBGENERA OF *Thrips*

- |                                                                                                     |     |     |     |                                       |
|-----------------------------------------------------------------------------------------------------|-----|-----|-----|---------------------------------------|
| 1. Upper vein of forewings with an almost continuous row of setae.                                  | ... | ... | ... | <i>Isothrips</i> Priesner, 1940       |
| — Upper vein of forewings with a gap in the row of setae.                                           | ... | ... | ... | 2                                     |
| 2. Mouthcone very long and narrow, surpassing base of prosternum; maxillary palpi long and slender. | ... | ... | ... | <i>Oxyrrhinothrips</i> Priesner, 1933 |
| — Mouthcone not surpassing base of prosternum.                                                      | ... | ... | ... | 3                                     |
| 3. Prothoracic postangular setae well developed; general chaetotaxy strong.                         | ... | ... | ... | <i>Thrips</i> s.str.                  |
| — Prothoracic postangulars short to rudimentary.                                                    | ... | ... | ... | 4                                     |
| 4. Posterior margin of abdominal sternites II–VIII with 6 pairs of setae.                           | ... | ... | ... | <i>Ramaswamiahiella</i> Karny, 1926   |
| — Posterior margin of abdominal sternites II–VIII with 3 pairs of setae.                            | ... | ... | ... | <i>Athrips</i> * Priesner, 1938       |

KEY TO THE INDIAN SPECIES OF *Thrips* s. str.

- |                                                                                                                                                                              |     |     |     |     |                              |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|-----|-----|------------------------------|
| 1. Antennae 7-segmented.                                                                                                                                                     | ... | ... | ... | ... | 2                            |
| — Antennae 8-segmented.                                                                                                                                                      | ... | ... | ... | ... | 15                           |
| 2. Upper vein of forewings with only 3 widely separated setae on distal half; lower vein with 14 setae and costa with 26–30 setae. Comb on tergite VIII very finely fringed. | ... | ... | ... | ... | <i>albipes</i> Bagnall, 1914 |

\* Bhatti, 1978 treats *Athrips* as a genus under Anaphothripini, not as a subgenus of *Thrips*.

|     |                                                                                                                                                                                                                                                                                                                                                                                                                                                           |     |     |     |                                 |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|-----|---------------------------------|
| —   | Upper vein of forewings with more setae.                                                                                                                                                                                                                                                                                                                                                                                                                  | ... | ... | ... | 3                               |
| 3.  | Upper vein of forewings with 2 distal setae.                                                                                                                                                                                                                                                                                                                                                                                                              | ... | ... | ... | 4                               |
| —   | Upper vein with 3 distal setae.                                                                                                                                                                                                                                                                                                                                                                                                                           | ... | ... | ... | 5                               |
| —   | Upper vein with 4-5 distal setae.                                                                                                                                                                                                                                                                                                                                                                                                                         | ... | ... | ... | 14                              |
| 4.  | Forewings with 15-18 costal and 7-9 lower vein setae. Body pale yellow.                                                                                                                                                                                                                                                                                                                                                                                   | ... | ... | ... | <i>pallidulus</i> Bagnall, 1924 |
| ... | Forewings with 22-27, costal 6-8 upper vein basal and 9-13 lower vein setae; forewings with 2 brownish cross bands and 3 clear areas. Abdominal sterna without accessory setae. Body yellow.                                                                                                                                                                                                                                                              | ... | ... | ... | <i>latis</i> Bhatti, 1967       |
| 5.  | Body yellow; apex of abdomen not dark.                                                                                                                                                                                                                                                                                                                                                                                                                    | ... | ... | ... | 6                               |
| —   | Body dark or at least apex of abdomen dark.                                                                                                                                                                                                                                                                                                                                                                                                               | ... | ... | ... | 7                               |
| 6.  | Forewings with 29 costal, 10 (4+3+3) upper vein and 14 lower vein setae. Prothoracic postangulars long (67 $\mu$ ). Comb on abdominal tergite VIII sparse, short but complete. Abdominal segment II-VIII greyish in the middle; IX & X yellow.                                                                                                                                                                                                            | ... | ... | ... | <i>carthami</i> Shumsher, 1945  |
| —   | Forewings with 24-28 costal, 10 (4+3+3) upper vein and 11-15 lower vein setae. Postangulars, inner 80-100 $\mu$ and outer 78-98 $\mu$ long; prothorax very setose. Comb on abdominal tergite VIII closely set with 25-28 setae. Body uniformly yellow.                                                                                                                                                                                                    | ... | ... | ... | <i>flavus</i> Schrank, 1776     |
| —   | Forewings with 20-22 costal and 11-13 lower vein setae. Antennal segment 3 about as long as 6. Head shorter than pronotum.                                                                                                                                                                                                                                                                                                                                | ... | ... | ... | <i>palmi</i> Karny, 1925        |
| 7.  | Body some shade of yellow.                                                                                                                                                                                                                                                                                                                                                                                                                                | ... | ... | ... | 8                               |
| —   | Body some shade of brown.                                                                                                                                                                                                                                                                                                                                                                                                                                 | ... | ... | ... | 11                              |
| 8.  | Abdominal sternites with accessory setae.                                                                                                                                                                                                                                                                                                                                                                                                                 | ... | ... | ... | 9                               |
| —   | Abdominal sternites without accessory setae; comb on tergite VIII complete. Forewings with 24 costal, 10 (7+3) upper vein and 11-12 lower vein setae. Prothoracic postangulars, outer 59-81 $\mu$ , inner 74-81 $\mu$ long. Head, prothorax, all legs yellow; antennae unicolourous dark grey; abdominal segments II-VI deep blackish brown. Forewings with a dark cross band starting beyond the basal third of wing and occupying half the wing length. | ... | ... | ... | <i>atactus</i> Bhatti, 1967     |
| 9.  | Posterior margin of pronotum with 6 pairs of setae. Abdominal segment IX brownish, X strikingly blackish brown.                                                                                                                                                                                                                                                                                                                                           | ... | ... | ... | <i>melanurus</i> Bagnall, 1926  |
| —   | Posterior margin of pronotum with 3 pairs of setae....                                                                                                                                                                                                                                                                                                                                                                                                    | ... | ... | ... | 10                              |
| 10. | Abdominal segment IX in posterior half and X wholly dark; tergites shaded with dark area; antennal segments 1-3 yellow, 4-5 basally yellow apically brown, 6-7 brown. Prothoracic postangulars, inner 52-68 $\mu$ , outer 48-64 $\mu$ long. Forewings with 24-28 costal, 10 (7+3) upper vein and 10-13 lower vein setae.                                                                                                                                  | ... | ... | ... | <i>coloratus</i> Schmutz, 1913  |
| —   | Only abdominal segment X dark; tergites not shaded; body including wings uniformly light to dark yellow. Prothoracic postangulars inner                                                                                                                                                                                                                                                                                                                   |     |     |     |                                 |

- 54–70  $\mu$  and outer 48–64  $\mu$  long. Forewings with 24–28 costal, 10 (7+3) upper vein and 11–13 lower vein setae. ... .. *apicatus* Priesner, 1934
11. Prothoracic postangulars, inner (46–48  $\mu$ ) very long, more than 2.5 times longer than the outer (18–20  $\mu$ ). Body uniformly brown; wings grey, basal fourth pale. Forewings with 27–28 costal, 10 (4+3+3) upper vein and 16–18 lower vein setae. ... .. *brunneus* Ananthakrishnan & Jagadish, 1968
- Inner postangulars not very much longer than the outer, mostly subequal. ... .. 12
12. Forewings with only 6 (3+3) upper vein setae; lower vein with 16 and costa with 27 setae. Prothoracic postangulars, inner 32  $\mu$  and outer 38  $\mu$  long respectively. General colour yellowish grey; abdomen uniformly greyish brown; wings pale greyish infumate. ... .. *kallarensis* (Ananthakrishnan, 1960)
- Forewings with more upper vein setae.... ... 13
13. Antennal segment 3 longer than 6. Prothoracic postangulars subequal (48–50  $\mu$  long). Forewings with 28–32 costal; 10 (7+3) upper vein and 15–18 lower vein setae; vein setae long (45–50  $\mu$ ). Abdominal pleurite teeth very characteristic blunt; sternites with 8–10 pairs of accessory setae, arranged in more than one row. Body uniformly light to dark brown; antennal segment 3 yellow, 4–6 yellow at base and brown at apex, 7 dark brown. ... .. *hispidus* Ananthakrishnan & Jagadish, 1966
- Antennal segment 3 shorter than 6. Body dark brown. ... .. *parvus* Schmutz, 1913
14. Prothoracic postangulars very long (80–100  $\mu$ ) subequal. Body uniform yellowish to yellowish brown; antennal segment 1 pale yellow, 2 light brown, 3 pale yellow & light grey at apex, 4–5 yellow at base and brown apically, 6–7 brown; wings shaded, paler at base. Forewings with 24–28 costal, 15 (7+3+5) upper vein and 12–16 lower vein setae. Abdominal segments II–VII with dark anteromarginal bands; sternites without accessory setae. ... .. *kodaikanalensis* Ananthakrishnan & Jagadish, 1966
- Prothoracic postangulars short and stout (40–45  $\mu$  long). Body pale yellow to grey brown; antennal segment 1 light brown, rest brown except for bases of 3–5; forewings pale grey. Upper vein of forewings with 4–5 distal setae. Abdominal sternites without accessory setae. ... .. *tabaci* Lindeman, 1888
15. Sternites with accessory setae. ... .. 17
- Sternites without accessory setae. ... .. 16
16. Prothoracic postangulars very long, inner 78–102  $\mu$  and outer 92–104  $\mu$  long respectively. Forewings with 27–34 costal, 10–11 (6–7+2+2) upper vein and 13–18 lower vein setae. Metanotal sculpture with longitudinal lines. Antennal segment 3 (69–79  $\mu$ ) shorter than segment 6 (72–89  $\mu$ ). ... .. *tectus* (Zur Strassen, 1975)
- Postangulars comparatively shorter, inner 68–74  $\mu$  and outer 63  $\mu$  long respectively. Forewings with 28–31 costal, 10 (4+3+1+2) upper vein and 15 lower vein setae. Antennal segment 3 (55–58  $\mu$ ) subequal to segment 6 (55–57  $\mu$ ). ... .. *himalayanus* (Pelikan, 1970)

17. Antennal segment 4 & 5 light yellow in basal third; segment 3 yellow; head and thorax light orange, abdomen dark; wings dark, clear at base; males yellow. Abdominal sternites with 6–10 pairs of accessory setae. Upper vein of forewings with 7–8 basal and 3 distal setae; lower vein with 12–13 setae; vein setae dark. ... .. *hawaiiensis* (Morgan, 1913)
- Antennal segment 5 uniformly dark, atmost basal extremity slightly pale. ... .. 18
18. Forewings uniformly brownish yellow; body including legs dark brown. Antennal segment 6 longer than 4; head shorter than pronotum. Forewings with 38–40 costal setae and 18 lower vein setae. Comb on abdominal tergite VIII sparse. ... .. *longiceps* (Bagnall, 1916)
- Forewings clear at base. Antennal segment 6 shorter than 4; head shorter than pronotum. Forewings with 24–26 costal setae and lower vein with 12–15 setae. Comb on abdominal tergite arising in groups. ... .. *andrewsi* (Bagnall, 1914)

The subgenus *Athrips* is represented by one species *A. heveae* Ananthakrishnan, 1968; subgenus *Oxyrrhinothrips* is represented by *O. beharensis* Ramakrishna & Margabandhu, 1939; subgenus *Ramaswamiahiella* is represented by *R. subnudula* Karny, 1926 and the other subgenus *Isothrips* is represented by *I. orientalis* Bagnall, 1915.

### Genus 43. *Trichromothrips* Priesner, 1930

Priesner, 1930. *Bull. Soc. R. Ent. d'Egypte*: 9

#### KEY TO THE INDIAN SPECIES OF *Trichromothrips*

1. Body bicolourous. ... .. 2
- Body unicolourous, yellow with greyish marginal longitudinal bands on head and prothorax; abdomen with dark red pigment. Prothoracic postangulars inner, 75–83  $\mu$  and outer 48–64  $\mu$  long respectively. Forewings with 18–20 costal, 8–9 (3+3+2 or 3+4+2) upper vein and 11 lower vein setae. ... .. *bellus* Priesner, 1930
2. Head and prothorax brown along sides and yellowish at middle; pterothorax and abdominal segments I–VI yellow, VII–X dark brown. All femora yellow with brownish tinge towards apex; all tibiae brown; tarsi yellow. Forewings uniform dark grey. Prothoracic postangulars, inner 50–65  $\mu$  and outer 39–52  $\mu$  long respectively. Forewings with 20–25 costal, 7–8 (5–6+2) upper vein and 12–13 lower vein setae. Abdominal sternites II–VIII of male with numerous gland areas. ... .. *arorai* Bhatti, 1967
- Head dorsally dark brown except a cone shaped yellow area posteriorly; pronotum with a dark brown strip on either side, 2 strips converging but not meeting anteriorly; abdominal segments VII–X dark brown, segment VI in median fourth very

light brown, segment 5 also with a similar small median patch touching the antecostal line anteriorly, rest pale yellow. Prothoracic postangulars, inner 42  $\mu$  and outer 45–47  $\mu$  long respectively. Forewings with 25–26 costal, 7 (5+2) upper vein and 13–15 lower vein setae. ...

... *alis* Bhatti, 1967

- Head and thorax yellow; head and pronotum with dark strips on margin; abdomen brown; darker towards apical segments and with red pigments. Forewing dark greyish brown. Prothoracic postangulars, inner 53–56  $\mu$  and outer 37  $\mu$  long respectively. Forewings with 17 costal, 8 (6+2) upper vein and 9–11 lower vein setae. Abdominal sternites without accessory setae; sterna III–VIII of male with 6–7 glandular areas and III–VII with 2 median transversely elongated areas just behind antecostal line; VIII with a single median transversely elongated area and 3 rounded areas on each side. ...

... *priesneri* (Bhatti, 1967)

#### Genus 44. *Tusothrips* Bhatti, 1967

Bhatti, 1967. *Thysanoptera Nova Indica* :16

##### KEY TO THE SPECIES OF *Tusothrips*

1. Forewings with a broad dark brown cross band across middle of wing. Spinula absent on mesosternum. Antennal segment 7 about 1.5 times as long as wide; major inner sense cone on segments 5 & 6 arising from a greatly elongate base. ... *setiprivus* (Karny, 1926)
- Forewings without cross band. Spinula present on mesosternum. Antennal segment VII about as long as wide; major inner sense cone on antennal segments 5 & 6 arising from a circular base. ... *sumatrensis* (Karny, 1925)

#### Subfamily PANCHAETOTHRIPINAE

#### Genus 1. *Astrothrips* Karny, 1921

Karny, 1921. *Treubia*, 1 (4): 215

##### KEY TO THE INDIAN SPECIES OF *Astrothrips*

1. Antennae 8-segmented with clear and complete suture separating terminal segments. Pronotum with a small area in the neighbourhood of anteromarginal seta without sculpture, posterior margin smooth. Body dark brown, abdominal segments IX & X lighter; antennal segments 1, 3, 4 & 5 yellow, 2 light brown, 6–8 dark brown; all femora dark except extreme base and apex, all tibiae with a lighter shade in extreme base and distal half, all tarsi yellowish brown. Abdominal tergite VIII with comb only on extreme sides of posteromarginal flange; sternites II–VII with continuous postmarginal flange. ... *asiaticus* (Bhatti, 1967)
- Antennae 5–7 segmented. ... 2
2. Terminal segments of antennae not forming an unit with clear suture separating the terminal segments;

- antennae 7 — segmented. Body dark brown, abdominal segments IX & X yellowish brown; antennal segments 1, 2 yellowish brown, 3–5 yellow, 6 shaded greyish brown in distal half, 7 completely greyish brown; all femora dark brown, fore and mid tibiae light brown except at extreme base and apex, hind tibiae yellow, all tarsi yellow; forewings with 2 small dark greyish brown cross-bands. Ocellar hump small, scarcely overreaching frontal costa when the head is tilted forward; postocular setae 2 & 3 subequal. ... .. *lantana* Bhatti, 1967
- Terminal segments of antennae forming an unit. ... .. 3
3. Antennae 7 — segmented. Body uniformly dark yellowish brown, tip of abdominal segment X darker; antennae yellow terminal segments light brown; all femora brown, tibiae medially brown, base and apex yellow, tarsi yellow; forewings with 2 dark greyish brown cross-bands. Ocellar hump strongly developed. Sculpture on mesoscutum deeply notched anteriorly and posteriorly along mid line. Males without gland areas on abdominal sternites. ... .. *tumiceps* Karny, 1923
- Antennae 5–6 segmented. ... .. 4
4. Antennal segment 3 with slender basal part as long as the swollen portion (excluding constricted apex); segment 6 with 2 sense cones, inner one very long reaching beyond the apex of segment 7 (40–42  $\mu$  long). Body blackish brown, sides of pterothorax and abdomen darkest, abdominal segments III–VII lighter in middle; antennal segments 1, 2 yellowish brown, 3–5 yellow, 6 greyish brown in distal half, 7 complete greyish brown; all femora dark brown, fore and mid tibiae brown except at base and apex, hind tibiae brown in basal third, tarsi yellow. Head with strongly developed ocellar hump. Mesoscutal sculpture deeply notched anteriorly extending nearly to middle, not completely divided longitudinally along mid line. Abdominal sterna IV–VII of male with 'V' or 'U' shaped gland areas. ... .. *stannardi* Bhatti, 1967
- Antennal segment 3 with the slender basal part shorter than the swollen portion (excluding constricted apex). ... .. 5
5. Narrowed apex of antennal segment 4 shorter wider and more abruptly constricted than apex of segment 3; apex of sense cone of antennal segment 4 positioned below apex of accessory sense cone. Body dark yellowish brown; antennae yellow conical apex shaded with brown; base of forewings golden with 2 dark cross bands. Ocellar hump enlarged, ocellar setae No. 2 developed, No. 1 & 3 minute. Anterior of mesoscutal sculpture moderately notched along mid line. Sternites V–VII of male each with a 'U' shaped glandular area. *parvilimbus* Stannard & Mitri, 1962
- Narrowed apex of antennal segment 4 sub-equal in size and of the same configuration as the apex of segment 3; apex of sense cone on antennal segment 4 surpassing apex of accessory sense cone. Body entirely dark yellowish brown; abdominal segments

VII-IX more yellow medially, X dark brown; antennae yellow, segments 6-7 light brown; forewings golden basally with 2 dark cross-bands, apex pale; forelegs yellow, shaded with brown on femora and tibiae, mid and hind femora brown, tibiae yellow in distal third, tarsi yellow. Ocellar hump strongly elevated, ocellar setae minute. Mesoscutal sculpture notched anteriorly and posteriorly along mid line. ... ..

*globiceps* (Karny, 1913)

Genus 2. **Caliothrips** Daniel, 1904

Daniel, 1904. *Ent. News.*, **15** (9): 296

KEY TO THE INDIAN SPECIES OF *Caliothrips*

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|
| 1. Extreme apex of forewing white. ... ..                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 2                                            |
| — Extreme apex of forewing uniformly dark brown. ... ..                                                                                                                                                                                                                                                                                                                                                                                                                                   | 3                                            |
| 2. Abdominal tergite IX of male with long, slender, needle like setae. Hind tibiae distal half white, base light brown. Setae on veins of forewing strong bristle like, curving towards hind margin of wing. Abdominal tergite I with one third covered with well formed reticules. ... ..                                                                                                                                                                                                | <i>luckmanni</i> Wilson, 1975                |
| — Abdominal tergite IX of male with stout thorn like setae. Hind tibiae with distal one fourth white, basal three fourth entirely brown. Setae on veins of forewing similar to that of <i>luckmanni</i> but slightly weaker. Abdominal tergite I with median half covered by distinct well formed reticules; sides of abdominal tergites III-VII without wrinkles between lines of sculpture. ... ..                                                                                      | <i>striatopterus</i> (Kobus, 1892)           |
| 3. Forewings completely brown except base slightly paler and with a subapical pale area. Antennal segments 3-5 mostly yellow. Metascutellum with well defined wrinkles among reticules. Abdominal tergites with lateral thirds covered by well-formed polygonal reticulations; entire median third of tergites IV-VIII without sculpture, smooth. Abdominal tergite IX of male with long, slender setae and sternites III-VII of male each with long narrow transverse gland area. ... .. | <i>impurus</i> (Priesner, 1928)              |
| — Forewings with 4 light greyish cross bands, alternating with 3 clear areas. Antennal segments 3-5 dark grey brown in distal half or more. ... ..                                                                                                                                                                                                                                                                                                                                        | 4                                            |
| 4. Dark cross-bands of forewings more or less well defined. Abdominal tergites with lateral sculpture composed of elongate ill-formed reticules; inter surface of reticules bearing numerous wrinkles. Metascutellum without wrinkles among reticules. Abdominal sternites IV-VII of male with long transverse arcuate glandular area. ... ..                                                                                                                                             | <i>indicus</i> (Bagnall, 1913)               |
| — Dark cross-bands of forewing weaker and smaller, more like dark spots rather than cross-bands. Abdominal tergites with lateral sculpture composed of transverse striae that occasionally anastomose and with a few wrinkles between the lines of sculpture. Metascutellum with well defined wrinkles among reticules. Abdominal sternites IV-VII of male with small, transverse, oblong, glandular area,...                                                                             | <i>graminicola</i> (Bagnall & Cameron, 1932) |

Genus 3. **Euidothrips** Ananthakrishnan, 1967

Ananthakrishnan, 1967. *Oriental Ins.*, **1** (1-2): 118

Known only through the type of the genus *E. apsarus* Ananthakrishnan, 1967

Genus 4. **Helionothrips** Bagnall, 1932

Bagnall, 1932. *Ann. Mag. nat. Hist.*, (10)**10**: 506

KEY TO THE INDIAN SPECIES OF *Helionothrips*

1. Antecostal line on abdominal tergites III-VIII forming three broad contiguous scallops, with prominent lines running caudad from their extremities, tergite VIII without comb. Antennal segments more globular, segment 3 with much shorter pedicel, sense cone on 3 short and curved extending only to apex of basal pedicel of 4, segment 2 subquadrate. Setae on vein of forewings minute except for a slender setae at apex. ... ..

*nilgiricus* (Ananthakrishnan, 1967)
- Antecostal line on abdominal tergite III-VIII often divided into broad arches which are connected by finer lines but never with prominent lines running candad from their extremities which produce the impression of scallops. ... ..

... .. 2
2. Antennal segment 2 brown concolorous with segment 6. ... ..

... .. 3
- Antennal segment 2 pale yellowish white, 3-5 & base of 6 lemon yellow, distal three-fifth of 6 brown, 7 greyish brown, 8 greyish yellow; segments 4 & 5 elongated, 5 with a subbasal thickening. Apical three fourth of forewing uniformly brown. Abdominal sternites of male without glandular areas except for a small dot-like gland on segment VIII. ... ..

*kadaliphilus* (Ramakrishna & Margabandhu, 1931)
3. Forewing with a subapical dark brown (lighter than base) cross band, apex brown. Antennal segments 1, 2, 6-8 brown, 3-5 yellow, body blackish brown, tarsi and apical third of tibiae yellow. Abdominal sterna VII-VIII of male each with a more or less rounded gland area. ... ..

... .. *parvus* Bhatti, 1968
- Forewings brown except for a small pale brown subbasal patch. Sense cone on antennal segment 4 very long reaching the middle of segment 8. Head transverse. ... ..

*brunseipennis* (Bagnall, 1915)

Genus 5. **Heliothrips** Haliday, 1836

Haliday, 1836. *Ent. Mag.*, **3**: 443

KEY TO THE INDIAN SPECIES OF *Heliothrips*

1. Metascutal triangle with a flange of sculpture extending to middle of metascutellum. Reticles on abdominal tergites small and numerous and those on anterior of antecostal lines on tergites III-VII distinct, complete and forming a transverse series, ... ..

*ceylonicus* Schmutz, 1913

- Metascutal triangle without flange of sculpture. Reticles on abdominal tergites large and those on anterior of antecostal lines on tergites III–VII delicate, ill-formed and the series occasionally interrupted. Abdominal tergite IX of male with 3 pairs of stout, thorn like posteromedian setae, each posterior pair of setae slightly smaller and lateral of preceding pair, sternites III–VII of male each with a transverse oblong glandular area. ... *haemorrhoidalis* (Bouche, 1833)

**Genus 6. *Hercinothrips* Bagnall, 1932**

Bagnall, 1932. *Ann. Mag. nat. Hist.*, 10(10): 506.

Represented in India by the type of the genus—*H. bicinctus* Bagnall, 1932

**Genus 7. *Monilothrips* Moulton, 1929**

Moulton, 1929. *Rec. Indian Mus.*, 31: 93

Known only through the type of the genus *M. kemp*i Moulton, 1929

**Genus 8. *Noathrips* Bhatti, 1967**

Bhatti, 1967. *Thysanoptera Nova Indica*: 9

Known only through the type of the genus *N. prakash*i Bhatti, 1967

**Genus 9. *Panchaetothrips* Bagnall, 1912**

Bagnall, 1912. *Rec. Indian Mus.*, 7: 257

Represented in India by the type of the genus *P. indicus* Bagnall, 1912

**Genus 10. *Parthenothrips* Uzel, 1895**

Uzel, 1895. *Monogr. Ord. Thys.*: 170

Represented in India by the type of the genus *P. dracaenae* (Heeger, 1854)

**Genus 11. *Phibalothrips* Hood, 1918**

Hood, 1918. *Mem. Queensland Mus.*, 6: 125

Represented in India by one species *P. peringueyi* (Faure, 1925)

**Genus 12. *Retithrips* Marchal, 1910**

Marchal, 1910. *Bull. Soc. Ent. Egypte*: 17

Represented in India by one species *R. syriacus* (Mayet, 1890)

**Genus 13. *Rhipiphorothrips* Morgan, 1913**

Morgan, 1913. *Proc. U.S. Nat. Mus.*, 46 (2008): 17

Represented in India by one species *R. cruentatus* Hood, 1919

**Genus 14. *Selenothrips* Karny, 1911**

Karny, 1911. *Ent. Rundschau*, 28: 179

Represented in India by one species *S. rubrocinctus* (Giard, 1901)

Genus 15. **Tryphactothrips** Bagnall, 1919Bagnall, 1919. *Ann. Mag. nat. Hist.*, **4** (9): 256Known only through the type of the genus—*T. rutherfordi* (Bagnall, 1915)Genus 16. **Zaniothrips** Bhatti, 1967Bhatti, 1967. *Thysanoptera Nova Indica*: 6Known only through the type of the genus—*Z. ricini* Bhatti, 1967Suborder **TUBULIFERA**Family **PHLAEOTHIRIPIDAE**Subfamily **UROTHRIPINAE**Genus 1. **Ananthakrishnaniella** Stannard, 1970Stannard, 1970. *Proc. R. ent. Soc. Lond. (B)*, **39** (7-8): 118Known only through the type of the genus—*A. tarai* Stannard, 1970Genus 2. **Baenothrips** Crawford, 1948Crawford, 1948. *Proc. ent. Soc. Wash.*, **50**: 39KEY TO THE INDIAN SPECIES OF *Baenothrips*

- Head short, about as long as wide without conspicuous production. Antennal segments 6-8 brown cephalic setae a little shorter. Forefemora mostly dark brown and scattered granules or smaller tubercles on head. ... .. *asper* (Bournier, 1963)
- Head more elongate, with conspicuous production at vertex. Antennal segment 7 brown. Forelegs completely pale. Numerous emphasised granules all over head. Cephalic setae more prominent. ... .. *minutus* (Ananthakrishnan, 1964)

Genus 3. **Bournieria** Ananthakrishnan, 1966Ananthakrishnan, 1966. *Bull. Ent.*, **7**: 2Known only through the type of the genus—*B. indica* Ananthakrishnan, 1966Genus 4. **Bradythrips** Hood & Williams, 1925Hood & Williams, 1925. *Psyche*, **32**: 68Known only through the type of the genus—*B. hesperus* Hood & Williams, 1925Genus 5. **Habrothrips** Ananthakrishnan, 1967Ananthakrishnan, 1967. *Oriental Ins.*, **1** (1-2): 137Known only through the type of the genus—*H. curiosus* Ananthakrishnan, 1967Genus 6. **Stephanothrips** Trybom, 1912Trybom, 1912. *Arkiv. f. Zool.*, **7** (33): 42

KEY TO THE INDIAN SPECIES OF *Stephanothrips*

1. Head prothorax and forefemora (except apex) dark brown; last two antennal segments dark brown; foretibiae, mid and hind femora and tibiae dark brown at middle. Head 1.13 times as long as wide. Antennal segment 3 and the last segment short. *occidentalis* Hood & Williams, 1925
- Head and prothorax pale yellow and only the last antennal segment brown; fore and mid legs pale yellow; hind femora brown, a little pale at apex. Head more elongate. Antennal segment 3 and last segment clearly more elongate. ... *adnatus* Ananthakrishnan, 1972

## Subfamily PHLAEOTHRIPINAE

Genus 1. **Ablemothrips** Ananthakrishnan, 1970

Ananthakrishnan, 1970. *Oriental Ins.*, **3** (3): 289

Known by only the type of the genus—*A. maxillatus* Ananthakrishnan, 1970

Genus 2. **Aclystothrips** Ananthakrishnan, 1971

Ananthakrishnan, 1971. *Marcellia*, **37** (3): 111

Known by only the type of the genus—*A. priesneri* Ananthakrishnan, 1971

Genus 3. **Adraneothrips** Hood, 1925

Hood, 1925. *Psyche*, **32**: 54

KEY TO THE INDIAN SPECIES OF *Adraneothrips*

1. Apterous; all tibiae yellow; antennal segment 3 yellow. Anteromarginal setae of pronotum vestigial, much shorter than anteroangulars. Setae dark, blunt. ... *madrasensis* Ananthakrishnan, 1968
- Winged forms. ... 2
2. Body brown. Intermediate antennal segments yellow at basal half and paler brown beyond; all tibiae banded, brown at middle and yellow at either ends. Cephalic and thoracic setae short. Foretarsi unarmed in females, armed with a small tooth in males. 6 double fringes on forewing. ... *disjunctus* Ananthakrishnan, 1972
- Body more yellowish. ... 3
3. Body yellow with only the tube brown; antennal segments 3–6 with proximal half yellow, rest brown. Setae hyaline. Anteroangulars of pronotum shorter than anteromarginals; postoculars short (26  $\mu$  long); no double fringes on forewing. ... *stannardi* Ananthakrishnan, 1969
- Body including legs pale yellow. Antennal segment 3 yellow, rest as in *stannardi*. All setae brown; postoculars long (72–78  $\mu$ ); anteroangulars and anteromarginals subequal. Forewing with 7–10 double fringes. ... *elegans* Ananthakrishnan, 1972

**Genus 4. Aeglothrips** Ananthakrishnan, 1969

Ananthakrishnan, 1969. *Senckenbergiana biol.*, **50** (3-4): 179.

Known by only the type of the genus—*A. denticulus* Ananthakrishnan, 1969

**Genus 5. Agrothrips** Jacot-Guillarmod, 1939

Jacot-Guillarmod, 1939. *J. ent. Soc. S. Afr.*, **2**: 40.

This genus is represented by only one species *A. insolitus* Ananthakrishnan, 1969

**Genus 6. Aleurodothrips** Franklin, 1909

Franklin, 1909. *Ent. News*, **20**: 228.

This genus is represented by type of the genus—*A. fasciapennis* (Franklin, 1909)

**Genus 7. Alocothrips** Priesner, 1951

Priesner, 1951. *Indian J. Ent.*, **13** (2): 195.

Known by only the type of the genus—*A. hadrocerus* (Karny, 1926)

**Genus 8. Alloiothrips** Ananthakrishnan, 1964

Ananthakrishnan, 1964. *Ent. Ts. Arg.*, **85** (3-4): 218.

Known by only the type of the genus—*A. nigrisetis* Ananthakrishnan, 1964

**Genus 9. Ananthakrishnana** Bhatti, 1967

Bhatti, 1967. *Thysanoptera Nova Indica* :22.

Known by only the type of the genus—*A. indica* Bhatti, 1967

**Genus 10. Androthrips** Karny, 1912

Karny, 1912. *Marcellia*, **11**: 152.

KEY TO THE INDIAN SPECIES OF *Androthrips*

- |                                                                                                                                                                                                                        |     |     |                                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|-----------------------------------|
| 1. Foretibial scale strongly developed. Maxillary stylets retracted at middle. ...                                                                                                                                     | ... | ... | <i>coimbatorensis</i> Ramk., 1934 |
| — Foretibial scale weak, feeble or absent. ...                                                                                                                                                                         | ... | ... | 2                                 |
| 2. All legs yellow. ...                                                                                                                                                                                                | ... | ... | 3                                 |
| — All legs not uniformly yellow. ...                                                                                                                                                                                   | ... | ... | 4                                 |
| 3. Body distinctly bicolourous. Head almost as long as wide. Postoculars (55-65 $\mu$ ) and prothoracic postangulars (65 $\mu$ ) and epimerals (67-75 $\mu$ ) not very long. ...                                       | ... | ... | <i>melastomae</i> Zimm., 1900     |
| — Body pale to dark brown. Head clearly longer than wide. Postoculars (80-90 $\mu$ ) and prothoracic postangulars (78-105 $\mu$ ) and epimerals (78-109 $\mu$ ) very well developed. ...                               | ... | ... | <i>flavipes</i> Schmutz, 1915     |
| 4. Forefemora brown, shading to yellow in outer third; mid and hindfemora brown; all tibiae yellow. Postoculars (83 $\mu$ ) and prothoracic postangulars (93 $\mu$ ) and epimerals (104 $\mu$ ) long respectively. ... | ... | ... | <i>flavitibia</i> Moulton, 1932   |

- Apex of forefemora, entire foretibiae, extreme base of hindtibiae and all tarsi yellow; rest dark brown. Body setae very well developed long. Forefemora with a conspicuous row of tubercles at inner margin....

*ramachandrai* Karny, 1926

### Genus 11. *Apelaunothrips* Karny, 1925

Karny, 1925. *Notulae Ent.* :82.

#### KEY TO THE INDIAN SPECIES OF *Apelaunothrips*

1. Colour yellow, tube brown. Foretarsi armed in males. ... .. *lucidus* (Ananthakrishnan, 1965)
- Bicolourous or unicolourous. Foretarsi unarmed in both sexes. ... .. 2
2. Body bicolourous. Abdominal segment V yellow in brachypterous specimen and more unicolourous in macropterous specimen; antennal segment 3 and base of 4 and 5 (rarely 3 and 4 fully) yellow. Postoculars always one pair. Postoculars (93–108  $\mu$ ) and prothoracic postangulars (64–90  $\mu$ ) and epimerals (80–96  $\mu$ ) long, very well developed ... .. *madrasensis* (Ananthakrishnan, 1964)
- Body always unicolourous; antennal segments uniform light brown. An inner shorter pair of postoculars generally evident, rarely absent. Postoculars (80–84  $\mu$ ) and prothoracic postangulars (72–76  $\mu$ ) and epimerals (76–80  $\mu$ ) moderately long but shorter than those of *madrasensis*. ... .. *indicus* (Ananthakrishnan, 1967)

### Genus 12. *Antillothrips* Stannard, 1957

Stannard, 1957. *Illinois biol. Monogr.*, **25**: 35.

#### KEY TO THE INDIAN SPECIES OF *Antillothrips*

1. Body brown. Mesopraesternum well developed.  $B_2$  of abdominal segment IX pointed. .. .. *varius* (Ananthakrishnan & Jagadish, 1969)
- Body bicolourous, at least abdominal segment II yellow. ... .. 2
2. Anteromarginals (44  $\mu$ ) well developed and expanded at tip. ... .. *nayari* (Ananthakrishnan, 1958)
- Anteromarginals vestigial. ... .. 3
3. Antennal segments 3 and 4 with 1+1 sense cones. Micropterous. ... .. *micropterus* Piktin, 1976
- Antennal segments 3 and 4 with 1+1 and 1+2+1 sense cones respectively. Macropterous. ... .. 4
4. Postoculars and  $B_1$  of abdominal segment IX pointed. Forewings with 1–4 double fringes. ... .. *malabaricus* (Ananthakrishnan, 1965)
- Postoculars and  $B_1$  of abdominal segment IX expanded at tip. Forewings with 5–7 double fringes. ... .. *graminellus* (Ananthakrishnan & Jagadish, 1969)

### Genus 13. *Apterygothrips* Preisner, 1933

Priesner, 1933. *Bull. Soc. ent. Egypte* :1.

KEY TO THE INDIAN SPECIES OF *Apterygothrips*

1. Antennal segment 4 with  $2+2^{+1}$  sense cones. ... .. 2
- Antennal segment 4 with atmost  $1+2$  sense cones.... .. 3
2. Midlaterals well developed and expanded at tip. *jogensis* (Ananthakrishnan & Jagadish, 1969)  
Antennal segment 3 without sense cones. ... ..
- Midlaterals vestigial. Antennal segment 3 with  $1+1$  sense cones. ... .. *rubiginosus* (Ananthakrishnan & Jagadish, 1971)
3. Body predominantly yellow. Postoculars expanded at tip. ... .. 4
- Body brown. Postoculars pointed. Antennal segment 3 and 4 with  $0+1$  and  $1+1$  sense cones respectively. Anteromarginals vestigial. ... *pini* Ananthakrishnan, 1961
- Body brown. Postoculars expanded at tip. Antennal segments 3 and 4 with  $0+1$  and  $1+2$  sense cones respectively. Anteromarginals moderately well developed. ... .. *hispanicus* (Bagnall, 1916)
4. Tube mainly yellow, extreme apex tinged with brown. Antennal segments 3 and 4 with  $0+1$  and  $1+2$  sense cones respectively. Anteromarginals vestigial.  $B_1$  of abdominal tergite IX expanded at tip. Apterous. ... .. *pellucidus* (Ananthakrishnan, 1968)
- Tube brown. Antennal segments 3 and 4 with  $1+1$  and  $1+1^{+1}$  sense cones respectively. Anteromarginals well developed and expanded at tip.  $B_1$  of abdominal tergite IX pointed. Macropterous or apterous. ... .. *fungosus* (Ananthakrishnan & Jagadish, 1969)

Genus 14. *Arrhenothrips* Hood, 1919Hood, 1919. *Insect. Inscit. Menstr.*, 7: 98.KEY TO THE INDIAN SPECIES OF *Arrhenothrips*

1. Wings clear. Anteromarginals very much shorter than anteroangulars. Postoculars and all prothoracic setae dilated at tip. Metanotal setae well developed. Fore-wings with 13–15 double fringes.... *ramakrishnae* Hood, 1919
- Wings never clear, from pale grey to cloudy. ... .. 2
2. Postoculars longer than eyes. Anteromarginals subequal to a little longer than anteroangulars. Postoculars and all prothoracic setae dilated at tip. Metanotal setae short. Forewings with 9–10 double fringes. ... .. *dhumrapaksha* Ramakrishna, 1928
- Postocular shorter than eyes. ... .. 3
3. Anteroangulars, anteromarginals and midlaterals very much reduced and shorter than postoculars. Maxillary stylets strongly approaching at middle. Forewings with 8–10 double fringes and very short basal wing setae. ... .. *acuminatus* Ananthakrishnan, 1969
- Anteroangulars, anteromarginals and midlaterals well developed and longer than postoculars. Maxillary stylets 'V' like, not approaching. Forewings with 18–26 double fringes and with well developed basal wing setae. ... .. *longisetis* Sen, 1977

Genus 15. **Austrothrips** Brethes, 1915

Brethes, 1915. *Ann. Mus. nac. Buen. Aires*, **21**: 89.

This genus is represented in India by single species *A. cochinchinensis* Karny, 1926

Genus 16. **Ayyarothrips** Ananthakrishnan, 1971

Ananthakrishnan, 1971. *Marcellia*, **37** (3): 120.

Known by only the type of the genus—*A. abstrusus* Ananthakrishnan, 1971

Genus 17. **Azaleothrips** Ananthakrishnan, 1964

Ananthakrishnan, 1964. *Ent. Ts. Arg.*, **85** (3-4): 220.

Known by only the type of the genus—*A. amabilis* Ananthakrishnan, 1964

Genus 18. **Bamboosiella** Ananthakrishnan, 1957

Ananthakrishnan, 1957. *Ent. News*, **68** (3): 65.

Known by only the type of the genus—*B. bicoloripes* Ananthakrishnan, 1957

Genus 19. **Brachythrips** Reuter, 1899

(Near *Crotonothrips* Ananthakrishnan)

Reuter, 1899. *Acta Soc. Faun. Flor. Fenn.* :28.

This genus is represented in India by one species *B. dhirgavadana* Ramakrishna and this species is to be the type of a new genus to be described by Preisner.

Genus 20. **Bunothrips** Ananthakrishnan, 1969

Ananthakrishnan, 1969. *Oriental Ins.*, **3** (3): 293.

Known by the type of the genus—*B. cruralis* Ananthakrishnan, 1969.

Genus 21. **Byctothrips** Ananthakrishnan, 1973

Ananthakrishnan, 1973. *Oriental Ins.*, **7** (4): 540.

Known by only the type of the genus—*B. ayyari* Ananthakrishnan, 1973

Genus 22. **Calamothrips** Ananthakrishnan, 1967

Ananthakrishnan, 1967. *Ann. Soc. ent. Fr.*, **3** (N.S.): 232.

Known by only the type of the genus—*C. fastigatus* Ananthakrishnan, 1967

Genus 23. **Callothrips** Ananthakrishnan, 1969

Ananthakrishnan, 1969. *Indian Forester*, **95** (3): 176.

Known by only the type of the genus—*C. ascitus* Ananthakrishnan, 1969.

Genus 24. **Carissothrips** Ananthakrishnan, 1964

Ananthakrishnan, 1964. *Ent. Ts. Arg.*, **85** (1-2): 99.

Known by only the type of the genus *C. nigrescens* Ananthakrishnan, 1964

**Genus 25. Chiraplothrips** Priesner, 1930

Priesner, 1930. *Bull. Soc. R. Ent. Egypte.*, 271.

This genus is represented in India by one species *C. graminellus* Priesner, 1938

**Genus 26. Chiridothrips** Ramakrishna & Margabandhu, 1939

Ramakrishna and Margabandhu, 1939. *Rec. Indian Mus.*, 41: 32.

Known by only the type of the genus — *C. indicus* Ramakrishna & Margabandhu, 1939

**Genus 27. Chlarathrips** Ananthakrishnan, 1967

Ananthakrishnan, 1967. *Ann. Soc. ent. Fr.*, 3 (N.S.): 230

Known by only the type of the genus *C. tersus* Ananthakrishnan, 1967

**Genus 28. Corycidothrips** Ananthakrishnan, 1972

Ananthakrishnan, 1972. *Marcellia*, 37 (5): 4.

Known by only the type of the genus *C. inquilinus* Ananthakrishnan, 1972

**Genus 29. Crotonothrips** Ananthakrishnan, 1967

Ananthakrishnan, 1967. *Oriental Ins.*, 1 (1-2): 119.

**KEY TO THE SUBGENERA OF *Crotonothrips***

- |                                                                                                                                                    |                                               |
|----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|
| Foretarsi armed in both sexes. B <sub>2</sub> of abdominal segment IX short. ... ..                                                                | <i>Crotonothrips</i> s.str.                   |
| — Foretarsi unarmed in both sexes. B <sub>2</sub> of abdominal segment IX not short, almost subequal to B <sub>1</sub> and B <sub>3</sub> . ... .. | <i>Inermothrips</i> Muraleedharan & Sen, 1978 |

**KEY TO THE SPECIES OF *Crotonothrips* s.str.**

- |                                                                                                                                                                                                                                                                                                     |                                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|
| 1. B <sub>2</sub> of female abdominal segment IX not shorter than B <sub>1</sub> and B <sub>3</sub> (130–145; 130–143 and 156 $\mu$ long respectively). Anteroangulars, anteromarginals and postangulars short, only epimerals better developed...                                                  | <i>dantahasta</i> (Ramk., 1928)            |
| — B <sub>2</sub> of female abdominal segment IX shorter than B <sub>1</sub> and B <sub>3</sub> . ... ..                                                                                                                                                                                             | 2                                          |
| 2. Body distinctly bicolourous; head, all legs, antennal segments 1–5 yellow, rest brown. Postoculars (35 $\mu$ ) and postangulars (35–46 $\mu$ ), short, epimerals 81–92 $\mu$ long. B <sub>1</sub> –B <sub>3</sub> of abdominal tergite IX: 102–105; 51–61 and 122–123 $\mu$ long respectively. I | <i>memecylonicus</i> Ananthakrishnan, 1976 |
| — Body unicolourous brown, almost with an admixture of yellow in restricted areas. ... ..                                                                                                                                                                                                           | 3                                          |
| 3. Anteroangulars and anteromarginals very short and also postangulars. ... ..                                                                                                                                                                                                                      | 4                                          |
| — Anteroangulars, anteromarginals and postangulars better developed, rarely anteroangulars short. ... ..                                                                                                                                                                                            | 5                                          |

4. Anteromarginals (10–13), postangulars (29–39) and epimerals (80–86) long.  $B_2$  of abdominal segment IX a little more than half as long as  $B_1$  and  $B_3$ . Antennal segments 4–6 more rounded and pedicellate. Mesopraesternum more parallel sided. ... *mimicus* (Ananthakrishnan, 1969)
- Anteromarginals and anteroangulars almost as in *mimicus*.  $B_2$  of abdominal segment IX very short, less than half as long as  $B_1$  and  $B_3$ . Antennal segments 4–6 more elongate, not pedicellate. Mesopraesternum narrowed at middle. ... *parvus* Ananthakrishnan, 1976
5.  $B_2$  of IX always half as long as  $B_1$  and  $B_3$ . ... 6
- $B_2$  of IX nearly half as long, sometimes only very little shorter. ... 7
6. Forefemora brown, mid and hind femora yellow at apex; mid- and hind tibiae brown. Postoculars short (30–46), anteroangulars and anteromarginals (21–23), postangulars (46–51) and epimerals (71–87) long respectively.  $B_2$  of abdominal segment IX: 61–64 and  $B_1$ ,  $B_3$  122–126  $\mu$  long. ... *dissimilis* Ananthakrishnan, 1976
- All legs uniformly yellow, suffused with brown. Postoculars and prothoracic setae longer. Postoculars (45–75  $\mu$ ), postangulars (55–65  $\mu$ ) and epimerals (104–110  $\mu$ ) long respectively.  $B_2$  of segment IX: 64–80;  $B_1$  and  $B_3$ : 144–160; 144–175  $\mu$  long respectively. ... *gallarum* Ananthakrishnan, 1967
7. Mesopraesternum narrowed at middle, with a distinct crest. Anteromarginals shorter than anteroangulars. Basal wing setae very short.  $B_2$  of abdominal segment IX: 72–85 and  $B_1$  and  $B_3$ : 91–106  $\mu$  long respectively. ... *davidi* Ananthakrishnan, 1972
- Mesopraesternum narrowed, parallel sided and without median crest. Anteromarginals and anteroangulars subequal. Basal wing setae  $B_1$  short,  $B_2$  and  $B_3$  much longer.  $B_2$  of IX: 102–112  $\mu$  only a very little shorter than  $B_1$  and  $B_3$  (143–153  $\mu$ )... *coorgensis* Ananthakrishnan, 1976

The other subgenus *Inermothrips* is known only through the type—*I. cacharensis* Muraleedharan & Sen, 1978.

### Genus 30. *Dixothrips* Ananthakrishnan, 1969

Ananthakrishnan, 1969. *Oriental Ins.*, 3 (3): 295.

Known by only the type of the genus *D. onerosus* Ananthakrishnan, 1969

### Genus 31. *Dolicholepta* Priesner, 1932

Preisner, 1932. *Rev. Zool. Bot. Afr.*, 22: 198.

#### KEY TO THE INDIAN SPECIES OF *Dolicholepta*

1. Head almost twice as long as broad.
- Forewings with 8 double fringes. ... *gracilipes* Ramk. & Marg., 1939
- Head 1.5 times as long as wide. ... 2

2. Antennae and foretibiae pale. Tube  $\frac{2}{3}$  length of head. ... .. *flaviantennatus* Sesh. & Ananth., 1954
- Antennae and all tibiae deep golden yellow. Tube  $\frac{1}{2}$  length of head. ... .. *inquilinus* Ananthakrishnan, 1954

### Genus 32. *Dolichothrips* Karny, 1912

Karny, 1912. *Zool. Anz.*, 11: 289.

#### KEY TO THE INDIAN SPECIES OF *Dolichothrips*

- |                                                                                                                                                                                                                                                  |                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|
| 1. Body with red hypodermal pigmentation. ... ..                                                                                                                                                                                                 | 2                                          |
| — Body without red pigmentation. ... ..                                                                                                                                                                                                          | 3                                          |
| 2. All tibiae yellow. Foretarsal tooth small. Forewings with 8 double fringes. ... ..                                                                                                                                                            | <i>malhavi</i> Ananthakrishnan, 1961       |
| — All tibiae not yellow, foretibiae yellowish brown, mid-and hind tibiae brown. Foretarsal tooth strong. Forewings with 12-14 double fringes. ... ..                                                                                             | <i>montanus</i> Ananthakrishnan, 1964      |
| 3. All femora and tibiae ochraceous. Metanotal setae stout, dilated at apex, similar to major pronotal setae. Postoculars short. Forewings with 6-7 double fringes; basal wing setae dilated at apex, $B_2$ longer than $B_1$ and $B_3$ . ... .. | <i>ochripes</i> Karny, 1926                |
| — All femora and tibiae not ochraceous, brown or yellow. ... ..                                                                                                                                                                                  | 4                                          |
| 4. Basal wing setae small, less than the distal width of forewings. Apical $\frac{3}{4}$ th of foretibiae and tips of mid and hind tibiae light lemon yellow, rest dark brown. Forewings with 6-7 double fringes. ... ..                         | <i>indicus</i> (Hood, 1919)                |
| — Basal wing setae longer than the distal width of forewings. ... ..                                                                                                                                                                             | 5                                          |
| 5. All legs uniformly yellow. Head 1.6 times as long as wide. Postoculars well developed and long. Basal wing setae $B_1$ and $B_2$ dilated at apex, $B_3$ pointed and longer than $B_1$ and $B_2$ . ... ..                                      | <i>confusus</i> Ananthakrishnan, 1968      |
| — All tibiae yellow. ... ..                                                                                                                                                                                                                      | <i>citripes</i> (Bagnall, 1921)            |
| — Mid and hind tibiae brownish. ... ..                                                                                                                                                                                                           | 6                                          |
| 6. Apical $\frac{3}{4}$ of foretibiae, apical $\frac{1}{3}$ of mid-tibiae and apical $\frac{1}{5}$ of hind tibiae and all tarsi yellow. Head 1.4 times as long as wide. ... ..                                                                   | <i>nesius</i> Stannard, 1961               |
| — Mid and hind tibiae uniformly brown. ... ..                                                                                                                                                                                                    | 7                                          |
| 7. Forewings with 9-12 double fringes. Foretibiae and foretarsi yellow at apex, base dark.... ...                                                                                                                                                | <i>assimilis</i> Priesner & Seshadri, 1952 |
| — Forewings with 9 double fringes. Postangulars three times as long as anteromarginals.... ...                                                                                                                                                   | <i>fumipennis</i> (Bagnall, 1921)          |
| — Forewings with 12 or more double fringes. Postangulars twice as long as anteromarginals. ... ..                                                                                                                                                | <i>zyziphi</i> (Bagnall, 1923)             |

**Genus 33. Ecacanthothrips** Bagnall, 1915

*Acanthothrips* Bagnall, 1909. *Ann. Soc. ent. Belg.*, **52**: 348.

*Ecacanthothrips* Bagnall, 1915. *Ann. Mag. nat. Hist.*, (8) **15**: 320.

This genus is represented in India by one species *E. tibialis* (Ashmead, 1905).

**Genus 34. Eothrips** Hood

Hood, 1915. *Entomologist*, **48**: 106.

KEY TO THE INDIAN SPECIES OF *Eothrips*

- |                                                                                                                                                                                                             |     |     |     |                       |                                               |   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|-----|-----------------------|-----------------------------------------------|---|
| 1. Wings transparent.                                                                                                                                                                                       | ... | ... | ... | ...                   | ...                                           | 2 |
| — Wings grey.                                                                                                                                                                                               | ... | ... | ... | ...                   | ...                                           | 3 |
| 2. All body setae dark and blunt. Anteroangulars little longer than anteromarginals. Forewings with 5-8 double fringes; basal wings setae $B_1$ - $B_3$ equal. $B_1$ - $B_3$ of abdominal segment IX equal. |     |     |     |                       |                                               |   |
|                                                                                                                                                                                                             |     |     |     |                       | <i>sirumalaiensis</i><br>Ananthakrishnan 1968 |   |
| 3. All body setae dark and blunt. Forewings with 2-3 double fringes, basal wing setae $B_2$ longer than $B_1$ and $B_3$ .                                                                                   |     |     |     |                       |                                               |   |
|                                                                                                                                                                                                             | ... | ... | ... | <i>distinctus</i>     | Ananthakrishnan, 1967                         |   |
| — All body setae pointed. Forewings with 6-7 double fringes; basal wing setae $B_3$ longer than $B_1$ and $B_2$ .                                                                                           |     |     |     |                       |                                               |   |
|                                                                                                                                                                                                             |     |     |     | <i>coimbatorensis</i> | Ramakrishna, 1928                             |   |

**Genus 35. Eugynothrips** Priesner, 1926

Priesner, 1926. *Trenbia suppl.*, **8**: 157.

This genus is represented in India by one species *E. priesneri* Ramakrishna, 1928.

**Genus 36. Euoplothrips** Hood, 1918

Hood, 1918. *Mem. Queensland Mus.*, **6**: 140.

This genus is represented in India by one species *E. malabaricus* Ramk. & Marg., 1931

**Genus 37. Euryaplothrips** Ramk. & Marg., 1931

Ramakrishna and Margabandhu, 1931. *J. Bombay nat. Hist. Soc.*, **34** (4): 1037.

Known by only the type of the genus—*E. crassus* Ramk. & Marg., 1931

**Genus 38. Eurynchothrips** Bagnall, 1918

Bagnall, 1918. *Ann. Mag. nat. Hist.*, (9) **1**: 213.

KEY TO THE SUBGENERA OF *Eurynchothrips*

- |                                                                                      |     |                                  |
|--------------------------------------------------------------------------------------|-----|----------------------------------|
| 1. Pronotum with two pairs of epimeral setae.                                        | ... | <i>Eurynchothrips</i> s.str.     |
| — Pronotum with one pair of epimerals; cheeks with a few small warts with spines.... | ... | <i>Mimothrips</i> Priesner, 1935 |

The subgenus *Eurynchothrips* is represented in India by one species *E. ordinarius* (Hood, 1919) and the other subgenus *Mimothrips* is represented by one species *M. orientalis* Ananthakrishnan, 1966.

Genus 39. **Gigantothrips** Zimmerman, 1900*Gigantothrips* Zimmerman, 1900. *Bull. Inst. Bot. Bruit.*, **7**: 18.*Panurothrips* Bagnall, 1908. *Trans. N.H.S. North (N.S.)*, **3**: 208.*Cercothrips* Hood, 1919. *Insecutor Insec. menstr.*, **7**: 73.KEY TO THE INDIAN SPECIES OF *Gigantothrips*

1. All legs uniformly pale yellow. Cheeks with 3-6 weak spines and tube more pilose. Forewing with 19-24 double fringes. ... .. *ochroscelis* Priesner, 1951
- All legs not uniformly pale yellow. ... .. 2
2. All femora entirely brown; foretibiae yellow. ... .. 3
- Forefemora brown except distal fifth yellow; mid- and hind femora uniform brown; all tibiae and tarsi yellow. Anteroangulars (48-64  $\mu$ ) strong and blunt. Basal wing setae 5 in number and 4 in a row, except the first. Tube longer and surface hairy. ... .. *seshadrii* Ananthakrishnan, 1964
3. Antennal segments, 1, 2, 7 and 8 and apices of 3, 4, 5 and 6 brown, rest yellow. Forewings with 25-28 double fringes. Tube not pilose. ... .. *elegans* Zimmerman, 1900
- Antennal segment 2 at apex and 3-7 yellow, rest brown. Forewings with 33-34 double fringes. Tube very long 2.4 times as long as head and with hairs. ... .. *gardneri* Ananthakrishnan, 1960
- Antennal segments 3-6 yellow in basal half rest brown, 7-8 brown. Forewings with 20-23 double fringes. Tube about 1.5 times as long as head. ... .. *nigrodentatus* Karny, 1930
- Antennal segment 2 more yellowish than brown, 7-8 yellowish grey, rest mostly yellow. Prothoracic anteroangulars and midlaterals closer together. ... .. *tibialis* Bagnall, 1921

Genus 40. **Glubothrips** Ananthakrishnan, 1969Ananthakrishnan, 1969. *Oriental Ins.*, **3** (3): 295.Known only through the type of the genus—*G. mucidus* Ananthakrishnan, 1969Genus 41. **Gynaikothrips** Karny, 1915*Mesothrips* Zimmerman, 1900. *Bull. Inst. Bot. Brit.*, **7**: 12.*Gynaikothrips* Karny, 1915. *Zeit. F. Wiss. Ins.*, **10**: 324.KEY TO THE INDIAN SPECIES OF *Gynaikothrips*

1. Major and minor females as well as oedymorous and gynaecoid males present. Forefemora with chitinated corrugations along innermargin in both sexes; foretibiae with an emphasised tubercle, better developed in major form of both sexes.  $B_1$ - $B_3$  of abdominal tergite IX short and thin. ... .. *schfflericola* Ananth. & Viswanath, 1975
- Female not diverse, only normal form present. ... .. 2
2. Tube distinctly longer than head. ... .. 3

- Tube shorter than head. ... .. 6
- 3. Mesopraesternum complete. Postoculars and all prothoracic setae except epimerals very short, being about a third as long as epimerals. Basal wing setae also very much reduced. Wings transparent with 12-14 double fringes. ... .. *microchaetus* Ananth. & Jagadish, 1969
- Mesopraesternum complete, with a median crest. Two pairs of postoculars distinct. Prothoracic setae well developed, rarely anteroangulars and anteromarginals reduced or vestigial. Forewings clouded or transparent. Basal wing setae very well developed. ... .. 4
- 4. Anteroangulars longer than anteromarginals. Prothoracic setae well developed. ... .. 5
- Anteroangulars and anteromarginals subequal and very short, as also midlaterals and postangulars. Epimerals very long. All legs yellow. Forewings with 18-20 double fringes. ... .. *uzeli* Zimmerman, 1900
- 5. Head 1.6 times as long as wide. Tube very long, 1.5 times longer than head. Postocular and prothoracic setae long and strongly developed, except anteromarginals, a third as long anteroangulars. Outer pair of postoculars longer than eyes, inner pair shorter. Antennal segments 4-8 yellow. Forewings with 22-24 double fringes. Two third of mid and hind tibiae brown, rest yellow. *bengalensis* Ananthakrishnan, 1973
- Head very much shorter, about as long as wide. Tube only a little longer than head. All setae moderately long, epimerals longer than postangulars. The two pairs of postoculars subequal, shorter than eyes. Mid-and hind tibiae yellow. Forewings transparent, with 12-14 double fringes. *malabaricas* Ramakrishna, 1928
- 6. Antennal segments 3-8 yellow. Wings clouded. Postangulars and epimerals subequal. ... .. 7
- Antennal segments 3-6 and basal half of 7 yellow. Wings shaded grey. Postoculars a little shorter than eyes. Epimerals much longer than postangulars. Forewings with 7-10 double fringes. *imitator* Ananthakrishnan, 1968
- 7. Postoculars longer than eyes. ... .. 8
- Postoculars as long as eyes. Mesopraesternum incomplete, present as two triangular sclerites. Anteroangulars long, anteromarginals vestigial; postangulars and epimerals subequal. Antennal segments 3-8 yellow; femora and tibiae brown. Wings shaded grey with 2-3 double fringes. ... *cecidii* Ananthakrishnan, 1968
- 8. Mesopraesternum entire, parallel sided with a crest at middle. Head 1.15 times longer than wide. Anteromarginals and anteroangulars subequal as also postangulars and epimerals. Antennal segments 3-8 yellow and all tibiae and tarsi yellow. ... *flaviantennatus* Moulton, 1929
- Mesopraesternum very much narrowed at middle. Head 1.4 times as long as wide. Prothoracic setae as in *flaviantennatus*. Foretibiae and extreme apices of mid and hind tibiae yellow. ... *gardneri* (Moulton, 1928)

Genus **42. Haplothrips** Amyot & Serville, 1843Amyot and Serville, 1843. *Hist. Nat. Ins. Hemip.* :640.KEY TO THE SUBGENERA OF *Haplothrips*

- |                                     |     |     |                            |
|-------------------------------------|-----|-----|----------------------------|
| 1. Forewing without double fringes. | ... | ... | <i>Trybomiella</i> Bagnall |
| — Forewing with double fringes.     | ... | ... | <i>Haplothrips</i> s.str.  |

KEY TO THE INDIAN SPECIES OF THE SUBGENUS *Trybomiella*

- |                                                                                                                                 |     |     |     |                                        |
|---------------------------------------------------------------------------------------------------------------------------------|-----|-----|-----|----------------------------------------|
| 1. Abdominal tergites III–VII with one pair of well developed wing retaining setae.                                             | ... | ... | ... | <i>apicalis</i> Bagnall, 1915          |
| — Abdominal tergites III–VII with two pairs of well developed wing retaining setae.                                             | ... | ... | ... | 2                                      |
| 2. Antennal segment 3 with 0+1 sense cone.                                                                                      | ... | ... | ... | 3                                      |
| — Antennal segment 3 with 1+1 sense cones.                                                                                      | ... | ... | ... | 4                                      |
| 3. Postocular setae short and pointed.                                                                                          | ... | ... | ... | <i>talpa</i> Priesner, 1930            |
| — Postoculars blunt.                                                                                                            | ... | ... | ... | <i>tirumalraoi</i> Ramk. & Marg., 1931 |
| 4. Anteromarginals well developed.                                                                                              | ... | ... | ... | 5                                      |
| — Anteromarginals vestigial.                                                                                                    | ... | ... | ... | 6                                      |
| 5. Midlaterals well developed.                                                                                                  | ... | ... | ... | <i>articulosus</i> Bagnall, 1926       |
| — Midlaterals vestigial.                                                                                                        | ... | ... | ... | <i>clarisetis</i> Priesner, 1930       |
| 6. Postoculars minute. Epimerals dilated at tip. B <sub>1</sub> of abdominal tergite IX expanded at apex.                       | ... | ... | ... | <i>euphorbiae</i> Prienser, 1931       |
| — Postoculars well developed. Epimerals not very much expanded at tip. B <sub>1</sub> of abdominal tergite IX pointed or blunt. | ... | ... | ... | 7                                      |
| 7. Anteroangulars well developed; midlaterals vestigial.                                                                        | ... | ... | ... | <i>bagnalli</i> (Trybom, 1910)         |
| — Anteroangulars and midlaterals vestigial.                                                                                     | ... | ... | ... | <i>nigricornis</i> (Bagnall, 1910)     |

KEY TO THE INDIAN SPECIES OF THE SUBGENUS *Haplothrips* s.str.

- |                                                                                                                                                                                                                              |     |     |     |                                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|-----|----------------------------------------|
| 1. Antennal segment 3 with 0+1 sense cone.                                                                                                                                                                                   | ... | ... | ... | 2                                      |
| — Antennal segment 3 with 1+1 or 1+2 sense cones....                                                                                                                                                                         | ... | ... | ... | 5                                      |
| 2. Postoculars pointed or blunt.                                                                                                                                                                                             | ... | ... | ... | <i>andresi</i> Prienser, 1930          |
| — Postoculars expanded apically.                                                                                                                                                                                             | ... | ... | ... | 3                                      |
| 3. Mid- and hind tibiae brown, extreme apex yellow.                                                                                                                                                                          | ... | ... | ... | <i>ceylonicus</i> Schmutz, 1913        |
| — Mid- and hind tibiae completely brown.                                                                                                                                                                                     | ... | ... | ... | 4                                      |
| 4. Antennal segment 4 with 2+2 sense cones. Aedeagus of male bifid at apex.                                                                                                                                                  | ... | ... | ... | <i>bagrolis</i> Bhatti, 1973           |
| — Antennal segment 4 with 2+2 <sup>1</sup> sense cones. Aedeagus of male simple.                                                                                                                                             | ... | ... | ... | <i>ganglbaueri</i> Schmutz, 1913       |
| 4. Body bicolourous; head thorax, posterior half of abdominal segments VIII, IX and tube brown; abdominal segments II–VII yellow; segment III–VII each with a small median pale brown transverse patch near anterior margin. | ... | ... | ... | <i>bicolor</i> (Ananthakrishnan, 1964) |
| — Body brown or almost entire yellow.                                                                                                                                                                                        | ... | ... | ... | 5                                      |

5. Body yellow except apex of tube dark brown. ... .. *pirus* Bhatti, 1967  
 — Body brown. ... .. 6  
 6. Postoculars and epimerals pointed. ... .. *reuteri* (Karny, 1907)  
 — Postoculars and epimerals expanded at apex. ... .. 7  
 7. Antennal segment 3 alone yellowish, 4–6 shaded;  
 antennal segment 3—1.4 to 1.5 times as long as  
 wide, narrow; segment 4 broader. Foretarsal  
 tooth absent. Wings narrow with 7–9 double  
 fringes. ... .. *tenuipennis* Bagnall, 1918  
 — Antennal segment 3 yellow, at least partly shaded  
 or 3–8 uniformly shaded (when 3–5 would be a  
 little paler). ... .. 8  
 8. Segment 3 of antennae very short, 1.1 times as long  
 as wide; segments 3 and 4 yellowish, 5 more yellow  
 than brown, segments 1–2 and 6–8 brown. Fore-  
 tarsi with a small tubercle. Forewings with 5–8  
 double fringes. ... .. *gowdeyi* (Franklin, 1908)  
 — Segment 3 of antennae 1.4 times as long as wide.  
 Body with plenty of red pigment. Antennal seg-  
 ments 1, 2 and 5–8 brown, 3 and 4 pale yellow.  
 All body setae very long. ... .. *longisetosus* Ananthakrishnan, 1955

### Genus 43. *Hoplandrothrips* Hood, 1912

Hood, 1912. *Proc. ent. Soc. Wash.*, 14: 145.

#### KEY TO THE INDIAN SPECIES OF *Hoplandrothrips*

1. Body bicolourous, with abdominal segments II–VI  
 and all legs yellow, the head, thorax and abdominal  
 segments VII–X brown. Postocular and pro-  
 thoracic setae well developed. Forewings with  
 only 2–5 double fringes. Usually occurring in dead  
 dry or decaying grasses. ... .. *graminis* Ananthakrishnan, 1964  
 — Body unicolourous, mostly brown, inhabiting dry  
 twigs. ... .. 2  
 2. Postocular and prothoracic setae long and well  
 developed; anteroangular and anteromarginal  
 setae mostly subequal. ... .. 3  
 — Postoculars and prothoracic setae comparatively  
 short, anteromarginals distinctly shorter than  
 anteroangulars. Legs uniform brown. ... .. *corticis* Ananthakrishnan, 1972  
 3. All tibiae yellow. Forewings with only 8–10 double  
 fringes. ... .. *flavipes* Bagnall, 1923  
 — Mid and hind tibiae dark brown, a little pale at  
 extreme ends. Forewings with 25 double fringes ... .. *natalensis* (Trybom, 1912)

### Genus 44. *Hoplothrips* Amyot and Serville, 1843

Amyot and Serville, 1843. *Hist. Nat. Ins. Hemip.* :640.

#### KEY TO THE INDIAN SPECIES OF *Hoplothrips*

1. Antennal segments 4–8 distinctly pedicellate.  
 Foretarsi unarmed in females. Forewings pale  
 grey, without double fringes. Mouthcone bluntly

- rounded. Brachypterous and apterous forms predominant, their males showing profound oedemerism. ... .. *fungosus* Moulton, 1928
- Antennal segments not pedicellate. Foretarsi armed in females. Forewings with double fringes. Mouthcone varying, bluntly to narrowly rounded or pointed. ... .. 2
2. Mouthcone long, pointed. Head about 1.3 times as long as wide. Anteroangular and epimeral setae almost subequal, rest shorter.  $B_9$  of basal wing setae shorter than  $B_1$  and  $B_3$ ; 8-9 double fringes on forewing. Foretarsus with a very weak tooth, 5-6  $\mu$  long. ... .. *nemorius* Ananthakrishnan, 1971
- Mouthcone not long and pointed, but shorter and blunt; anteroangulars always shorter than epimerals. Head elongate or wider than long. ... .. 3
3. Head distinctly longer than wide. ... .. 4
- Head wider than long.  $B_9$  of Basal wing setae much longer than  $B_1$  and  $B_3$ . Antennal segment 3 yellow in basal half, rest of 3 and 4-8 brown; all prothoracic setae well developed. ... .. *transvaalensis* (Hood, 1942)
4. Cheeks strongly corrugate, spinose; anteromarginals (13-16  $\mu$ ) and anteroangulars (21-26  $\mu$ ) very short, pointed, rest long well developed. Forewings with 9-14 double fringes.  $B_1$  of basal wing setae very short (23-26  $\mu$ ), only  $1/7$  as long as  $B_3$ . Mouthcone broadly rounded. Foretarsal tooth strongly developed in oedymorous males; also bearing a tooth-like process at apex of foretibia on inner margin. Tube only slightly shorter than head. ... .. *orientalis* (Ananthakrishnan, 1969)
- Cheeks not corrugate and slightly spinose; all prothoracic setae very well developed and dilated. Antenna coloured as in *orientalis*. Mouthcone moderately long, pointed. Foretarsal tooth minute... .. *angusticeps* (Hood, 1908)

#### Genus 45. *Idiothrips* Faure, 1933

Faure, 1933. *Bull. Brooklyn ent. Soc.*, **28** (1-2): 25.

Represented in India by one species *I. ficus* Bhatti, 1967.

#### Genus 46. *Karnyothrips* Watson, 1924

*Dolichothrips* Watson, 1920. *Fla. Ent.*, **4** (2): 21

*Karnyia* Watson, 1922. *Fla. Ent.*, **6** (1): 6.

*Karnyothrips* Watson, 1924. *Univ. Fla. Agri. Exp. Sta. Bull.*, **168**: 23.

#### KEY TO THE INDIAN SPECIES OF *Karnyothrips*

1. Body brown. Anteromarginals vestigial. ... .. 2
- Body bicolourous. ... .. 3
2. Forelegs incrassate, foretarsi with a stout strongly curved tooth. Prothorax heavy. Forewings with 1-5 double fringes  $B_1$  of abdominal tergite IX expanded apically. ... .. *flavipes* (Jones, 1912)

- Foretarsi unarmed. Forewings with 3–4 double fringes.  $B_1$  of abdominal tergite IX knobbed,  $B_2$ – $B_3$  pointed. ... .. *fungulus* Ananthakrishnan, 1973
- 3. Forewings with double fringes Prothorax brown. ... .. 4
- Forewings without double fringes. Prothorax yellow. Antennal segments 3 and 4 with 0+1 and 1+2 sensecones respectively. ... .. *alpha* Pitkin, 1976
- 4. Pterothorax brown. ... .. 5
- Pterothorax yellow. Antennal segments 3 and 4 with 0+1 and 1+2 sensecones respectively.  $B_1$  of abdominal tergite IX expanded at apex. ... .. *nigriflavus* Ramakrishna, 1934
- 5. Antennal segments 3 and 4 with 1+1 and 1+1<sup>+</sup> sensecones respectively.  $B_1$  of abdominal tergite IX pointed or blunt. ... .. *melaleucus* (Bagnall, 1911)
- Antennal segments 3 and 4 with 0+1 and 1+2<sup>+</sup> sensecones respectively.  $B_1$  of abdominal tergite IX expanded apically. ... .. *mucidus* (Ananth. & Jagadish, 1971)

**Genus 47. Kochummania** Ananthakrishnan, 1969

Ananthakrishnan, 1969. *Senckenbergiana biol.*, **50** (3–4): 184.

Known by only the type of the genus *K. excelsa* Ananthakrishnan, 1969

**Genus 48. Leeuwenia** Karny, 1912

Karny, 1912. *Marcellia*, **11**: 161.

KEY TO THE INDIAN SPECIES OF *Leeuwenia*

- 1. Tube swollen. Anteroangulars absent. ... .. 2
- Tube not swollen. Postoculars 44–48  $\mu$  long placed much below (117–120  $\mu$ ) eyes. Anteroangulars short (19  $\mu$ ). Tube 5 times head length and 18 times its greatest width at middle. Tube setae moderately long. ... .. *ramakrishnae* (Ramk., 1925)
- 2. Tube almost cylindrical long, 4.5 times head length and 23 times its greatest width. Tube setae weak, short, adpressed. ... .. *eugeniae* Bagnall, 1924
- Tube gradually tapering to apex or of equal width at base and middle, never very long and thin as in *eugeniae*. ... .. 3
- 3. Tube gradually tapering behind (6 : 5 : 4), 4 times head length and 15.8 times its greatest width. Head much longer than wide and cheeks with numerous spines. ... .. *maculans* Pries. & Sesh., 1952
- Head shorter, tube of equal width at base and middle (5 : 5 : 4), tapering at apex. Cheeks with a few spines. ... .. 4
- 4. Tube 4 times head length and 14–15 times its greatest width. Head at base more tuberculate than reticulate. Tube setae adpressed, well developed. Epimeral region better specialised. Antennae slender. ... .. *vorax* Ananthakrishnan, 1970
- Tube as in *vorax* tube setae weaker. Head at base distinctly reticulate, not tuberculate. Epimeral region less specialised. Antennal segments not slender. ... .. *coriacea* (Bagnall, 1921)

**Genus 49. Liophlaeothrips Priesner, 1919**

Priesner, 1919. *Sitz. Akad. Wiss. Wien.*, **128**: 138.

**KEY TO THE INDIAN SPECIES OF *Liophlaeothrips***

1. Mesopraesternum complete, parallel-sided or constricted at middle. ... .. 2
- Mesopraesternum incomplete, present as two triangular lateral sclerites. ... .. 6
2. Mesopraesternum parallel-sided, very broad. Head 1.1 times as long as wide, postoculars longer than eyes or about as long. Anteroangulars longer than anteromarginals; postangulars and epimerals subequal. Foretibiae and all tarsi yellow. Forewings with 4-5 double fringes. ... .. *segnis* Ananth. & Jagdish, 1969
- Mesopraesternum narrowed or constricted at middle. ... .. 3
3. Body distinctly bicolourous. ... .. 4
- Body always unicolourous. ... .. 5
4. Abdominal segment III predominantly yellow, rest of body brown; only foretibiae yellow, all femora and mid- and hindtibiae brown. Postoculars shorter than eyes; anteroangulars and anteromarginals subequal, postangulars and epimerals subequal. Always macropterous. ... .. *curtus* Ananth. & Jagdish, 1969
- Apterous and brachypterous forms with head and prothorax yellow; more brown in macropterous form; abdominal segments VIII-X dark and II-VII paler with darker bands anteriorly; colour variants very common; forelegs yellow, mid- and hind femora yellow, tibiae dark brown in macropterous form; apterous form with forelegs yellow, mid- and hind tibiae pale. Postoculars longer than eyes; anteromarginals shorter than anteroangulars; postangulars and epimerals subequal. ... .. *amoenus* Ananthakrishnan, 1966
5. Foretarsal tooth strongly enlarged. Postoculars longer than eyes. Anteroangulars longer than anteromarginals; epimerals longer than postangulars. Forewings with 18-20 double fringes. Antennal segments 3, 4 yellow, 5 darker. ... .. *dentipes* (Sesh. & Ananthakrishnan, 1954)
- Foretarsal tooth not strongly enlarged. Postoculars as long as eyes; anteroangulars and anteromarginals equal and also epimerals and postangulars subequal. Forewings with 9-10 double fringes. Antennal segments 3-8 yellow. ... .. *ablusus* Ananthakrishnan, 1971
6. Body bicolourous. ... .. 7
- Body always unicolourous, dark brown or more yellowish. ... .. 8
7. Prothorax and abdominal segment IV yellow, rest brown. Postoculars longer than eyes; anteromarginals shorter than anteroangulars and epimerals longer than postangulars. Antennal segments 1-5 and basal half of 6 yellow. Forewings with 10-14 double fringes. ... .. *vichitravarna* (Ramakrishna, 1928)
- Abdominal segments II-III yellowish. IV yellowish brown. Antennal segments 1-3 yellow, 4 yellow

|                                                                                                                  |                                                                                                                                                                              |     |     |                                                 |    |
|------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|-------------------------------------------------|----|
| to yellowish brown, rest brown. Postoculars as long as eyes; anteroangulars and anteromarginals subequal. ... .. |                                                                                                                                                                              |     |     | <i>reperticus</i> Ananth. & Muraleedharan, 1974 |    |
| 8.                                                                                                               | Body more yellow to golden yellow.                                                                                                                                           | ... | ... | ...                                             | 9  |
| —                                                                                                                | Body always dark brown.                                                                                                                                                      | ... | ... | ...                                             | 10 |
| 9.                                                                                                               | Foretarsal tooth very strong; forefemora very much enlarged. Macropterous, forewings with 5–6 double fringes.                                                                | ... | ... | <i>nitidus</i> Ananthakrishnan, 1968            |    |
| —                                                                                                                | Foretarsal tooth very small; forefemora not excessively enlarged. Apterous and brachypterous forms...                                                                        |     |     | <i>pictus</i> Ananthakrishnan, 1968             |    |
| 10.                                                                                                              | Epimerals and postangulars not subequal.                                                                                                                                     | ... | ... | ...                                             | 11 |
| —                                                                                                                | Epimerals and postangulars subequal.                                                                                                                                         | ... | ... | ...                                             | 12 |
| 11.                                                                                                              | Postoculars shorter than eyes. Anteroangulars and anteromarginals subequal; epimerals much longer than postangulars. Setae grey, not hyaline.                                | ... | ... | <i>succinctus</i> Ananth. & Jagadish, 1969      |    |
| —                                                                                                                | Postoculars as long as eyes. Anteroangulars longer than anteromarginals. Setae hyaline.                                                                                      | ... | ... | <i>pavettae</i> Ananth. & Jagadish, 1969        |    |
| 12.                                                                                                              | Anteromarginals shorter than anteroangulars Forewings slightly infumate with 5–8 double fringe. Head 1.3–1.4 times as long as wide. Postoculars as long as eyes. Setae grey. | ... | ... | <i>tenebrosus</i> Ananth. & Jagadish, 1969      |    |
| —                                                                                                                | Anteromarginals and anteroangulars subequal. Head 1.25 times as long as wide. Postoculars shorter than eyes. Forewings with 12 double fringes. Body setae hyaline.           | ... | ... | <i>cecidii</i> Ananthakrishnan, 1964            |    |

Genus 50. **Liothrips** Uzel, 1895

Uzel, 1895. *Monogr. Ord. Thys.* :261.

KEY TO THE INDIAN SPECIES OF *Liothrips*

|    |                                                                                                                                                                                                                                                                                                  |     |     |     |                        |   |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|-----|------------------------|---|
| 1. | Head more elongate, 1.5 times to twice as long as wide.                                                                                                                                                                                                                                          | ... | ... | ... | ...                    | 2 |
| —  | Head shorter, rarely wider than long.                                                                                                                                                                                                                                                            | ... | ... | ... | ...                    | 9 |
| 2. | Head 1.5 to 1.6 times as long as wide.                                                                                                                                                                                                                                                           | ... | ... | ... | ...                    | 3 |
| —  | Head twice as long as wide.                                                                                                                                                                                                                                                                      | ... | ... | ... | ...                    | 8 |
| 3. | All legs including tarsi dark. Antennal segment 3 more narrow and elongate. Postoculars and all prothoracic setae short, dark. Tube very short, less than half the head length Mesopraesternum complete Forewings with 16–18 double fringes.                                                     | ... | ... | ... | <i>dampfi</i> Priesner |   |
| —  | All legs never uniformly dark; at least foretibiae and tarsi more yellowish. Tube never shorter than half the length of head.                                                                                                                                                                    | ... | ... | ... | ...                    | 4 |
| 4. | Head 1.6 times longer than wide. Anteromarginals a little longer than anteroangulars; postangulars little longer than epimerals. Forewings clear, except for a small brownish basal area, with 18 double fringes. Tube shorter than head and setae on abdominal segment IX shorter than tube.... | ... | ... | ... | <i>litseae</i> Moulton |   |
| —  | Head a little shorter, 1.5—1.55 times as long as wide                                                                                                                                                                                                                                            | ... | ... | ... | ...                    | 5 |
| 5. | Head 1.5 times as long as wide.                                                                                                                                                                                                                                                                  | ... | ... | ... | ...                    | 6 |

- Head 1.55 times as long as wide. Postoculars very short, placed far below eyes. Anteromarginals shorter than anteroangulars; postangulars and epimerals subequal. Mesopraesternum with a distinct median crest. Wings clear with 12–15 double fringes. Setae on abdominal segment IX as long as tube. ... .. *abstrusus* Ananth. & Muraleedharan, 1974
6. Postoculars longer than eyes. Antennal segment 3 five times as long as wide. Anteromarginals shorter than anteroangulars; postangulars and epimerals subequal. Mesopraesternum constricted at middle. Forewings clouded with 9–12 double fringes. Tube as long as head and setae on abdominal segment IX shorter than tube. ... .. *himalayanus* Ananth. & Jagadish, 1970
- Postoculars shorter than eyes. ... .. 7
7. Forewings weakly infumate with 13 double fringes. Prothoracic postangulars (82  $\mu$ ) much shorter than epimerals (102–112  $\mu$ ) and an accessory epimeral (10–20  $\mu$ ) present. ... .. *emulatus* Ananthakrishnan, 1976
- Forewings transparent with a median brown streak and with 14 double fringes. Prothoracic postangulars (168–172  $\mu$ ) subequal to epimerals (164–176  $\mu$ ) and without accessory epimeral.... .. *aberrans* Muraleedharan & Sen, 1978
8. Postoculars very short, much shorter than eyes. Anteromarginals longer than anteroangulars; postangulars and epimerals subequal. Antennal segment 3 four times as long as wide. Mesopraesternum complete, parallel sided. Setae on abdominal segment IX shorter than tube. Apices of tibiae yellow. ... .. *aequilus* Ananth. & Jagadish, 1969
- Postoculars shorter than eyes. Anteromarginals vestigial; epimerals and postangulars almost subequal. Antennal segment 3 five times as long as wide. Mesopraesternum incomplete, restricted to two lateral triangular sclerites. Setae on abdominal segment IX as long as tube. All tibiae and tarsi yellow. ... .. *gracilis* (Karny, 1913)
9. Head much shorter, wider than long. ... .. 10
- Head as long to 1.4 times as long as wide. ... .. 11
10. Mesopraesternum incomplete. Postoculars shorter than eyes; anteroangulars and anteromarginals subequal as also epimerals and postangulars. Forewings with a median pale grey area with 7–9 double fringes. Antennal segments 3–7 yellow, as also extreme apices of mid and hind tibiae. Tube shorter than head and setae on abdominal segment IX as long as tube. ... .. *minys* Ananthakrishnan, 1972
- Mesopraesternum complete, parallel sided. Postoculars longer than eyes; anteromarginals shorter than anteroangulars; epimerals longer than postangulars. Forewings a little infumate with 5–7 double fringes. Antennal segments 3–4 only fully yellow; mid- and hind tibiae brown. ... .. *nanus* Ananthakrishnan, 1972
11. All tibiae and tarsi yellow. ... .. 12
- All tibiae not yellow; atmost foretibiae and apices of mid and hind tibiae yellow.... .. 25

12. Two pairs of distinct but short postoculars (not vestigial). Head 1.3–1.4 times as long as wide. Anteroangulars and anteromarginals as well as epimerals and postangulars subequal. Mesopraesternum parallel sided at middle, laterally expanded. Forewings with a faint infumation with 6–8 double fringes. Antennal segments 3–6 yellow. ... *eugeniae* Priesner
- Only one pair of postoculars present. ... 13
13. Anteroangulars and anteromarginals vestigial; epimerals longer than postangulars. Mesopraesternum complete, almost parallel sided. Forewings clouded. Antennal segments 3–8 yellow. Tube shorter than head and setae on abdominal segment IX longer than tube. ... *pallipes* (Karny, 1913)
- Both anteroangulars and anteromarginals not vestigial, rarely one or the other may be vestigial. ... 14
14. Both anteroangulars and anteromarginals as well as epimerals and postangulars subequal. ... 15
- Not subequal, one or the other varying.... ... 19
15. Forewings clouded or infumate. ... 16
- Forewings transparent. Postoculars shorter than eyes. Antennal segments 3–7 yellow. Mesopraesternum complete, parallel-sided. Forewings with 14–15 double fringes. ... *interlocatus* (Karny, 1926)
16. Mesopraesternum complete. Antennal segments 3–7 yellow. ... 17
- Mesopraesternum incomplete. Postoculars shorter than eyes. Antennal segment 3 yellow shaded with grey, 4–7 proximally yellow, distally grey. Setae on abdominal segment IX as long as tube. ... *jogensis* Ananth. & Jagadish, 1967
17. Head 1.4 times as long as wide. Postoculars shorter than eyes. Mesopraesternum concave at anterior margin. Forewings with 11–13 double fringes. Setae on abdominal segment IX as long as tube. ... *flavescens* Ananth. & Jagadish, 1968
- Head very much shorter. ... 18
18. Mesopraesternum complete, very narrow along middle. Postocular setae short placed far below eyes; prothoracic setae short, blunt. Antennal segment 3 four times as long as wide. Setae on abdominal segment IX as long as tube.... *chaviceae* (Zimmerman, 1900)
- Mesopraesternum laterally expanded. Postoculars shorter than eyes; anteroangulars very little shorter than anteromarginals and epimerals longer than postangulars. All setae blunt. Antennal segment 3, 2.3 times as long as wide. ... *epacrus* Ananth. & Muraleedharan, 1974
19. Anteroangulars and anteromarginals never subequal but postangulars and epimerals subequal. ... 20
- Postangulars and epimerals never subequal, rarely anteroangulars and anteromarginals subequal. ... 22
20. Mesopraesternum complete with a median crest. ... 21
- Mesopraesternum incomplete, restricted to two lateral plate. Head 1.3 times as long as wide. Postoculars longer than eyes and prothoracic setae

- long; anteromarginals longer than anteroangulars. Forewings shaded grey with 10-11 double fringes. Antennal segments 3-6 yellow. Setae on abdominal segment IX as long as tube. ... .. *ater* Ananth. & Jagadish, 1968
21. Mesopraesternum well developed, band-like. Anteromarginals a little longer than anteroangulars. Antennal segments 3-7 yellow. Wings clear with 9-11 double fringes. ... .. *tersus* Ananth. & Jagadish, 1967
- Mesopraesternum more expanded laterally. Anteromarginals shorter than anteroangulars. Antennal segments 3-7 yellow. Wings clear with 15-16 double fringes. ... .. *inquilinus* Ananth. & Jagadish, 1967
- Mesopraesternum well developed. Postoculars and most prothoracic setae long and pointed; anteroangulars very short. Segment 3 of antenna thrice as long as wide. Setae on abdominal segment IX longer than tube. ... .. *karnyi* (Bagnall, 1914)
22. Anteromarginals and anteroangulars subequal, epimerals longer than postangulars. Antennal segments 3-8 yellow. Forewings with 8-9 double fringes. ... .. *flavitibia* (Moulton, 1929)
- Anteromarginals and anteroangulars never subequal, the latter always longer than anteromarginals. ... .. 23
23. Mesopraesternum parallel sided, expanded laterally. Epimerals longer than postangulars. Postoculars shorter than eyes. Antennal segments 3-6 yellow. ... .. *pallicrus* (Karny, 1913)
- Mesopraesternum not expanded laterally, parallel sided. ... .. 24
24. Head 1.34 times as long as wide. One pair of postoculars, shorter than eyes. Mesopraesternum without median crest. All prothoracic setae long, well developed. Antennal segments 3-7 pale yellow. Forewings strongly infumate. ... .. *tibialis* Preisner, 1951
- Head little shorter with two pairs of postoculars, little shorter than eyes. Prothoracic setae shorter; postangulars longer than epimerals. Mesopraesternum with a median crest. Antennal segments 3-8 yellow. Forewings infumate. ... .. *cecidii* Ananth. & Jagadish, 1968
25. Mesopraesternum incomplete, restricted to two lateral plates. ... .. 26
- Mesopraesternum complete, parallel sided or slightly to strongly narrowed. ... .. 32
26. Setae on abdominal segment IX longer than tube. Anteroangulars and anteromarginals, as well as epimerals and postangulars subequal. ... .. 27
- Setae on abdominal segment IX shorter than tube, atmost as long. Prothoracic setae not subequal. ... .. 28
27. Head 1.3 times as long as wide. Postoculars longer than eyes. Epimeral suture complete. Forewings clouded with 11-16 double fringes. Antennal segments 3-6 yellow. ... .. *hradecensis* Uzel, 1895
- Head 1.2 times as long as wide. Postoculars as long as eyes. Epimeral suture incomplete. Fore-

- wings clouded with 14–18 double fringes. Antennal segments more brownish. ... *fumipennis* (Karny, 1913)
28. Anteromarginals vestigial. Postoculars much longer than eyes, as also epimerals much longer than postangulars. Head very little longer than wide. Forewings infumate with 10–12 double fringes. Tube very little longer than head. ... *ananthakrishnani* Sen, 1976
- Anteromarginals not vestigial. ... 29
29. Anteroangulars and anteromarginals as well as epimerals and postangulars subequal setae on abdominal segment IX shorter than tube. ... 30
- Epimerals longer than postangulars; anteroangulars and anteromarginals mostly subequal. Setae on abdominal segment IX as long as tube. ... 31
30. Postoculars and prothoracic setae expanded. Antennal segment 3 twice as long as wide, 3–6 yellow. Forewings deeply infumate with 7–8 double fringes. ... *malabaricus* Ananth. & Jagadish, 1967
- Postoculars and prothoracic setae more bluntly pointed. Antennal segment 3, 2.8 times as long as wide. Forewings transparent with 12–13 double fringes. ... *associatus* Ananth. & Jagadish, 1969
31. Postoculars shorter than eyes. Forewings infumate with 13–15 double fringes. Antennal segments 3–8 pale yellow. Tube distinctly shorter than head. ... *morindae* Ananth. & Muraleedharan, 1974
- Postoculars as long as eyes. Forewings slightly infumate with 18 double fringes. Antennal segment 3 yellow; 4, 5, 6 shaded brown. Tube very little shorter or almost as long as head. ... *spectabilis* Ananthakrishnan, 1972
32. Mesopraesternum parallel sided, with or without median crest; never constricted. ... 33
- Mesopraesternum narrowed, rarely very highly constricted. ... 41
33. B<sub>1</sub>, B<sub>2</sub> of abdominal segment IX blunt, not pointed and as long as tube. Postoculars shorter than eyes; anteromarginals shorter than anteroangulars; epimerals longer than postangulars. Forewings shaded. ... *ramakrishnae* Ananth. & Jagadish, 1969
- B<sub>1</sub>, B<sub>2</sub> of abdominal segment IX always pointed. ... 34
34. Tube as long as head. Setae on abdominal segment IX as long as tube. Head 1.1 times as long as wide. Postoculars shorter than eyes; anteroangulars and anteromarginals subequal, as also epimerals and postangulars. Forewings transparent with 14–16 double fringes. Antennal segments 3–6 yellow. ... *indicus* Ananthakrishnan, 1972
- Tube always shorter than head and setae on abdominal segment IX shorter than tube. ... 35
35. Mesopraesternum parallel-sided or band-like, without a median crest. ... 36
- Mesopraesternum with a distinct median crest. ... 39
36. Head as long as wide. Postoculars longer than eyes and epimerals longer than postangulars. Forewings transparent. ... 37

- Head longer 1.15 to 1.4 times as long as wide. Postoculars shorter than eyes. ... 38
37. Anteromarginals longer than anteroangulars. Antennal segments 3–7 yellow. Prothoracic setae long. Setae on abdominal segment IX as long as tube and B<sub>1</sub> blunt, B<sub>2</sub> and B<sub>3</sub> pointed. ... *digressus* Ananthakrishnan, 1971
- Anteromarginals shorter than anteroangulars. Antennal segments 3–5 yellow, 6 proximally yellow, distally brown. All prothoracic setae shorter. Setae on abdominal segment IX as long as tube, setae pointed. ... *variabilis* Ananth. & Jagadish, 1967
38. Epimerals longer than postangulars. Antennal segments 3–8 yellow. Forewings transparent. Antennal segments 3, 3.6 times as long as wide. Head 1.4 times as long as wide. ... *kannani* (Moulton)
- Epimerals and postangulars subequal. Antennal segments 3–8 yellow. Forewings clouded. Antennal segment 3, 2.8 times as long as wide. Head 1.15 times as long as wide. ... *furvus* Ananth. & Jagadish, 1968
39. Ocellar cone very prominent. Postoculars and anteromarginals vestigial. Epimerals longer than postangulars. Antennal segments 3–8 yellow. Forewings clear with 9–13 double fringes. Median crest on mesopraesternum very prominent. ... *kiriti* Ramakrishna, 1928
- Ocellar cone not very pronounced. Postoculars and anteromarginals never vestigial. Postoculars short, much shorter than eyes. Antennal segments 3–8 yellow. Forewings infumate. Mesopraesternum with a moderately developed crest. ... 40
40. Head 1.3 times as long as wide. Anteroangulars and anteromarginals subequal; epimerals longer than postangulars. Setae on abdominal segment IX as long as tube. Forewings faintly shaded. ... *viticola* (Karny, 1913)
- Head as long as wide. Anteroangulars and anteromarginals subequal as also epimerals and postangulars. Setae on abdominal segment IX shorter than tube. Wings infumate. ... *exilis* (Ananth. & Jagadish, 1969)
41. Mesopraesternum very strongly narrowed at middle, as to appear like a faint strip connecting the two lateral halves. ... 42
- Mesopraesternum not strongly narrowed as above. Head shorter. ... 44
42. Postoculars longer than eyes; anteromarginals longer than anteroangulars; epimerals and postangulars subequal. All setae very long. Setae on abdominal segment IX as long as tube.... ... *bosei* Moulton, 1923
- Postoculars shorter than eyes. ... 48
43. Anteroangulars and anteromarginals very much reduced (20–31  $\mu$ ) subequal. Postoculars very much reduced. Epimerals longer than postangulars. Antennal segments 3–7 basal half yellow. Forewings infumate with dark longitudinal band and with 11–12 double fringes. Tube about as long as head and setae on abdominal segment IX shorter than tube. ... *fragilis* Ananthakrishnan, 1976

- Anteroangulars and anteromarginals not reduced. moderately developed. Epimerals and postangulars subequal. Antennal segments 3–7 yellow. Forewings infumate with a weak longitudinal band, basally dark and with 12–13 double fringes. Tube shorter than head and setae on abdominal segment IX shorter than tube. ... *retusus* Ananthakrishnan, 1976
- 44. Tube as long as head and setae on abdominal segment IX as long as tube. Postoculars longer than eyes. Anteroangulars longer, than anteromarginals; epimerals and postangulars subequal. Antennal segments 3–8 yellow. Forewings clouded with 15 double fringes. ... *seshadrui* Ananth. & Muraleedharan, 1974
- Tube shorter than head and setae on abdominal segment IX as long as or shorter than tube. ... 45
- 45. Forewings transparent with 13 double fringes. Head 1.2 times as long as wide. Postoculars longer than eyes. Anteroangulars longer than anteromarginals; epimerals and postangulars subequal. Antennal segments 3–6 yellow. Setae on abdominal segment IX as long as tube. ... *kolliensis* Ananthakrishnan, 1972
- Forewings not transparent, weakly to strongly infumate. ... 46
- 46. Head as long as wide. ... 47
- Head longer, 1.2 to 1.3 times as long as wide. ... 48
- 47. Postoculars longer than eyes. Anteroangulars longer than anteromarginals; epimerals and postangulars subequal, all setae pointed. Antennal segments 3–5 yellow. ... *nubilis* Ananth. & Jagadish, 1968
- Postoculars almost as long as eyes; anteroangulars and anteromarginals subequal as also epimerals and postangulars. Antennal segments 3–6 yellow. ... *mucronis* Ananth. & Jagadish, 1967
- 48. Head 1.25–1.3 times as long as wide. Postoculars shorter than eyes; anteromarginals and anteroangulars almost subequal as also epimerals and postangulars. Antennal segments 3 yellow, 4 and 5 proximal half yellow; segment 3, 3.7 times as long as wide. Forewings with 11–20 double fringes. Setae on abdominal segment IX shorter than tube... *morulus* Ananth. & Jagadish, 1970
- Head 1.2 times as long as wide. Postoculars as long as eyes; anteroangulars and anteromarginals subequal as also epimerals and postangulars. Setae on abdominal segment IX as long as tube. Antennal segments 3–6 yellow; segment 3 only twice as long as wide. Forewings with 14 double fringes. ... *sordidus* Ananthakrishnan, 1972

**Genus 51. *Lygothrips*** Ananthakrishnan, 1964

Ananthakrishnan, 1964. *Oppusc. ent. Suppl.*, **25**: 60.

Known by only the type of the genus—*L. jambuvasi* (Ramakrishna, 1928)

**Genus 52. *Macrophthalmothrips*** Karny, 1922

Karny, 1922. *Treubia*, **3**: 34.

This genus is represented by one species *M. splendidus* Ananthakrishnan, 1968

**Genus 53. Mallothrips** Ramakrishna, 1928

Ramakrishna, 1928. *Mem. Dept. Agri. India Ent. Ser.*, **10** (7): 308.

Known by only the type of the genus—*M. indicus* Ramakrishna, 1928

**Genus 54. Margaritothrips** Priesner, 1933

Priesner, 1933. *Konowia*, **11** (1): 49.

KEY TO THE INDIAN SPECIES OF *Margaritothrips*

- |                                                                                                                      |     |     |     |     |                                   |   |
|----------------------------------------------------------------------------------------------------------------------|-----|-----|-----|-----|-----------------------------------|---|
| 1. Cephalic and prothoracic setae long and well developed.                                                           | ... | ... | ... | ... | ...                               | 2 |
| — Cephalic and prothoracic setae short.                                                                              | ... | ... | ... | ... | ...                               | 3 |
| 2. Postoculars and prothoracic setae knobbed. Legs yellow.                                                           | ... | ... | ... | ... | <i>sumatrensis</i> Priesner, 1933 |   |
| — Postoculars pointed. Anteromarginals and mid-laterals expanded at apex. Postangulars pointed. All setae very long. | ... | ... | ... | ... | <i>longus</i> Bhatti              |   |
| 3. All setae pointed except basal wing setae blunt at apex. Tube dark brown.                                         | ... | ... | ... | ... | <i>flavus</i> Bhatti, 1965        |   |

**Genus 55. Maxillothrips** Bhatti, 1978

Bhatti, 1978. *Entomon*, **3** (2): 226.

Known only through the type species of the genus—*M. arorai* (Bhatti & Hattar, 1974)

**Genus 56. Membrothrips** Bhatti, 1978

Bhatti, 1978. *Entomon*, **3** (2): 226.

Known only through the type species of the genus—*M. indicus* (Hood, 1919)

**Genus 57. Mesandrothrips** Priesner, 1933

Priesner, 1933. *Konowia* :80.

This genus is represented by one species *M. inquilinus* (Priesner, 1921)

**Genus 58. Mesicothrips** Priesner, 1951

Priesner, 1951. *Indian J. Ent.*, **13** (2): 191.

KEY TO THE SUBGENERA OF *Mesicothrips*

- |                                                       |     |                                         |
|-------------------------------------------------------|-----|-----------------------------------------|
| 1. Prothoracic setae long, hyaline and blunt at apex. | ... | <i>Mesicothrips</i> s.str,              |
| — Prothoracic setae short, dark and more pointed.     | ... | <i>Mesicothripoides</i> Ananthakrishnan |
| ...                                                   | ... | 1967                                    |

The subgenus *Mesicothrips* is represented by *M. plicans* Priesner, 1951 and the other subgenus *Mesicothripoides* is represented by *M. inquilinus* Ananthakrishnan, 1967.

Genus **59. Mesothrips** Zimmerman, 1900  
Zimmerman, 1900. *Bull. Inst. Bot. Buit.*, **7**: 16.

KEY TO THE INDIAN SPECIES OF *Mesothrips*

- 1. Forewings transparent excepting base. Antennal segment 4-5 and basal half of 6 yellow. Intermediate antennal segments elongate. Mesopra-sternum continuous, more narrowed at middle, expanded along sides. Basal wing setae long Pelta triangular, constricted at apex. ... .. *...extensivus* Ananth. & Jagadish, 1969
- Forewings clouded; rarely with a longitudinal stripe along middle or clouded beyond middle or clouded along margin. ... .. 2
- 2. Forewings clouded beyond middle, being more transparent before middle. ... .. 3
- Forewings uniformly clouded with or without an emphasised longitudinal stripe. ... .. 4
- 3. Head short, 1.2 times as long as wide. Forewings infumate beyond middle and mottled. Antero-angulars and anteromarginals subequal, postangu-lars (101  $\mu$ ) longer than epimerals (92  $\mu$ ) and epi-merals and postoculars subequal. ... .. *apatelus* Karny, 1926
- Head very long 1.7 times as long as wide. Pro-notum short, 0.6 times as long as head. Antero-marginals shorter than anteroangulars; mid laterals and epimerals subequal; postangulars a little longer. Antennal segments 3-6 yellow. ... .. *angusticollis* Karny
- 4. Mouthcone more elongate, narrowly rounded and reaching about base of prosternum. All setae including B<sub>1</sub>-B<sub>3</sub> of abdominal segment IX blunt, rounded at apex. All prothoracic setae very long; anteroangulars a little longer than anteromarginals; midlaterals much longer than anteroangulars and anteromarginals. Pelta elongate traingular. ... .. *malloti* Moulton, 1928
- Mouthcone shorter, more broadly rounded or rarely moderately narrowly rounded, but not attaining much beyond middle of prosternum. ... .. 5
- 5. Mouthcone roundly pointed. Head 1.3 times as long as wide. Prothoracic setae pointed; epi-merals (65  $\mu$ ) shorter than postangulars (83  $\mu$ ). Forefemora unusually stout. Forewings with 15 double fringes. ... .. *bhimabahu* Ramakrishna, 1928
- Mouth cone broadly rounded. ... .. 6
- 6. Head from a little longer than wide up to 1.25 times as long as wide. ... .. 7
- Head more elongate. ... .. 8
- 7. Body bicolourous. Head, thorax, legs antennal segments 1-4 deep yellow, 5-8 dark brown. Head 1.15 times as long as wide. Anteromarginals vesti-gial; epimerals a little longer than postangulars; postoculars longer than eyes and other prothoracic setae. Setae on abdominal segment IX only as long or longer than tube. ... .. *cracens* Ananthakrishnan, 1968

- Body unicolourous, brown. Head about a little longer than wide. Postoculars very long, subequal to postangulars; epimerals and postangulars very long (128–144  $\mu$ ). Anteroangulars, anteromarginals and midlaterals comparatively very short.  $B_1$ – $B_3$  of abdominal segment IX blunt. ... *melinocnemis* Karny, 1926
- 8. Anteroangulars and anteromarginals subequal epimerals distinctly longer than postangulars; setae pointed. Postoculars much longer than other prothoracic setae, about as long as epimerals. Tube shorter than head; setae on abdominal segment IX shorter than tube. ... *manii* Ananthakrishnan, 1972
- Anteroangulars shorter than anteromarginals. Tube as long as head; setae on abdominal segment IX shorter than tube. Cheeks with strong setae (33–36  $\mu$ ). Postoculars (79–85  $\mu$ ) much shorter than eyes. Mouthcone broadly rounded. ... *jordani* Zimm., 1900

#### Genus 60. **Mystrothrips** Priesner, 1949

Priesner, 1949. *Bull. Soc. Fouad ler Ent.*, **33**: 117

Known by the type of the genus—*M. dammermani* (Priesner, 1933)

#### Genus 61. **Nanothrips** Faure, 1938

Faure, 1938. *Publ. Univ. Pretoria*, Ser 11, *nat. Sci.*, **4**: 3.

#### KEY TO THE INDAIN SPECIES OF *Nanothrips*

1. Body bicolourous, head and forelegs yellow, thorax brown, abdomen more yellowish, tube yellow. Prothoracic setae well developed. Strong median tooth at middle of posterior margin of abdominal tergite IX, distinct in males. ... *typicus* Ananthakrishnan, 1964
- Body almost uniform brown. Prothoracic setae except epimerals weak. Tooth at middle of posterior margin of tergite IX absent in males. ... *nigrus* (Ananthakrishnan, 1971)

#### Genus 62. **Neodixothrips** Sen and Muraleedharan, 1976

Sen and Muraleedharan, 1976. *Entomon*, **1** (2): 178.

Known by the type of the genus—*N. assamensis* Sen and Muraleedharan, 1976

#### Genus 63. **Neoheegeria** Schmutz, 1909

Schmutz, 1909. *Ann. Nat. Mus. Wien*. **23**: 344.

#### KEY TO THE INDIAN SPECIES OF *Neoheegeria*

1. Mouthcone very short, sharply pointed. Body chestnut brown with some red pigment in parts of abdomen. Head longer than broad. All setae pointed. Forefemora stout and incrassate; foretarsi with a distinct tooth at base. Wings clear at base with very faint grey infumation beyond and with 9 double fringes. ... *hrasvamukha* Ramakrishna, 1928

- Mouthcone elongate, slender and narrowly rounded. Body brown. Head longer than broad. All setae dark and blunt. Forefemora moderately wide, not very enlarged; foretarsal tooth very minute. Wings narrow transparent, except base including scape grey and with 8–12 double fringes.

*montana* Ananthakrishnan &  
... ... Jagadish, 1970

**Genus 64. Neothrips** Hood, 1908

Hood, 1908. *Bull. Ill. State Lab. Nat. Hist.*, **8**: 371.

This genus is represented in India by one species *N. lepidus* Ananthakrishnan, 1971

**Genus 65. Neurothrips** Hood, 1924

Hood, 1924. *Ent. News*, **25**: 315.

This genus is represented in India by one species *N. indicus* Ananthakrishnan, 1964

**Genus 66. Ocnothrips** Ananthakrishnan, 1969

Ananthakrishnan, 1969. *Senckenbergiana biol.*, **50** (3–4): 188.

Known by only the type of the genus—*O. indicus* Ananthakrishnan, 1969

**Genus 67. Ocythrips** Ananthakrishnan, 1972

Ananthakrishnan, 1972. *Oriental Ins.*, **6** (4): 440.

Known by only the type of the genus—*O. rarus* Ananthakrishnan, 1972

**Genus 68. Opidnothrips** Ananthakrishnan, 1971

Ananthakrishnan, 1971. *Oriental Ins.*, **5** (2): 190.

Known by only the type of the genus—*O. corticulus* Ananthakrishnan, 1971

**Genus 69. Pegothrips** Sen and Muraleedharan, 1976

Sen and Muraleedharan, 1976. *Entomon*, **1** (2): 175.

Known by only the type of the genus—*P. meghalaya* Sen and Muraleedharan, 1976

**Genus 70. Phenothrips** Ananthakrishnan, 1967

Ananthakrishnan, 1967. *Oriental Ins.*, **1** (1–2): 128.

Known by only the type of the genus—*P. decoratus* Ananthakrishnan, 1967

**Genus 71. Phiarothrips** Ananthakrishnan, 1968

Ananthakrishnan, 1968. *Oriental Ins.*, **2** (1): 50.

Known by only the type of the genus—*P. reperticus* Ananthakrishnan, 1968

**Genus 72. Phaleothrips** Haliday, 1836

Haliday, 1836. *Ent. Mag.*, **3**: 442.

KEY TO THE INDIAN SPECIES OF *Phlaeothrips*

1. Head longer than broad; cheeks warty with small spines. Postoculars longer than eyes hyaline and blunt. Mouthcone long, pointed. Anteroangulars longer than anteromarginals; epimerals and postangulars subequal. Foretarsi unarmed. Wings clear except at extreme base yellowish grey and with 22–26 double fringes, basal wing setae all subequal, blunt in a row. ... .. *nilgiricus* Ananthakrishnan, 1967

Genus **73. Phorinothrips** Ananthakrishnan, 1967

Ananthakrishnan, 1967. *Oriental Ins.*, **1** (1–2): 126

KEY TO THE SPECIES OF *Phorinothrips*

1. Wings faintly to well shaded. ... .. 2
- Wings always transparent. Head more elongate 1.2 times longer than wide. Intermediate antennal segments much longer (84–87; 80–83; 70–80  $\mu$ ) and prothoracic anteroangulars (45–48  $\mu$ ) much longer than anteromarginals (18–29  $\mu$ ); epimerals and postoculars very well developed. ... .. *loranthi* Ananthakrishnan, 1967
2. Wings distinctly clouded. Antennal segments 3–6 yellow. Body setae dark and blunt. Anteroangulars and anteromarginals almost subequal. ... .. *minusculus* Ananthakrishnan, 1971
- Wings faintly shaded. Cephalic and prothoracic setae transparent and expanded. Antennal segments 3–5 yellow, 6–8 faintly shaded brown. Anteroangulars slightly but distinctly longer than anteromarginals. ... .. *levis* Ananthakrishnan & Varadarasan, 1978

Genus **74. Phylladothrips** Priesner, 1933

Priesner, 1933. *Konowia*, **12** (1–2): 79.

Known by only the type of the genus—*P. karnyi* Priesner, 1933

Genus **75. Plectothrips** Hood, 1908

Hood, 1908. *Bull. Ill. State Lab. Nat. Hist.*, **8** (2): 370.

KEY TO THE INDIAN SPECIES OF *Plectrothrips*

1. Head short, mostly as long as wide across cheeks. All femora brown in basal half, gradually merging to yellow distally; all tibiae and tarsi yellow. Basal wing setae  $B_3$  many times longer than  $B_1$  and  $B_2$ . ... .. *pallipes* Hood, 1916
- Head more elongate, distinctly longer than wide across cheeks. ... .. 2
2. Maxillary stylets retracted well back near the eyes and meeting at middle. ... .. *eximius* Ananthakrishnan, 1969
- Maxillary stylets retracted well below middle not meeting, widely separate 'V' like. ... .. *corticinus* Priesner, 1935

Genus **76. Pnigmothrips** Priesner, 1953

Priesner, 1953. *Trenbia*, **22**: 357.

Known by the type of the genus—*P. medanensis* Priesner, 1953

Genus **77. Podothrips** Hood, 1913

Hood, 1913. *Insec. Inscit. menstr.*, **1**: 67.

KEY TO THE SUBGENERA OF *Podothrips*

- |                                                                                                                                                                                    |     |     |     |                        |                       |   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|-----|------------------------|-----------------------|---|
| 1. Body bicolourous.                                                                                                                                                               | ... | ... | ... | ...                    | ...                   | 2 |
| — Body unicolourous.                                                                                                                                                               | ... | ... | ... | ...                    | ...                   | 3 |
| 2. Antennal segment 3 with a prominent basal ring.                                                                                                                                 |     |     |     | <i>Saucrothrips</i>    | Ananthakrishnan, 1967 |   |
| — Antennal segment 3 without basal ring.                                                                                                                                           | ... | ... | ... | <i>Podothrips</i>      | s.str.                |   |
| 3. Forefemora with a hump at base.                                                                                                                                                 | ... | ... | ... | <i>Kentronothrips</i>  | Moulton, 1928         |   |
| — Forefemora without hump.                                                                                                                                                         | ... | ... | ... | ...                    | ...                   | 4 |
| 4. Cheeks convex, distinctly indented below eyes, outer edge pojecting, as a short process. Head clearly constricted at base. Forefemora strong. Forewings without double fringes. | ... | ... | ... | <i>Neopodothrips</i>   | Ananthakrishnan, 1965 |   |
| — Cheeks not indented below below eyes.                                                                                                                                            | ... | ... | ... | <i>Melampodothrips</i> | Prienser, 1937        |   |

The subgenus *Podothrips* is represented by one species *bicolor* Seshadri and Ananthakrishnan, 1954, the subgenus *Neopodothrips* by *distinctus* Ananthakrishnan, 1965 and the other subgenus *Saucrothrips* by *scitulus* Ananthakrishnan, 1967.

KEY TO THE INDIAN SPECIES OF THE SUBGENUS *Kentronothrips*

- |                                                                                                                                        |     |     |     |                  |                       |   |
|----------------------------------------------------------------------------------------------------------------------------------------|-----|-----|-----|------------------|-----------------------|---|
| 1. Antennal segment 3 with one sensecone (0+1). Forefemora occasionally with a basal hump on inner margin.                             | ... | ... | ... | <i>lucasseni</i> | (Kruger, 1890)        |   |
| — Antennal segment 3 with two sensecones (1+1).                                                                                        | ... | ... | ... | ...              | ...                   | 2 |
| 2. Antennal segment 4 and 5 dark brown; 3-6 thick and round. Basal wing setae B <sub>1</sub> of forwing short and pointed.             | ... | ... | ... | <i>moultoni</i>  | Ananthakrishnan, 1965 |   |
| — Antennal segment 4 yellow, 5 shaded brown distally; 3-6 slender. Basal wing setae B <sub>1</sub> of forewing long, expanded at apex. | ... | ... | ... | <i>placitus</i>  | Ananthakrishnan, 1966 |   |

KEY TO THE INDIAN SPECIES OF THE SUBGENUS *Melampodothrips*

- |                                                                                                                                                                                                                            |     |     |     |                   |                |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|-----|-------------------|----------------|--|
| 1. Postoculars, anteroangulars, posteroangulars and basal wing setae B <sub>1</sub> of forewings pointed. Foretibiae with distinct apical tooth and subapical tubercle. Abdominal tergite II usually with two micro pores. | ... | ... | ... | <i>graminum</i>   | Priesner, 1937 |  |
| — Basal wing setae B <sub>2</sub> of forewings pointed. Abdominal segments VI and VII yellow. Antennal segment 5 with 3 sensecones (1+1+1).                                                                                | ... | ... | ... | <i>semiflavus</i> | Hood, 1913     |  |

Genus **78. Praepodothrips** Priesner and Seshadri, 1952

Priesner and Seshadri, 1952. *Indian J. Agric. Sci.*, **22** (4): 405.

KEY TO THE SPECIES OF *Praepodothrips*

1. Body bicolourous. Head distinctly longer than wide. ... .. 2
- Body unicolourous. Head as long as wide, never longer. Postoculars and prothoracic setae short and dilated at tip. ... .. *priesneri* Ananthakrishnan, 1955
2. Forewings without double fringes. ... .. *nigrocephalus* Ananthakrishnan, 1964
- Forewings with double fringes. ... .. 3
3. Postoculars and prothoracic setae long and pointed. ... .. *indicus* Priesner & Seshadri, 1952
- Postoculars and prothoracic setae short and pointed. ... .. *cymbapogoni* Ananthakrishnan, 1956

Genus **79. Psenothrips** Ananthakrishnan, 1967

Ananthakrishnan, 1967. *Oriental Ins.*, **1** (1-2): 128.

Known by only the type of the genus—*P. priesneri* (Ananthakrishnan, 1964)

Genus **80. Pygmaeothrips** Karny, 1920

Karny, 1920. *Acta Soc. Ent. Czech.*, **17**: 40.

This genus is represented in India by the type of the genus—*P. columuniceps* Karny, 1920

Genus **81. Pyknothrips** Ananthakrishnan, 1964

Ananthakrishnan, 1964. *Ent. Ts. Arg.*, **85** (1-2): 113.

Known by only the type of the genus—*P. reticulatus* Ananthakrishnan, 1964

Genus **82. Ramakrishniella** Karny, 1926

Karny, 1926. *Mem. Dept. Agri. India, Ent. Ser.*, **9** (6): 232.

KEY TO THE SPECIES OF *Ramakrishniella*

1. Wings clear with 23-25 double fringes. Cheek spines longer (35  $\mu$ ) or prominent warts. Antennal segments 3-5 yellow tinged with brown at apex, 6 wholly brown except base, 7 and 8 dark grey; segments 3-6 elongate. Eyes very large (140  $\mu$ ), postoculars long. Foretarsi armed with a triangular tooth at base. ... .. *nirmalapaksha* Ramk., 1928
- Wings not clear with 14-15 double fringes. Cheek spines shorter (22  $\mu$ ). Antennal segments 3-6 uniformly dark yellow, 7 and 8 black; segments 3-6 comparatively shorter. Eyes moderate, not very large (98  $\mu$ ); postoculars short. ... .. *unispina* Karny, 1926

Genus **83. Rhynchothrips** Hood, 1912

Hood, 1912. *Proc. ent. Soc. Wash.*, **14**: 141.

This genus is truly represented in India by one species *R. perandaphagus* (Ramakrishna, 1928) and the other two species *R. champakae* Ramakrishna and

Margabandhu, 1939 and *R. raoensis* (Ramakrishna, 1928) are to be described under two new genera.

Genus **84. Scelothrips** Priesner, 1951

Priesner, 1951. *Indian J. Ent.*, **13** (2): 188.

Known by only the type of the genus—*S. menoni* (Ananthakrishnan, 1949)

Genus **85. Schedothrips** Ananthakrishnan, 1969

Ananthakrishnan, 1969. *Senckenbergiana biol.*, **50** (3–4): 192.

KEY TO THE SPECIES OF *Schedothrips*

1. Postoculars (104–130  $\mu$ ) and prothoracic setae, postangulars (130–133  $\mu$ ) and epimeral (117–130  $\mu$ ) long. Forefemora in females very stout. All setae hyaline, blunt at tip. ... *tumidus* Ananthakrishnan, 1969
- Postoculars (80–88  $\mu$ ) and prothoracic setae postangulars (113–115  $\mu$ ) and epimeral (83–90  $\mu$ ) not very long. Forefemora in females not very stout. All setae hyaline and pointed. ... *orientalis* (Ananthakrishnan, 1967)

Genus **86. Segnothrips** Ananthakrishnan, 1965

Ananthakrishnan, 1965. *Ent. Ts. Arg.*, **86** (1–2): 49.

Known by only the type of the genus—*S. trivandrensis* Ananthakrishnan, 1965

Genus **87. Socothrips** Ananthakrishnan, 1972

Ananthakrishnan, 1972. *Oriental Ins.*, **6** (4): 427.

Known by only the type of the genus—*S. verrucosus* Ananthakrishnan, 1972

Genus **88. Sphingothrips** Ananthakrishnan, 1971

Ananthakrishnan, 1971. *Marcellia*, **37** (3): 115.

Known by only the type of the genus—*S. trachypogon* (Karny)

Genus **89. Stannardiana** Ananthakrishnan, 1964

Ananthakrishnan, 1964. *Ent. Ts. Arg.*, **85** (1–2): 115.

Known by only the type of the genus—*S. variegata* Ananthakrishnan, 1964

Genus **90. Stannardothrips** Ananthakrishnan, 1965

Ananthakrishnan, 1965. *Ent. Ts. Arg.*, **86** (1–2): 51.

Known by only the type of the genus—*S. longirostris* Ananthakrishnan, 1965

Genus **91. Stictothrips** Hood, 1924

Hood, 1924. *Psyche*, **31** (6): 295.

This genus is represented in India by one species *S. fimbriata* (Ananthakrishnan, 1953)

Genus **92. Stigmothrips** Ananthakrishnan, 1964

Ananthakrishnan, 1964. *Ent. Ts. Arg.*, **85** (3-4): 231.

KEY TO SPECIES OF *Stigmothrips*

1. Body predominantly yellow, tube dark brown. Antennal segments 3-6 yellow, rest brown. Anteromarginals and anteroangular subequal. Double fringes absent. ... *bambusae* Ananthakrishnan, 1965
- Body bicolourous. ... 2
- Body predominantly brown with plenty of red pigment. ... 3
2. Abdominal segments II and VI yellow, rest of body brown. Forewings with basal 2/3 shaded grey, distal 1/3 transparent. Anteromarginals shorter than anteroangulars. Glandular areas on VIII sternite of male separated at middle. ... *pteris* Ananthakrishnan, 1971
- Abdominal segment I, II, VI and VIII and prothorax yellow, rest of body brown. Antennal segment 3 pale yellow. Wings shaded grey. Sternite VIII of male without distinct glandular areas... *limpidus* Ananthakrishnan, 1964
3. Anteromarginal setae of prothorax absent. All legs dark brown except extreme apices of tibiae and whole of tarsi yellow. Antennal segments 3-6, proximal half yellow, distal half brown. Wings transparent with 8-11 double fringes.  $B_1-B_3$  of IX, pointed subequal. ... *bhowalii* Ananthakrishnan, 1971
- Anteromarginal setae of prothorax distinct. ... 4
4. Sternite VIII of male with a large glandular area. Postoculars short, 25-30  $\mu$  long. Body with red hypodermal pigment. Body setae hyaline, knobbed. ... *infirmus* Ananthakrishnan, 1971
- Sternite VIII of males without glandular areas. Postoculars 65-70  $\mu$  long. ... 5
5. Forewings with 7 double fringes. Head only 1.4 times longer than tube. Body setae grey, prothoracic setae well developed; anteroangulars and marginals well developed, midlaterals 52-55  $\mu$  long. Inner and middle basal wing setae not subequal. ... *consimilis* Ananthakrishnan, 1969
- Forewings without double fringes. Head almost twice longer than tube. Body setae transparent; prothoracic setae short; anteroangulars 24-26  $\mu$ , anteromarginals 15-18  $\mu$ , midlaterals 26-30  $\mu$  long. Outer basal wing setae about twice as long as inner and middle one which are subequal. ... *nilgiriensis* Ananthakrishnan, 1971

Genus **93. Strepterothrips** Hood, 1953

Hood, 1953. *J. New York ent. Soc.*, **41**: 131.

This genus is represented in India by *S. orientalis* Ananthakrishnan, 1964

Genus **94. Synergothrips** Ananthakrishnan, 1971

Ananthakrishnan, 1971. *Mercellia*, **37** (3): 117.

Known by only the type of the genus—*S. prolatus* Ananthakrishnan, 1971

**Genus 95. Tetradothrips** Priesner, 1951

Priesner, 1951. *Indian J. Ent.*, **13** (2): 198.

Known by only the type of the genus—*T. foliiperda* (Karny, 1926)

**Genus 96. Teuchothrips** Hood, 1919

Hood, 1919. *Proc. biol. Soc. Wash.*, **32**: 86.

This genus is truly represented by one species *T. eugeniae* Seshadri & Ananthakrishnan, 1954 and the other species *T. longus* (Schmutz, 1913) to be described as a new genus.

**Genus 97. Thilakothrips** Ramakrishna, 1928

Ramakrishna, 1928. *Mem. Dept. Agri. India Ent. Ser.*, **10** (7): 275.

Known by only the type of the genus—*T. babuli* Ramakrishna, 1928

**Genus 98. Thlibothrips** Priesner, 1951

Priesner, 1951. *Indian J. Ent.*, **13** (2): 183.

This genus is represented in India by one species *T. inquilinus* Ananthakrishnan and Varadarasan, 1978

**Genus 99. Treherniella** Watson, 1923

Watson, 1923. *Synopsis*: 81.

Known species from India *T. inferna* Priesner, 1932 to be described a new species.

**Genus 100. Trichinothrips** Bagnall, 1929

Bagnall, 1929. *Ann. Mag. nat. Hist.*, **10** (3): 604.

This genus is represented in India by one species *T. breviceps* (Bagnall, 1926)

**Genus 101. Tylothrips** Hood, 1937

Hood, 1937. *Revta de Ent.*, **7** (4): 494.

This genus is represented in India by one species *T. indicus* Sen and Muraleedharan, 1976

**Genus 102. Xylaplothrips** Priesner, 1928

Priesner, 1928. *Thys. Europas*: 572

KEY TO THE INDIAN SPECIES OF *Xylaplothrips*

- |                                                                                                                                                                                                                                                                          |     |     |     |     |     |                                                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|-----|-----|-----|-------------------------------------------------|
| 1. Body bicolourous.                                                                                                                                                                                                                                                     | ... | ... | ... | ... | ... | 2                                               |
| — Body brown.                                                                                                                                                                                                                                                            | ... | ... | ... | ... | ... | 3                                               |
| 2. Anteromarginals present. B <sub>1</sub> and B <sub>2</sub> of abdominal segment IX knobbed. Head brown, prothorax yellow; antennal segments brown except 3 yellow basally; wings pale grey; sense cones on antennal segments 3 and 4 subequal. Foretarsi unarmed. ... |     |     |     |     |     |                                                 |
|                                                                                                                                                                                                                                                                          |     |     |     |     |     | <i>emineus</i> Ananthakrishnan & Jagadish, 1971 |

|                                                                                                                                                                                                                                                                                                                                                                        |                                                |     |     |     |     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|-----|-----|-----|-----|
| — Anteromarginals absent. B <sub>1</sub> of abdominal segment IX knobbed, B <sub>2</sub> pointed. Head yellow, thorax yellow except anterior margin with a shade of brown; antennal segments 1-3 yellow; wings uniformly grey; body with red hypodermal pigment. Antennal segment 3 with 1+1 sense cones; sense cones on 3 longer than those of 4. Foretarsi armed.... | <i>micans</i> Ananthakrishnan & Jagadish, 1971 | ... | ... | ... | 4   |
| 3. Anteromarginals well developed. ... ..                                                                                                                                                                                                                                                                                                                              | ...                                            | ... | ... | ... | 10  |
| — Anteromarginals vestigial. ... ..                                                                                                                                                                                                                                                                                                                                    | ...                                            | ... | ... | ... | 5   |
| 4. Antennal segments 4 and 5 predominantly yellow....                                                                                                                                                                                                                                                                                                                  | ...                                            | ... | ... | ... | 6   |
| — Antennal segments 4 and 5 brown. ... ..                                                                                                                                                                                                                                                                                                                              | ...                                            | ... | ... | ... | ... |
| 5. Antennal segments 4 and 5 yellow at base, pale brown at apex. ... ..                                                                                                                                                                                                                                                                                                | <i>flavus</i> Ananthakrishnan, 1964            | ... | ... | ... | ... |
| — Antennal segments 4 and 5 pale yellow. ... ..                                                                                                                                                                                                                                                                                                                        | <i>pictipes</i> (Bagnall, 1919)                | ... | ... | ... | 7   |
| 6. Foretarsi unarmed. ... ..                                                                                                                                                                                                                                                                                                                                           | ...                                            | ... | ... | ... | 8   |
| — Foretarsi armed. ... ..                                                                                                                                                                                                                                                                                                                                              | ...                                            | ... | ... | ... | ... |
| 7. B <sub>1</sub> and B <sub>2</sub> of abdominal segment IX knobbed. Mesopraesternum not reduced. Wings uniformly pale grey. Antennal segments 3 and 4 with 1+1 and 2+1 sense cones respectively and sense cones on 3 longer than those on 4. ... ..                                                                                                                  | <i>tener</i> Ananthakrishnan & Jagadish, 1969  | ... | ... | ... | ... |
| — B <sub>1</sub> and B <sub>2</sub> of abdominal segment IX pointed. Mesopraesternum reduced. Wings shaded grey. Anteromedian region of abdominal segments II-VIII with brownish patches. Sense cones on 3 and 4 almost subequal. ... ..                                                                                                                               | <i>debilis</i> Ananth. & Jagadish, 1971        | ... | ... | ... | 9   |
| 8. Wings transparent. ... ..                                                                                                                                                                                                                                                                                                                                           | ...                                            | ... | ... | ... | ... |
| — Wings grey. Head and thorax brown. B <sub>1</sub> -B <sub>3</sub> of abdominal segment IX of female subequal. Mesopraesternum reduced. Sense cones on 3 and 4 almost subequal. ... ..                                                                                                                                                                                | <i>pusillus</i> Ananth. & Jagadish, 1969       | ... | ... | ... | ... |
| 9. Basal wing setae almost subequal. Head more elongate. ... ..                                                                                                                                                                                                                                                                                                        | <i>ligs</i> Ananth. & Jagadish, 1971           | ... | ... | ... | ... |
| 10. All tibiae and tarsi yellow. Mesopraesternum reduced. ... ..                                                                                                                                                                                                                                                                                                       | <i>flavitibia</i> Ananth. & Jagadish, 1969     | ... | ... | ... | ... |
| — Hind tibiae brown except extreme base and apex....                                                                                                                                                                                                                                                                                                                   | <i>inquilinus</i> (Priesner, 1921)             | ... | ... | ... | ... |

### Subfamily IDOLOTHRIPINAE

#### Genus 1. *Aesthesiothrips* Ananthakrishnan, 1960

Ananthakrishnan, 1960. *J. Zool. Soc. India*, **12**: 253

Known by only the type species of the genus—*A. jatrophae* Ananthakrishnan, 1960

#### Genus 2. *Allothrips* Hood, 1908

Hood, 1908. *Bull. Ill. State Lab. Nat. Hist.*, **8**: 372

This genus is represented in India by one species *A. pillichellus* (Priesner, 1925)

KEY TO THE INDIAN SUBSPECIES OF *pillichellus*

1. Postoculars (22  $\mu$ ) and interocular (16  $\mu$ ) short; B<sub>1</sub>-B<sub>3</sub> of abdominal segment IX short; antennal segment 2 yellow, 1 and 3 yellowish brown. ... *indicus* Ananthakrishnan, 1958
- Postocular, interocular and other setae longer. ... 2
2. Antennal segments 1-3 yellow, 3-5 short (64, 64, 48  $\mu$ ). All prothoracic setae 38  $\mu$  long, anteroangulars not shorter than the rest. Body uniformly bicolorous in apterous and brachypterous forms, tending to be unicolorous in the macropterous forms. Tube yellow. ... *bicolor* Ananthakrishnan, 1964
- Antennal segments 1-3 yellowish brown. 4-7 more elongate; 3-5 measuring 65-70  $\mu$ , 52-55 and 52-55  $\mu$ . Postoculars 52-55  $\mu$  long. Apex of tube brown, rest yellowish. ... *montanus* Ananthakrishnan, 1968

Genus 3. **Bactrothrips** Karny, 1912

Karny, 1912. *Ent. Rundschau*: 130.

KEY TO THE INDIAN SPECIES OF *Bactrothrips*

- Drepana in males clearly dark and serrate. Tube with strong and densely distributed surface setae. Larva II with shorter major pronotal setae. ... *idolomorphus* Karny, 1910
- Drepana in males plain and smooth and distinctly uniform yellow. Tube with very weak and sparsely dispersed surface setae. Larva II with major pronotal setae long. ... *luteus* Ananthakrishnan, 1973

Genus 4. **Decothrips** Ananthakrishnan, 1969

Ananthakrishnan, 1969. *Indian Forester*, 95 (3): 182

Known by only the type of the genus *D. anacardii* Ananthakrishnan, 1969

Genus 5. **Diaphorothrips** Karny, 1920

Karny, 1920. *Ent. Mitt.*: 86

This genus is represented in India by one species *D. unguipes* Karny, 1920

Genus 6. **Diceratothrips** Bagnall, 1908

Bagnall, 1908. *Trans. Nat. Hist. Soc. Northumb.*, 3: 193

KEY TO THE INDIAN SPECIES OF *Diceratothrips*

1. Forewings transparent. ... 2
- Forewings weakly to strongly shaded grey. ... 3
2. Head 1.5 times longer than wide. Postocellars 63-113  $\mu$ , postoculars 113-165  $\mu$ , anteroangulars 33-43  $\mu$  long. Basal wing setae 43-55, 55-68, 70-90  $\mu$  long. ... *usitatus* Ananth. & Jagadish, 1970
- Head only 1.3 times longer than wide. Postocellars short 27-32  $\mu$ , postoculars 86-113  $\mu$ , anteroangulars 53-63  $\mu$  long. Basal wing setae 63-68, 75-86, 125-133  $\mu$  long. ... *brevisetosus* Ananthakrishnan & Jagadish, 1970

3. Body setae dark, pointed. Head 1.6 times as long as wide. Postocellars 78–94  $\mu$ , antero-marginals, angulars and midlaterals 62–93  $\mu$ , epimerals and postangulars 108–155  $\mu$  long. Forewings with 34–39 double fringes. ... *niger* (Schmutz, 1913)
- Body setae hyaline, pointed. ... 4
4. Head 1.1 to 1.3 times longer than wide.... 5
- Head 1.5 to 1.7 times longer than wide.... 6
5. Head 1.3 times longer than wide; postocellars 88–110  $\mu$ , postoculars 190–193  $\mu$ ; prothoracic postangulars 150–155  $\mu$  and epimerals 128–130  $\mu$  long. Double fringes on forewing 20–21. Tube as long as head and 100–108  $\mu$  wide at base. ... *uredinis* Ananth. & Jagadish, 1970
- Head only 1.1 times longer than wide; postocellars 65  $\mu$ , postoculars 180  $\mu$ , prothoracic postangulars 110  $\mu$ , epimerals 150–200  $\mu$  long. Forewings with 38–40 double fringes. Tube longer than head, 150–180  $\mu$  across base. ... *indicus* (Bagnall, 1921)
6. Body setae shorter. Postoculars 120–161  $\mu$ , midlaterals 39–73  $\mu$ , postangulars and epimerals 112–180  $\mu$  long. Basal wing setae 35–77, 49–105 and 77–147  $\mu$  long. Forewings with 15–19 double fringes. ... *vitreipennis* (Priesner, 1939)
- Body setae longer. Postoculars 228  $\mu$ , midlaterals 178  $\mu$ , postangulars 218  $\mu$ , epimerals 250  $\mu$  long. Basal wing setae 155, 233 and 239  $\mu$  long. Forewings with 27 double fringes. ... *longisetis* Ananth. & Jagadish, 1970

### Genus 7. *Dinothrips* Bagnall, 1908

Bagnall, 1908. *Trans. nat. Hist. Soc. Northumn.*, 3: 11

#### KEY TO THE INDIAN SPECIES OF *Dinothrips* (Adapted from Palmer & Mound, 1978)

1. Antennal segment 3 pale at base. Mesothoracic process of male small. ... 2
- Antennal segment 3 dark at base. Mesothoracic process often large. ... 3
2. Pronotal anteromarginals shorter than distance between their bases. Median pair of setae on vertex about 0.75 as long as postoculars (182–280  $\mu$ ); cheek setae short and pale (50–90  $\mu$ ). Setae on abdominal segment IX shorter than tube and tube longer than head.... *longicaudus* (Ananthakrishnan, 1960)
- Pronotal anteromarginal setae longer than the distance between their bases. Median pair of setae on vertex small, cheek setae long, and pale ( $\sigma$  160–170  $\mu$ ,  $\phi$  95–100  $\mu$ ). ... *juglandis* Moulton, 1933
3. Antennal segment 3 usually less than 3.5 times as long as the apical dark band of this segment; cheek setae long and pale in male (110–180  $\mu$  long) shorter and sometimes dark in female (60–100  $\mu$  long). Males usually and females often with more than one pair of major postangular pronotal setae; epimeral tubercles often well developed. ... *sumatrensis* Bagnall, 1908

- Antennal segment 3 usually more than 3.5 times as long as apical dark band of this segment. Cheek setae shorter and darker (male 70–140  $\mu$  and female 50–90  $\mu$  long). Pronotum with only one pair of postangulars; epimeral tubercles weak even in oedymorous male. ... .. *spinosus* (Schmutz, 1913)

**Genus 8. Elaphridia** Ananthakrishnan, 1964

Ananthakrishnan, 1964. *Opusc. Ent. Suppl.*, **25**: 90

Known only through the type of the genus—*E. crassiceps* Ananthakrishnan, 1964

**Genus 9. Elaphrothrips** Buffa, 1909

Buffa, 1909. *Redia*, **5**: 162

KEY TO SUBGENERA OF *Elaphrothrips*

- Forefemora in females always unarmed, without any hump or tooth or conical processes on one or both margins. Oedymorous males strongly armed with a sickle-like setae (except in *denticollis*) and inner margin of femora always straight. ... .. *Elaphrothrips* s.str.
- Forefemora of females with a distinct tooth at middle of inner margin, males without. Oedymorous males with the typical sickle-like setae. ... *Cradothrips* Ananthakrishnan, 1973

KEY TO THE SPECIES OF *Elaphrothrips*

1. Cephalic production pronounced, about 0.9–1.2 times as long as wide. ... .. 2
- Cephalic production much shorter, distinctly wider than long, atmost 0.5 times as long as wide. ... .. 4
2. Oedymorous males devoid of sickle-like setae at the apex of fore-femora. All tibiae basally more brownish and yellowish beyond middle. Antennal segment 3 yellowish with a tinge of brown at apex, 4 and 5 distinctly yellowish at basal half, rest brownish. ... .. *denticollis* (Bagnall, 1909)
- Oedymorous males with distinct sickle-like setae at apex at forefemora. ... .. 3
3. All tibiae with distal half pale. Body setae much longer and distinctly hyaline, except those on head production. Antennal segment 3 yellow, brownish at apex, 4 and 5 with proximal halves yellow, rest brown. ... .. *greeni* (Bagnall, 1914)
4. Cephalic, thoracic and basal wing setae exceptionally long. Antennal segments 3, 4, 5 and foretibiae, coloured almost as in *E. denticollis*. Cephalic production setae 239–265  $\mu$ , anterior postoculars 249–292  $\mu$  epimerals 195–208  $\mu$ , postangulars 229  $\mu$ , in the females. ... .. *notabilis* Ananthakrishnan, 1973
- Body setae normal, never exceptionally long. ... .. 5

5. Foretarsi of females unarmed; fore, mid and hind tibiae basally more brownish and rest yellowish. Antennal segments 3, 4, 5 coloured almost as in *E. denticollis* and *notabilis*. Basal wing setae 104–114, 117–143 and 205–234  $\mu$  long. Anteromarginals shorter than anteroangulars, mid laterals, epimerals and postangulars almost subequal. ... *curvipes* Priesner, 1929
- All tibiae clearly uniformly brownish and foretarsi of females, with a stump-like to a well developed tooth. ... ... 6
6. Body setae clearly hyaline; antennal segment with 2, 3 greyish yellow, rest brown, 4–8 brown, Basal wing setae 130–148, 130–148 and 278–296  $\mu$  long respectively, with 42–47 double fringes in females and 50–55 in the males. ... *spiniceps* Bagnall, 1932
- Body setae not hyaline but brownish. Apex of antennal segment 3 yellowish, rest brown, 4 and 5 basally yellow, distal half brown. Basal wing setae 58–88, 63–75, 158–200  $\mu$  long, with 25–29 double fringes. ... *procer* Schmutz, 1913

### Genus 10. *Gastrothrips* Hood

Hood, 1912. *Proc. ent. Soc. Wash.*, **14** (3); 156

#### KEY TO THE INDIAN SPECIES OF *Gastrothrips*

1. Forewings without double fringes. Antennals with apex of 2nd and 3 yellow, rest brown; segment 8 normal. Oedymorous males with excessively developed forelegs, forefemora and coxae with strong curved, chitinous processes, stout surfacial setae, foretibia with tooth at apex and foretarsal tooth very much enlarged; anteromarginal prothoracic setae very long and metanotum with a median process. ... *falcatus* (Ananthakrishnan, 1968)
- Forewings with 7–8 double fringes; antennals with apex of 2, basal 2/3 of 3 yellow; segment 8 very long and slender. Oedymorous males with distinct mesothoracic lateral spurs and with posterior margins of metanotum dentate. Forefemora normal, atmost enlarged. ... *acuticornis* (Hood, 1925)

### Genus 11. *Ischyrothrips* Schmutz, 1913

Schmutz, 1913. *Sitz. Akad. Wiss. Wien.*, **122**: 1074

Known by only the type of the genus—*I. crassus* Schmutz, 1913

### Genus 12. *Loyolaia* Ananthakrishnan, 1964

Ananthakrishnan, 1964. *Ent. Ts. Arg.*, **85** (1–2): 106

Known by only the type of the genus—*L. indica* Ananthakrishnan, 1964

### Genus 13. *Machatothrips* Bagnall, 1908

Bagnall, 1908. *Trans. nat. Hist. Soc. Northumb.*, **3**: 189.

KEY TO THE INDIAN SPECIES OF *Machatothrips*

1. Postoculars very long (202–217  $\mu$ ); anteromarginals of pronotum much reduced (16–32  $\mu$ ), anteroangulars well developed.  $B_2$  and  $B_3$  of basal wing setae long, subequal. Setae hyaline. ... *indicus* Ananth. & Jagadish, 1970
- Postoculars short; anteromarginals of pronotum better developed.  $B_2$  and  $B_3$  of basal wing setae not subequal. Setae brown. ... .. 2
2. Antennal segment 3 at extreme base and apex paler. Interocellar setae short, 55–58  $\mu$  long.  $B_3$  of basal wing setae shorter than  $B_1$ .  $B_2$  and  $B_3$  78–109 and 143–151  $\mu$  long. Pelta not angular. ... *silvaticus* Ananthakrishnan, 1972
- Interocellar setae well developed, 93–113  $\mu$  long;  $B_2$  of basal wing setae much longer than  $B_1$ ;  $B_2$  and  $B_3$  136–182 and 192–213  $\mu$  long. Pelta distinctly angular. ... .. *corticus* Ananthakrishnan, 1972

Genus **14. Meiothrips** Priesner, 1929

Priesner, 1929. *Treubia*: 197

The subgenus *Meiothrips* s.str. is represented in India by *M. menoni*, Ananthakrishnan, 1964 and the other subgenus *Aculeathrips* Kudo and Ananthakrishnan by *A. nepalensis* Kudo and Ananthakrishnan, 1974

Genus **15. Mecynothrips** Bagnall, 1908

Bagnall, 1908. *Ann. Mag. nat. Hist.*, 8 (1): 356.

This genus is represented in India by one species *M. simplex* Bagnall, 1912

Genus **16. Neosmerinthothrips** Schmutz, 1913

Schmutz, 1913. *Sitz. Akad. Wiss. Wien.*, **122**: 1051

KEY TO THE INDIAN SPECIES OF *Neosmerinthothrips*

1. Foretarsi unarmed in females, armed in males. Tube much wider at base, at most about twice as at apex. Forewings with base including scale brownish, rest transparent with 9–13 double fringes. Antennal segments mostly uniform brown, rarely with 3 and 4 paler.  $B_1$ – $B_3$  of abdominal segment IX moderately stout. Oedymorous males without multiple effects, at most forefemora much enlarged. ... *robustus* (Ananthakrishnan, 1964)

Genus **17. Nesidiothrips** Mound, 1974

Mound, 1974. *Bull. Brit. Mus. nat. Hist. (Ent.)*, **31**:

Known by only the type of the genus—*N. alius* (Ananthakrishnan, 1970)

Genus **18. Nesothrips** Kirkaldy, 1907

Kirkaldy, 1907. *Proc. Hawaii ent. Soc.*, **2**: 107.

This genus is represented in India by one species *N. brevicollis* (Bagnall 1914)

**Genus 19. Oedaleothrips** Hood, 1916Hood, 1916. *Bull. Brooklyn ent. Soc.*, **11**: 64.KEY TO THE INDIAN SPECIES OF *Oedaleothrips*

1. Body predominantly yellow; legs yellow; antennal segments 1-4 pale yellow, 2 and 6-8 blackish brown, basal half of 5 yellow, rest dark brown. Head 1.3 times as long as wide and pterothorax only a little wider than head. Tube 140  $\mu$  long. ... *ramamurthii* Ananthakrishnan, 1964
- Color glistening coal black with whitish markings on abdominal tergum I, extending along sides of II and one on tergum V. Antennae coal black. Head 2.2 times as long as wide, pterothorax narrow, much wider than head. Tube 203  $\mu$  long. ... *congoensis* Hood, 1952

**Genus 20. Percnothrips** Ananthakrishnan, 1967Ananthakrishnan, 1967. *Ann. Soc. ent. Fr. (N.S.)*, **3** (1): 233Known by only the type of the genus—*P. turbinatus* Ananthakrishnan, 1967**Genus 21. Polyphemothrips** Schmutz, 1909Schmutz, 1909. *Ann. natur. Hist. Hofmuseum, Wien*, **23**: 276KEY TO INDIAN SPECIES OF *Polyphemothrips*

1. Head more elongate, dorsum moderately to strongly arched, median ocellus on a weak to a strongly developed elevation and overhanging bases of antennae (Subgenus: *Polyphemothrips* s.str.). ... 2
- Head not very long, dorsum feebly arched; median ocellus not reaching bases of antennae (Subgenus: *Adelothrips* Hood). ... 4
2. Ocellar cone strongly developed. Head twice or more than twice as long as wide. Antennal segment 3 with 4 sense cones. ... 3
- Ocellar cone weak, but distinct. Head 1.5 times as long as wide. Postoculars very well developed (170  $\mu$ ). Anteroangulars longer than anteromarginals. All prothoracic setae strongly developed. Antennal segment 3 with only 3 sense cones. 26 double fringes on forewing. ... *mirandus* Ananthakrishnan, 1969
3. Head 2.4 times longer than wide. Ocellar cone 94-96  $\mu$  long, 144-156 wide at base. Postoculars very long, pointed (360  $\mu$ ). Anteromarginals vestigial. 62 double fringes on forewing. ... *megacephalus* Ananthakrishnan, 1969
- Head 1.9 to twice as long as wide. Ocellar cone 54  $\mu$  long, 140  $\mu$  wide at base. Postoculars 192-240  $\mu$  long. Anteromarginals distinct, 52-62  $\mu$  long, 35-40 double fringes on forewing. ... *enormis* Ananthakrishnan, 1969
4. Body bicolourous. Head 1.4 times as long as wide. Postoculars 104-112  $\mu$  long, hyaline, blunt. Anteromarginals much shorter than anteroangulars; brachypterous. ... *ruidus* Ananthakrishnan, 1955
- Body unicolourous, mostly yellow or brown. ... 5

5. Mouthcone more elongate, pointed. Head 1.3 times as long as wide. Postoculars 91  $\mu$  long, hyaline, knobbed. 11 double fringes on forewing.... *indicus* (Ananthakrishnan, 1955)
- Mouthcone broadly rounded. ... .. 6
6. Body yellow. Head 1.4 times as long as wide. Postoculars 91–95  $\mu$  long, hyaline, blunt. Anteromarginals and anteroangulars subequal, 13–14 double fringes on forewing. Apex of tube dark. ... *cracens* Ananthakrishnan, 1967
- Body dark brown. ... .. 7
7. Head 1.3 times as long as wide. Postoculars 112–160  $\mu$  long. Anteromarginals and anteroangulars almost subequal, 8–12 double fringes on forewing. Tube dark brown. ... .. *minor* Hood
- Head 1.3–1.6 times as long as wide; double fringes forewing. Tube dark brown. ... .. *minor* Hood
- Head 1.3–1.6 times as long as wide; double fringes always more than 12, anteroangulars and anteromarginals never subequal. ... .. 8
8. Head 1.4 times as long as wide. Postoculars 96–126  $\mu$  long; anteromarginals a little shorter than anteroangulars. 14–18 double fringes. Antennal segments 3–5 yellow, 6–7 light brown. .... *stannardi* Ananthakrishnan, 1972
- Head 1.5–1.6 times longer than wide. Postoculars much longer and anteromarginals very much shorter than anteroangulars. ... .. 9
9. Head 1.5–1.6 times as long as wide. Postoculars 130–143  $\mu$  long; anteromarginals 40–52  $\mu$ , anteroangulars 65–70  $\mu$ ; 23–25 double fringes; forewings with a grey brown band. Antennal segment 3 yellow, rest brown. ... .. *fumidus* Ananthakrishnan, 1972
- Head 1.3 times as long as wide, forewings transparent, with 15 double fringes; anteroangulars (78  $\mu$ ), anteromarginals (28) ... .. *subtilis* Ananthakrishnan, 1972

## Genus 22. *Priesneriana* Ananthakrishnan, 1956

Ananthakrishnan, 1956. *Zool. Anz.*, **157**: 38

Known by only the type of the genus—*P. kabandha* (Ramakrishna, 1928)

## Genus 23. *Pygothrips* Hood, 1915

Hood, 1915. *Proc. biol. Soc. Wash.*, **28**: 49

This genus is represented in India by one species *P. amplus* Faure, 1949

## Genus 24. *Pyrgothrips* Karny, 1924

Karny, 1924. *Ark. Zool.* (2) **17A**: 35

### KEY TO THE INDIAN SPECIES OF *Pyrgothrips*

1. Preocular projection as long to longer than wide. Antennal segment 3 less than 1.5 times as long as that of 5. Interocellars and postoculars weak; postoculars shorter than interocellars. Pelta triangular with apex angular. ... .. *faurei* (Ananthakrishnan, 1964)

- Preocular projection wider than long. Antennal segment 3 more than 1.5 times as long as that of 5. Interocellars well developed; postoculars vestigial. Pelta triangular with apex rounded. ... *breviceps* (Bagnall, 1914)

Genus **25. Rhaebothrips** Karny, 1913

Karny, 1913. *Formosa Ausbeute Suppl. Ent.*, **2**: 128

Known by the type of the genus—*R. lativentris* Karny, 1913

Genus **26. Scotothrips** Priesner, 1938

Priesner, 1938. *Proc. R. ent. Soc. Lond.*, :75

This genus is represented in India by one species *S. claripennis* (Moulton, 1934)

Genus **27. Stinothrips** Ananthakrishnan, 1969

Ananthakrishnan, 1969. *Indian Thysanoptera, C.S.I.R. Zool. Monogr.*, **1**: 55.

Known by only the type of the genus—*S. typicus* (Ananthakrishnan, 1967)

Genus **28. Symphyothrips** Hood & Williams, 1915

Hood & Williams, 1915. *J. New York ent. Soc.*, **23**: 131

This genus is represented by one species *S. aberrans* Ananthakrishnan, 1971

Genus **29. Tiarothrips** Priesner, 1935

Priesner, 1935. *Konowia*, **13** (3): 251

This genus is represented in India by one species *T. subramanii* (Ramakrishna, 1925)

Genus **30. Veerabahuthrips** Ramakrishna, 1932

Ramakrishna, 1932. *Rec. Indian Mus.*, **34**: 277

Known by only the type of the genus—*V. bambusae* Ramakrishna, 1932

## APPENDIX I

## LIST OF VALID SPECIES OF INDIAN THYSANOPTERA

*Note:—* 1. Nearctic                      2. Ethiopian                      3. Neotropical                      4. Oriental  
               5. Palaearctic                      6. Australian                      7. Cosmopolitan                      8. Polynesian Islands

| <i>Name</i>                                         | <i>Distribution</i> | <i>Host</i>                             |
|-----------------------------------------------------|---------------------|-----------------------------------------|
| 1                                                   | 2                   | 3                                       |
| Order THYSANOPTERA                                  |                     |                                         |
| Suborder <i>TEREBRANTIA</i>                         |                     |                                         |
| Family AEOLOTHRIPIDAE                               |                     |                                         |
| Tribe 1. MELANTHRIPINI                              |                     |                                         |
| Genus 1. <b>Gelothrips</b> Bhatti, 1967             |                     |                                         |
| <i>G. cinctus</i> - (Hood,        )                 | Jabalpur (M.P.)     | Grass                                   |
| Genus 2. <b>Melanthrips</b> Haliday, 1836           |                     |                                         |
| Subgenus 1. <b>Dichropterothrips</b> Priesner, 1936 |                     |                                         |
| <i>D. baileyi</i> Ananthakrishnan, 1965             | Goa-Mysore border   | Grass sweeping                          |
| Subgenus 2. <b>Melanthrips</b>                      |                     |                                         |
| <i>M. affluens</i> Ananthakrishnan, 1966            | Nasik (Maharashtra) | Elephant grass ( <i>Coix lachryma</i> ) |
| <i>M. indicus</i> Bhatti, 1967                      | Gwarighat (M.P.)    | Grass                                   |

| <i>Name</i>                                           | <i>Distribution</i>                                            | <i>Host</i>                                                           |
|-------------------------------------------------------|----------------------------------------------------------------|-----------------------------------------------------------------------|
| 1                                                     | 2                                                              | 3                                                                     |
| Tribe 2. AEOLOTHRIPINI                                |                                                                |                                                                       |
| Genus 1. <b>Aeolothrips</b> Haliday, 1836             |                                                                |                                                                       |
| <i>A. collaris</i> <sup>2,5</sup> Priesner, 1919      | All over India                                                 | Sugarcane ( <i>Saccharum officinarum</i> )<br>leaf sheath             |
| <i>A. distinctus</i> Bhatti, 1971                     | Nainital (U.P.)                                                | <i>Salvia</i> sp. flowers                                             |
| <i>A. indicus</i> Bhatti, 1965                        | Hoshiarpur (Punjab)                                            | <i>Centaurea cyanea</i>                                               |
| <i>A. intermedius</i> <sup>5</sup> Bagnall, 1934      |                                                                |                                                                       |
| <i>A. meridionalis</i> <sup>2</sup> Priesner, 1948    | Delhi                                                          | <i>Brassica campestris</i> & <i>Eruca sativa</i>                      |
| <i>A. nigricornis</i> Ananthakrishnan, 1968           | Kotagiri (Tamil Nadu)                                          | <i>Ulex</i> flowers                                                   |
| Genus 2. <b>Erythrothrips</b> Moulton, 1911           |                                                                |                                                                       |
| <i>E. asiaticus</i> (Ramakrishna & Margabandhu, 1931) | Coimbatore; Salem (Tamil Nadu);<br>Bangalore (Karnataka)       | Grass; Sandal shoots; <i>Canthium didymum</i>                         |
| Genus 3. <b>Indothrips</b> Bhatti, 1967               |                                                                |                                                                       |
| <i>I. bhushani</i> Bhatti, 1967                       | Paraspani Village, Jabalpur Dt.<br>(M.P.); Jodhpur (Rajasthan) | <i>Ficus religiosa</i> leaves; flowering<br><i>Azadirachta indica</i> |
| Genus 4. <b>Mymarothrips</b> Bagnall, 1921            |                                                                |                                                                       |
| <i>M. bolus</i> Bhatti, 1967                          | Jabalpur (M.P.)                                                | <i>Ficus religiosa</i> leaves                                         |
| <i>M. garuda</i> Ramakrishna & Margabandhu, 1931      | Coimbatore (Tamil Nadu)                                        | Grapevine leaves; turmeric leaves,<br><i>Morus alba</i> leaves        |
| Genus 5. <b>Streothrips</b> Bhatti, 1971              |                                                                |                                                                       |
| <i>S. arorai</i> (Bhatti, 1967)                       | Paraspani Village, Jabalpur Dt.<br>(M.P.)                      | <i>Ficus religiosa</i> leaves                                         |

## Tribe 3. FRANKLINOTHRIPINI

Genus **Franklinothrips** Back, 1912*F. megalops*<sup>1, 2, 3, 6, 8</sup>, (Trybom, 1912)Madras (INDIA); Phuntsholing  
(BHUTAN)*Morus alba* leaves

## Tribe 4. OROTHRIPINI

Genus **1. Allelothrips** Bagnall, 1932*A. pandyani* (Ramakrishna & Margabandhu, 1931)

Kovilpatti (Tamil Nadu)

*Pennisetum typhoideum* ears; grassGenus **2. Orothrips** Moulton, 1907*O. raoi* Moulton, 1927

Bangalore (Karnataka)

Unknown flowers

## Family MEROTHRIPIDAE

Genus **1. Erotidothrips** Priesner, 1939*E. mirabilis*<sup>2</sup> Priesner, 1939

Aryankavu (Kerala)

Dry twig

Genus **2. Merothrips** Hood, 1912*M. indicus* Bhatti & Ananthakrishnan, 1975Courtallam (Tamil Nadu); Aryan-  
kavu (Kerala)

Dry twig

*M. morgani*<sup>1, 2, 3, 6</sup> Hood, 1912

Tamil Nadu

Decaying coconut sheaths; decay-  
ing wood; decaying grass

## Family HETEROTHRIPIDAE

Genus **1. Adiheterothrips** Ramakrishna, 1928*A. jambudvipae* Ramakrishna, 1928

Nayudupeta (Tamil Nadu)

*Phoenix dactylifera* flowersGenus **2. Holarthrothrips** Bagnall, 1927*H. indicus* Bhatti & Ananthakrishnan, 1978

Misrod (M.P.)

*Phoenix* inflorescence

| <i>Name</i>                                                            | <i>Distribution</i>            | <i>Host</i>                                   |
|------------------------------------------------------------------------|--------------------------------|-----------------------------------------------|
| 1                                                                      | 2                              | 3                                             |
| Family THRIPIDAE<br>Subfamily 1. THIRIPINAE<br>Tribe 1. DENDROTHRIPINI |                                |                                               |
| Genus 1. <b>Asprothrips</b> Crawford, 1938                             |                                |                                               |
| <i>A. indicus</i> (Bagnall, 1919)                                      | Taliparamba (Kerala)           | Arrowroot leaves                              |
| Genus 2. <b>Dendrothrips</b> Uzel, 1895                                |                                |                                               |
| <i>D. albus</i> Bhatti, 1967                                           | Jabalpur (M.P.)                | Unidentified flowers                          |
| <i>D. aspersus</i> Bhatti, 1971                                        | Jammu                          | <i>Ziziphus</i> flowers; <i>Acacia</i> leaves |
| <i>D. cibarius</i> Ananthakrishnan, 1965                               | Khandala (Maharashtra)         | Tender leaves of an unidentified plant        |
| <i>D. elixae</i> Bhatti, 1971                                          | Borivili (Maharashtra)         | Wild bushes                                   |
| <i>D. faurei</i> Bhatti, 1971                                          | Elephanta Island (Maharashtra) | Wild shrub                                    |
| <i>D. jasminum</i> (Ramakrishna & Margabandhu, 1939)                   | Madura (Tamil Nadu)            | Jasmine                                       |
| <i>D. mendax</i> Bhatti, 1971                                          | Nainital (U.P.)                | Herb                                          |
| <i>D. minutus</i> (Ananthakrishnan, 1961)                              | Agra (U.P.)                    | <i>Vitex negundo</i> leaves                   |
| <i>D. punctatus</i> Zur Strassesm, 1968                                |                                |                                               |
| <i>D. sexmaculatus</i> <sup>2, 4</sup> Bagnall, 1916                   | Karnataka; Kerala              | <i>Carissa</i> sp.                            |
| <i>D. stannardi</i> (Ananthakrishnan, 1957)                            | Kodaikanal (Tamil Nadu)        | Sheath of Liliaceous plant                    |
| <i>D. strasseni</i> Bhatti, 1971                                       | Borivili (Maharashtra)         | Wild bushes                                   |
| Genus 3. <b>Parsiiothrips</b> Bhatti, 1970                             |                                |                                               |
| <i>P. fuscus</i> Bhatti, 1970                                          | Mussoorie (U.P.)               | Fern                                          |
| Genus 4. <b>Pseudodendrothrips</b> Schmutz, 1913                       |                                |                                               |
| <i>P. dwivarna</i> (Ramakrishna & Margabandhu, 1931)                   | Kaladi, Trichur (Kerala)       | Jak shoots                                    |
| <i>P. ornatissimus</i> <sup>4</sup> Schmutz, 1913                      | Ceylon                         | <i>Macrocarpus integrifolia</i>               |

Tribe 2. SERICOTHRIPINI  
Subtribe 1. SERICOTHRIPINA

6

Genus 1. **Corcithrips** Bhatti, 1973

*C. hartwigi* Bhatti, 1973

Jabalpur (M.P.)

Genus 2. **Elbuthrips** Bhatti, 1973

*E. latis* Bhatti, 1973

Elephanta Island (Maharashtra)

Unidentified shrub

Genus 3. **Hydatothrips** Karny, 1913

*H. ananthakrishnani* Bhatti, 1973

*H. atactus* Bhatti, 1973

M.P.; Tamil Nadu

Delhi

Wild plant; leaves of *Peuraria* sp.

*Alhagi pseudoalhagi*; *Ficus religiosa* leaves

*H. aureus* Bhatti, 1973

*H. boerhaaviae* (Seshadri & Ananthakrishnan, 1954)

Burliar; Madras (Tamil Nadu)

U.P.; Delhi; J. & K.; Maharashtra

Tamil Nadu

Grass; *Peuraria* sp.

*Boerhaavia* sp.; *Antigonum* sp., grass

*H. dorax* Bhatti, 1973

*H. proximus* Bhatti, 1973

Tamil Nadu; M.P.

Mussoorie, Naini tal (U.P.) Kufri; Dharampur (H.P.)

Grass; herbage

Fern; Birch tree *Cypressus tonulosa*; male cone of *Cedrus deodara*; needles of *Pinus* sp.

*H. ramaswamiahi* Karny, 1926

*H. ramaswamiahi diversus* Bhatti, 1973

Coimbatore (Tamil Nadu)

Delhi

Indigo leaves

Herbage

Genus 4. **Kazinothrips** Bhatti, 1973

*K. luridus* (Ananthakrishnan, 1967)

Palghat (Kerala)

*Barleria* sp. flowers

Genus 5. **Neohydatothrips** John, 1929

*N. raniae* (Bhatti, 1967)

Genus 6. **Sericothrips** Haliday, 1836

*S. lineatus*<sup>4</sup> (Schmütz, 1913)

Ceylon

*S. solanifolii* (Shumsher, 1944)

Coimbatore (Tamil Nadu)

Leaves of *Solanum melongena*

| <i>Name</i>                                     | <i>Distribution</i>                   | <i>Host</i>                                                                                                                                                      |
|-------------------------------------------------|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1                                               | 2                                     | 3                                                                                                                                                                |
| Subtribe 2. SCIRTOTHRIPINA                      |                                       |                                                                                                                                                                  |
| Genus 1. <b>Ajothrips</b> Bhatti, 1967          |                                       |                                                                                                                                                                  |
| <i>A. gara</i> Bhatti, 1967                     | Sibpore Botanical Garden,             | Herbage                                                                                                                                                          |
|                                                 | (W. Bengal)                           |                                                                                                                                                                  |
| <i>A. karma</i> Bhatti, 1967                    | Sibpore Botanical Garden              | Herbage                                                                                                                                                          |
|                                                 | (W.Bengal)                            |                                                                                                                                                                  |
| Genus 2. <b>Anascirtotrips</b> Bhatti, 1961     |                                       |                                                                                                                                                                  |
| <i>A. arorai</i> Bhatti, 1961                   |                                       |                                                                                                                                                                  |
| <i>A. ficus</i> Bhatti, 1967                    | M.P.; Maharashtra; Delhi; West Bengal | <i>Ficus religiosa</i> leaves                                                                                                                                    |
| Genus 3. <b>Scirtotrips</b> Shull, 1909         |                                       |                                                                                                                                                                  |
| <i>S. bispinosus</i> (Bagnall, 1924)            | Kotagiri (Tamil Nadu)                 | Tea; Coffee                                                                                                                                                      |
| <i>S. dorsalis</i> Hood, 1919                   | Tamil Nadu; Kerala; Karnataka         | Castor; Chillies; <i>Acacia</i> ; <i>Prosopis</i> ; <i>Cassia</i> ; <i>Azadirachta</i> ; <i>Capsicum</i> ; <i>Caesalpinia</i> ; <i>Nelumbium</i> ; <i>Punica</i> |
| <i>S. fulleri</i> <sup>2</sup> Faure, 1929      | Coimbatore (Tamil Nadu)               | Groundnut leaves ( <i>Arachis hypogea</i> )                                                                                                                      |
| <i>S. oligochaetus</i> (Karny, 1926)            | Coimbatore (Tamil Nadu)               | Flowers and shrubs of cotton; Pomegranate; <i>Caesalpinia pulcherrima</i> ; mulberry shoots                                                                      |
| <i>S. pteridicola</i> Ananthakrishnan, 1968     | Kotagiri (Tamil Nadu)                 | Fern fronds                                                                                                                                                      |
| Tribe 3. CHIROTHRIPINI                          |                                       |                                                                                                                                                                  |
| Genus 1. <b>Chirothrips</b> Haliday, 1836       |                                       |                                                                                                                                                                  |
| <i>C. africanus</i> <sup>2</sup> Priesner, 1932 | New Delhi, Coimbatore (Tamil-Nadu)    | Grass                                                                                                                                                            |

*C. capensis*<sup>2</sup> Zur Strassen, 1958  
*C. maximi* Ananthakrishnan, 1957  
*C. meridionalis*<sup>2, 5</sup> Bagnall, 1927  
*C. mexicanus*<sup>2, 3</sup> Crawford, 1909

Genus 2. **Gnomothrips** Ramakrishna &  
 Margabandhu, 1939

*G. coimbatorensis* Ramakrishna & Margabandhu, 1939

Genus 3. **Neocorynothrips** Ramakrishna &  
 Margabandhu, 1939

*N. asiaticus* Ramakrishna & Margabandhu, 1939

Genus 4. **Neolimothrips** Shumsher, 1942  
 (Near *Bregmatothrips* Hood)

*N. binervis*<sup>4</sup> (Kobus, 1906)

*N. brachycephalus* Shumsher, 1942

Genus 5. **Sciothrips** Bhatti, 1969

*S. cardamomi* (Ramakrishna, 1935)

Genus 6. **Sorghothrips** Priesner, 1936

*S. jonnaphilus* (Ramakrishna, 1928)

Tribe 4. THIRIPINI

Subtribe 2. ANAPHOTHIRIPINA

Genus 1. **Agalmothrips** Priesner, 1965

*A. parviceps*<sup>2</sup> Priesner, 1965

Aravangad ((Tamil Nadu)  
 Madras (Tamil Nadu)

Madras

Coimbatore (Tamil Nadu)

Coimbatore (Tamil Nadu)

Baroda (Gujarat); Madras; Peria-  
 yar (Tamil Nadu)  
 Ambala (Haryana); Coimbatore  
 (Tamil Nadu)

Valparai (Tamil Nadu)

Guntur (Andhra Pradesh); Samal-  
 kot; Coimbatore (Tamil Nadu)

Kanyakumari (Tamil Nadu)

*Imperata*-grass  
 Guinea grass (*Panicum maximum*)

*Chloris barbata*; *Pennisetum typhoides*

*Cyperus bulbosus*

Garden Croton

Sugarcane leaves (rolled tip);  
 grass  
*Pennisetum typhoides*; within tender  
 leaf rolls of *Bambusa arundinacea*

Diseased cardamom spikes &  
 blossoms

Tassels of Maize; tender shoots of  
*Sorghum*; sugarcane leaves

Grass

| <i>Name</i>                                        | <i>Distribution</i>               | <i>Host</i>                                                     |
|----------------------------------------------------|-----------------------------------|-----------------------------------------------------------------|
| 1                                                  | 2                                 | 3                                                               |
| <b>Genus 2. Alathrips</b> Bhatti, 1969             |                                   |                                                                 |
| <i>A. roonwali</i> (Bhatti, 1963)                  | Rajasthan; Delhi; Gujarat, Andhra | <i>Capparis decidua</i> flowers; grass;<br><i>Asparagus</i> sp. |
| <b>Genus 3. Amalothrips</b> Ananthakrishnan, 1967  |                                   |                                                                 |
| <i>A. flaccidus</i> Ananthakrishnan, 1967          | Madras                            | Grass                                                           |
| <b>Genus 4. Anaphothrips</b> Uzel, 1895            |                                   |                                                                 |
| <i>A. latis</i> Bhatti, 1967                       | Bombay                            | Grass                                                           |
| <i>A. obscurus</i> (Muller, 1776)                  | Jammu & Kashmir; H.P.             | Grass and mixed vegetation                                      |
| <i>A. sudanensis</i> <sup>2,4</sup> Trybom         | All over India                    | Arrowroot leaves; Cholan shoots;<br>Sugarcane; grass            |
| <b>Genus 5. Aneurothrips</b> Kanry, 1912           |                                   |                                                                 |
| <i>A. priesneri</i> Bhatti, 1971                   | Madras                            | Leaf galls of <i>Cordia suaveolens</i>                          |
| <b>Genus 6. Aptinothrips</b> Haliday, 1836         |                                   |                                                                 |
| <i>A. karnyi</i> John, 1927                        | Nepal                             |                                                                 |
| <i>A. rufus</i> <sup>1,2,5</sup> (Gmelin, 1790)    | Darjeeling (W. Bengal)            | Tea flowers                                                     |
| <b>Genus 7. Ascirtothrips</b> Priesner, 1965       |                                   |                                                                 |
| <i>A. antilope</i> <sup>2,5</sup> (Priesner, 1923) | Jodhpur; Jaipur (Rajasthan)       | <i>Aerva</i> sp.                                                |
| <i>A. varius acutus</i> Bhatti, 1972               | Firozpur Jhirka (Haryana)         | Unidentified tree                                               |
| <i>A. varius varius</i> Bhatti, 1972               | Delhi                             | <i>Suaeda fruticosa</i>                                         |
| <b>Genus 8. Capitothrips</b> Bhatti, 1974          |                                   |                                                                 |
| <i>C. subramanii</i> Bhatti, 1974                  | Valparai (Tamil Nadu)             | Cane spindles                                                   |

Genus 9. **Caprithrips** Faure, 1933

*C. anolis*<sup>2</sup> Faure, 1933

*C. melanophthalmus*<sup>5</sup> (Bagnall, 1927)

*C. orientalis* Bhatti, 1973

Madras

Jammu & Kashmir; H.P.

Jabalpur (M.P.); Madras (Tamil Nadu)

*Eragrostis* sp.

Grass

Grass

Genus 10. **Dendrothripoides** Bagnall, 1923

*D. innoxius*<sup>4,8</sup> (Karny, 1914)

Kerala; Karnataka; Maharashtra; M.P.

*Ipomea staphylina*

Genus 11. **Exothrips** Priesner, 1939

*E. ananthakrishnani* Bhatti, 1975

*E. anolis* (Bhatti, 1967)

*E. cephalicus* Bhatti, 1975

*E. deemax* Bhatti, 1975

*E. hemavarna* (Ramakrishna & Margabandhu, 1931)

*E. ornus* Bhatti, 1975

*E. poorva* Bhatti, 1975

*E. redox* Bhatti, 1975

*E. sakimurai* (Ananthakrishnan, 1961)

*E. shweta* Bhatti & Ananth, 1978

Madras

Jabalpur (M.P.)

Delhi, M.P.

Delhi

Tamil Nadu; M.P.; Delhi; Maharashtra, Chandigarh

Delhi

Delhi

Delhi, Punjab; J.K.

Madras

Tamil Nadu

*Pennisetum*

Grass

Grass stumps

Grass

Mango leaves

Wheat plant (*Triticum aestivum*)

Grass clumps

—

*Apluda arista*

Grass

Genus 12. **Indusiothrips** Priesner, 1951

*I. seshadrii* Priesner, 1951

Valparai (Tamil Nadu)

Fern sporangia

Genus 13. **Palmiothrips** Bhatti, 1978

*H. palmae* (Ramakrishna, 1934)

Bellary Dist. (Karnataka)

Flower heads of *Phoenix dactylifera*

Genus 14. **Priesneriola** Ananthakrishnan, 1964

*P. o'Neillae* Ananthakrishnan, 1964

Madras (Tamil Nadu); Calcutta (W. Bengal)

Grass

Genus 15. **Psilothrips** Hood, 1927

*P. indicus* Bhatti, 1967

Delhi

*Ipomoea carnea* hedge

| <i>Name</i>                                        | <i>Distribution</i>                             | <i>Host</i>                                               |
|----------------------------------------------------|-------------------------------------------------|-----------------------------------------------------------|
| 1                                                  | 2                                               | 3                                                         |
| <b>Genus 16. Rhamphothrips</b> Karny, 1912         |                                                 |                                                           |
| <i>R. aureus</i> Ananthakrishnan, 1954             | Tamil Nadu; Maharashtra                         | Leaves of <i>Sesbania aegyptica</i> ; spiny shrub         |
| <i>R. jasminae</i> Bhatti, 1977                    | Delhi                                           | Jasminum sambak leaves                                    |
| <i>R. jasminae neritus</i> Bhatti, 1977            | Trivandrum (Kerala)                             | <i>Ailanthus</i> sp.                                      |
| <i>R. pardus</i> Bhatti, 1967                      | Sibpore Botanical Garden (W. Bengal)            | Herbage                                                   |
| <i>R. parviceps</i> Hood, 1919                     | Tamil Nadu; W. Bengal; M.P.; Maharashtra; Delhi | <i>Ailanthus excelsa</i> shoots; herbage; grass; Sal tree |
| <b>Genus 17. Salpingothrips</b> Hood, 1935         |                                                 |                                                           |
| <i>S. hoodi</i> Ananthakrishnan, 1969              | Delhi                                           | Grass                                                     |
| Subtribe 2. THIRIPINA                              |                                                 |                                                           |
| <b>Genus 1. Agriothrips</b> Ananthakrishnan, 1966  |                                                 |                                                           |
| <i>A. brevisetosus</i> Ananthakrishnan, 1966       | Palghat (Kerala)                                | Bamboo spindles                                           |
| <b>Genus 2. Amblythrips</b> Bagnall, 1911          |                                                 |                                                           |
| <i>A. frici</i> (Uzel, 1895)                       |                                                 |                                                           |
| <b>Genus 3. Amphithrips</b> Ananthakrishnan, 1965  |                                                 |                                                           |
| <i>A. argutus</i> Ananthakrishnan, 1965            | Tirupathi (Andhra Pradesh)                      | Galls of an unidentified plant                            |
| <b>Genus 4. Arathrips</b> Bhatti, 1967             |                                                 |                                                           |
| <i>A. cus</i> Bhatti, 1967                         | Jabalpur (M.P.)                                 | Grass                                                     |
| <b>Genus 5. Aroidothrips</b> Ananthakrishnan, 1960 |                                                 |                                                           |
| <i>A. longistylus</i> Ananthakrishnan, 1960        | Kodaikanal (Tamil Nadu)                         | Arum lily ( <i>Richardia</i> sp.) flowers                 |

Genus 6. **Ayyaria** Karny, 1926  
*A. chaetophora* Karny, 1926

Kerala; Tamil Nadu; W. Bengal

Flower of cow-pea (*Vigna catiang*);  
 shoots of castor; grass; *Dolichos*  
*lab-lab*; Jute.

Genus 7. **Baliothrips** Uzel, 1895

*B. aureus* (Ananthakrishnan & Jagadish, 1967)  
*B. bambusae*<sup>4</sup> (Shumsher, 1945)  
*B. bicolor* (Ananthakrishnan & Jagadish, 1967)  
*B. biformis*<sup>5</sup> (Bagnall, 1913)

Mysore (Karnataka)  
 Tamil Nadu; Orissa  
 Aravankadu  
 Tamil Nadu; W. Bengal (India);  
 Weibchen (NEPAL)  
 Madras  
 Hoshiarpur (Punjab);  
 Coimbatore (Tamil Nadu)  
 Kottarakara (Kerala)  
 Omalur  
 Coimbatore (Tamil Nadu)  
 Yercaud

*Striga* sp.  
 Bamboo leaves  
*Imperta* sp.  
 Very young paddy (*Oryza sativa*)  
 Bamboo  
*Arundo donax* leaves  
 Grass  
 Grass  
 Sugarcane sheath  
 Sugarcane  
 Sugarcane  
 Grass

*B. dissidens* (Ananthakrishnan & Jagadish, 1967)  
*B. faurei* (Bhatti, 1963)  
*B. glandularis* (Ananthakrishnan & Jagadish, 1967)  
*B. graminis* (Ananthakrishnan & Jagadish, 1967)  
*B. indicus* (Ramakrishna & Margabandhu, 1931)  
*B. minutus* (Van Devanter, 1906)  
*B. serratus* (Kobus, 1892)  
*B. tenebricus* (Ananthakrishnan & Jagadish, 1968)

Genus 8. **Bathrips** Bhatti, 1962

*B. jasminae* Ananthakrishnan, 1968  
*B. melanicornis*<sup>4</sup> (Shumsher, 1945)

Madras  
 Hoshiarpur (Punjab); Tirupathi  
 (Andhra Pradesh)

Jasmine leaves  
*Jasminum* sp.; *Ipomea* leaves

Genus 9. **Biltothrips** Bhatti, 1973

*B. minutus* (Bhatti, 1967)

Sibpore (W. Bengal)

*Pithecolobium dulce* sapplings

Genus 10. **Bolacidothrips** Priesner, 1960

*B. evittatus* Sakimura, 1958  
*B. graminis indicus* Ananthakrishnan, 1966  
*B. oryzae*<sup>2</sup> Moulton, 1942

Tinnevely (Tamil Nadu)  
 Kerala; Tamil Nadu; Maharashtra  
 Gujarat  
 Madras

Grass  
 Bamboo spindles; grass; wild cane  
 sheaths  
*Panicum maximum*

| <i>Name</i>                                        | <i>Distribution</i>                                                       | <i>Host</i>                                                              |
|----------------------------------------------------|---------------------------------------------------------------------------|--------------------------------------------------------------------------|
| 1                                                  | 2                                                                         | 3                                                                        |
| Genus <b>11. Ceratothripoides</b> Bagnall, 1918    |                                                                           |                                                                          |
| <i>C. claratris</i> (Shumsher, 1945)               | Cuttack (Orissa)                                                          | <i>Solanum melongena</i> flowers                                         |
| Genus <b>12. Ceratothrips</b> Reuter, 1899         |                                                                           |                                                                          |
| <i>C. alis</i> (Bhatti, 1967)                      | Delhi                                                                     | Grass                                                                    |
| Genus <b>13. Chaetanaphothrips</b> Priesner, 1926  |                                                                           |                                                                          |
| <i>C. leeuweni</i> <sup>4</sup> (Karny, 1914)      | Madras                                                                    | Grass                                                                    |
| <i>C. orchidii</i> <sup>4,8</sup> (Moulton, 1907)  | Kerala; Tamil Nadu; W. Bengal                                             | Leaf folds of Rutaceous plant;<br><i>Alternanthera</i> sp.; wild pasture |
| Genus <b>14. Chloethrips</b> Priesner, 1957        |                                                                           |                                                                          |
| <i>C. blandus</i> zur Strassen, 1975               | U.P.; W. Bengal; Maharashtra;<br>Tamil Nadu                               | Grass; <i>Oryza sativa</i>                                               |
| Genus <b>15. Craspedothrips</b> Zur Strassen, 1966 |                                                                           |                                                                          |
| <i>C. minor</i> (Bagnall, 1921)                    | Tamil Nadu; Karnataka; Delhi;<br>W. Bengal; M.P.                          | <i>Ipomea staphylina</i> ; castor                                        |
| Genus <b>16. Ctenidothrips</b> Priesner, 1951      |                                                                           |                                                                          |
| <i>C. bambusae</i> Priesner, 1951                  | Singampatti (Tamil Nadu)                                                  | Bamboo spindles                                                          |
| Genus <b>17. Ctenothrips</b> Franklin, 1907        |                                                                           |                                                                          |
| <i>C. niger</i> Kudo, 1977                         | Melanche & Dhunche (NEPAL);<br>Maghna, Darjeeling Dist., W.B.<br>(INDIA). | Unknown evergreen tree leaves;<br>bamboo; dead branches                  |
| <i>C. smilax</i> Bhatti, 1976                      | J. & K.; H.P.                                                             | Ferns: herbage                                                           |

Genus 18. **Danothrips** Bhatti, 1971

*D. setifer* Bhatti, 1971

Madras (Tamil Nadu); Kula-  
thupuzha (Kerala)

Grass

Genus 19. **Diarthrothrips** Williams, 1915

*D. nimbus* (Ananthakrishnan, 1965)

Widely, distributed in India

*Lantana* sp.

Genus 20. **Dichromothrips** Priesner, 1932

*D. indicus* Mound, 1976

*D. nakahari* Mound, 1976

*D. phalaenopsidis* <sup>4,5</sup>Sakimura, 1955

*D. smithi* <sup>4,5</sup> (Zimmerman, 1900)

Kalimpong (W.B.)

Orchid

Calcutta

*Dendrobium* sp. stem

Borivli (Maharashtra); Kanheri  
National Park (Maharashtra)

Orchid epiphytic on mango, *Vanda*

Conjeevaram (Tamil Nadu)

Sugarcane leaves

Genus 21. **Dorcadothrips** Priesner, 1932

*D. albus* Bhatti, 1978

*D. fasciatus* Bhatti, 1967

*D. flavidus* Bhatti, 1978

*D. indicus* Bhatti, 1978

*D. nilgiricus* Ramakrishna & Margabandhu, 1939

*D. similis* Ananthakrishnan, 1967

Mussoorie (U.P.)

Fern

Sibpore (West Bengal)

Grass

Tumkur (Karnataka)

Bamboo

West Bengal; M.P.; Karnataka;  
Maharashtra

Grass; Wild herb

Madras

*Ipomea* sp.

Genus 22. **Ednathrips** Bhatti, 1976

*E. pardus* Bhatti, 1976

Nainital (U.P.) Sultanpur Lake  
(Haryana)

Short grass

Genus 23. **Ernothrips** Bhatti, 1969

*E. lobatus* Bhatti, 1967

Jabalpur (M.P.)

Grass

| <i>Name</i>                                                     | <i>Distribution</i>                                                            | <i>Host</i>                                                                                                                                                  |
|-----------------------------------------------------------------|--------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1                                                               | 2                                                                              | 3                                                                                                                                                            |
| <b>Genus 24. Euphysothrips</b> Bagnall, 1926                    |                                                                                |                                                                                                                                                              |
| <i>E. fungivora</i> (Ramakrishna, 1928)                         | Coimbatore (Tamil Nadu)                                                        | Rust of wheat plants                                                                                                                                         |
| <i>E. minozzii</i> <sup>2,5</sup> Bagnall, 1926                 | Coimbatore; Kovilpatti (Tamil Nadu)                                            | Ears of <i>Pennisetum typhoideum</i> ; <i>Lucerne</i> sp.                                                                                                    |
| <b>Subgenus Megaphysothrips</b> Ramakrishna & Margabandhu, 1939 |                                                                                |                                                                                                                                                              |
| <i>M. subramanii</i> Ramakrishna & Margabandhu, 1939            | Dodkhan Estate (Karnataka)                                                     | Coffee rust                                                                                                                                                  |
| <b>Genus 25. Florithrips</b> Bhatti, 1969                       |                                                                                |                                                                                                                                                              |
| <i>F. traegardhi</i> (Trybom, 1911)                             | Coimbatore; Kambakkam (Tamil Nadu); Kollegal (Andhra Pradesh)                  | Ragi inflorescence; ears of cumbu; <i>Acacia arabica</i>                                                                                                     |
| <b>Genus 26. Foliothrips</b> Bhatti, 1972                       |                                                                                |                                                                                                                                                              |
| <i>F. oratus</i> Bhatti, 1972                                   | Delhi                                                                          | <i>Acacia</i> leaves                                                                                                                                         |
| <b>Genus 27. Frankliniella</b> Karny, 1911                      |                                                                                |                                                                                                                                                              |
| <i>F. insularis</i> (Franklin)                                  |                                                                                |                                                                                                                                                              |
| <i>F. intonsa</i> (Trybom, 1895)                                | Pusa (Bihar)                                                                   | Berseem ( <i>Trifolium alexandrinum</i> )                                                                                                                    |
| <i>F. paucispinosa</i> <sup>3</sup> Moulton, 1933               |                                                                                |                                                                                                                                                              |
| <i>F. schultzei</i> <sup>4</sup> (Trybom, 1910)                 | Kalianpur (U.P.) Tamil Nadu; Andhra Pradesh; Orissa; Punjab; Punjab, W. Bengal | Pumpkin; Chrysanthemum; <i>Lantana</i> ; <i>Bignonia grandis</i> ; <i>Lucerne</i> ; <i>Datura</i> ; <i>Hibiscus rosinensis</i> ; Jasmine; cotton food plants |
| <b>Genus 28. Krasibothrips</b> Kudo, 1977                       |                                                                                |                                                                                                                                                              |
| <i>K. coluckus</i> <sup>4</sup> Kudo, 1977                      | Melanche & Bokhajunda (NEPAL)                                                  | <i>Quercus</i> sp. leaves & <i>Mahonia nepalensis</i> leaves                                                                                                 |

Genus 29. **Laplothrips** Bhatti, 1972

*L. bicolor* Bhatti, 1972

Mussoorie (U.P.)

Fern

Genus 30. **Lefroyothrips** Priesner, 1938

*L. lefroyi* (Bagnall, 1913)

Darjeeling (W. Bengal); Hoshiarpur (Punjab)

Tea flowers

*L. obscurus* (Ananthakrishnan & Jagadish, 1966)

Valparai (Tamil Nadu)

Coffee leaves

Genus 31. **Megalurothrips** Bagnall, 1915

*M. distalis*<sup>5</sup> (Karny, 1913)

All over India; Samchi (BHUTAN)

Lab-Lab flowers; Sunhemp flowers  
*Pongamia glabra*; *Nepelium litchi*  
flower; *Lucerne*

*M. morosus* (Priesner, 1938)

Valparai (Tamil Nadu)

Coffee leaves

*M. peculiaris* (Bagnall, 1918)

Dehra Dun (U.P.); Pusa (Bihar)  
Madras (Tamil Nadu)

Flowers of *Pongamia glabra*; *Lucerne*;  
Leaves of *Leptadenia* sp.

*M. typicus*<sup>4</sup> (Bagnall, 1915)

Tambaram; Madras (Tamil Nadu)  
(INDIA) Samchi (BHUTAN)

*Pongamia glabra* flowers

Genus 32. **Micothrips** Ananthakrishnan, 1965

*M. fasciatus* Ananthakrishnan, 1965

Madras

*Ruellia* flowers

Genus 33. **Microcephalothrips** Bagnall, 1926

*M. abdominalis*<sup>1,2,3,4,5,6</sup> (Crawford, 1910)

All over India

Chrysanthemum flowers

Genus 34. **Mycterothrips** Trybom, 1910

*M. acaciae*<sup>2</sup> Priesner, 1932

Maharashtra; M.P.; Haryana;  
Delhi

*Lantana*; grass; *Capparis decidua*  
flowers

*M. moultoni* Seshadri & Ananthakrishna, 1954

Coimbatore (Tamil Nadu)

Leaves of ribbed gourd (*Luffa*  
*acutangula*)

*M. nilgiriensis* (Ananthakrishnan, 1960)

Kodaikanal (Tamil Nadu)  
Hoshiarpur (Punjab)

Flower of the orchid (*Cymbidium*  
*bicolor*); *Cassia* sp.

*M. ricini* (Shumsher, 1945)

Delhi

Leaves of *Ricinus communis*

*M. setiventris* (Bagnall, 1918)

Darjeeling (W. Bengal)

Tea bushes

Genus 35. **Organothrips** Hood, 1940

*O. indicus* Bhatti, 1974

Delhi

Dry vegetation

| <i>Name</i>                                          | <i>Distribution</i>       | <i>Host</i>                                                    |
|------------------------------------------------------|---------------------------|----------------------------------------------------------------|
| 1                                                    | 2                         | 3                                                              |
| <b>Genus 36. Oxythrips</b> Uzel, 1895                |                           |                                                                |
| <i>O. kochummani</i> Ananthakrishnan, 1969           | Simla (H.P.)              | Male cones of <i>Cedrus deodraa</i>                            |
| <b>Genus 37. Projectothrips</b> Moulton, 1929        |                           |                                                                |
| <i>P. bhatti</i> Ananthakrishnan, 1973               | Coimbatore (Tamil Nadu)   | Ex. Psyllid galls on <i>Tephrosia</i> ;<br><i>Pandanus</i> sp. |
| <i>P. pruthi</i> Moulton, 1929                       | Sibpore (W. Bengal)       | <i>Pandanus</i> sp.                                            |
| <b>Genus 38. Scolothrips</b> Hinds, 1902             |                           |                                                                |
| <i>S. asura</i> Ramakrishna & Margabandhu, 1931      | Coimbatore (Tamil Nadu)   | Banana leaves                                                  |
| <i>S. indicus</i> Prienser, 1950                     | Coimbatore (Tamil Nadu)   | Flowers of <i>Punica granatum</i>                              |
| <b>Genus 39. Smeringothrips</b> Prienser, 1938       |                           |                                                                |
| <i>S. salaciae</i> Prienser, 1938                    | Panchmarchi (M.P.)        | Grass                                                          |
| <b>Genus 40. Smilothrips</b> Bhatti, 1976            |                           |                                                                |
| <i>S. productus</i> Bhatti, 1976                     | McLeodganj (H.P.)         | Grass                                                          |
| <b>Genus 41. Taeniothrips</b> Amyot & Serville, 1843 |                           |                                                                |
| <i>T. chaetogastra</i> Ramakrishna, 1934             | Coimbatore (Tamil Nadu)   | Persian nim̃flowers                                            |
| <i>T. flavidulus</i> (Bagnall, 1923)                 | Nepal; Dehra Dun (U.P.)   |                                                                |
| <i>T. immsi</i> (Bagnall, 1926)                      | Bhowali; Dehra Dun (U.P.) | Clematis; <i>Eriobotrya japonica</i>                           |
| <i>T. janetscheki</i> Pelikan, 1970                  | Mingbo-Tal (NEPAL)        |                                                                |
| <i>T. major</i> Bagnall, 1916                        | NEPAL; Kulhara (U.P.)     |                                                                |
| <i>T. morosus</i> Prienser, 1938                     | NEPAL                     |                                                                |
| <i>T. simplex</i> Morison, 1930                      | Coonoor (Tamil Nadu)      | Gladiolus and other hill flowers                               |

|                                                            |                                                                         |                                                                               |
|------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| Genus <b>42. Thrips</b> Linnaeus, 1761                     |                                                                         |                                                                               |
| <i>T. albipes</i> <sup>5</sup> Bagnall, 1914               | Dehra Dun; Bhowali (U.P.)<br>(INDIA) (NEPAL)                            | <i>Nasturtium</i> ; <i>Eriobotrya japonica</i> flower;<br><i>Clematis</i> sp. |
| <i>T. andrewsi</i> (Bagnall, 1921)                         | Darjeeling (W. Bengal)                                                  | Rose                                                                          |
| <i>T. apicatus</i> Priesner, 1934                          | Guntur (Andhra Pradesh)                                                 | <i>Acacia</i> flower                                                          |
| <i>T. atactus</i> Bhatti, 1967                             | Sibpore Botanical Garden (W. Bengal)                                    | <i>Hedelia</i> sp.                                                            |
| <i>T. brunneus</i> Ananthakrishnan & Jagadish, 1968        | Madras                                                                  | <i>Cynachum alatum</i>                                                        |
| <i>T. carthami</i> Shumsher, 1945                          | Palampore (J. & K.)                                                     | <i>Carthamus tinctorius</i>                                                   |
| <i>T. ciliatus</i> Bhatti, 1969                            | Kulhara (U.P.)                                                          | Rhododendron flower                                                           |
| <i>T. coloratus</i> <sup>4, 5</sup> Schmutz, 1913          | Madras (INDIA); NEPAL                                                   | Grass                                                                         |
| <i>T. flavus</i> <sup>1, 2, 5</sup> Schrank, 1776          | Kodaikanal (Tamil Nadu); U.P.;<br>H.P. (Confined in India in altitudes) | Polyphagous                                                                   |
| <i>T. hawaiiensis</i> <sup>4, 5</sup> (Morgan, 1913)       | All over India —                                                        | Numerous plants                                                               |
| <i>T. himalayanus</i> (Pelikan, 1970)                      | Yaral bei Pangpoche (NEPAL)                                             | Rhododendron                                                                  |
| <i>T. hispidus</i> Ananthakrishnan & Jagadish, 1966        | Shencottah (Tamil Nadu)                                                 | <i>Acacia</i> sp.                                                             |
| <i>T. kallarensis</i> (Ananthakrishnan, 1960)              | Kallar (Tamil Nadu)                                                     | Wood apple flower                                                             |
| <i>T. kodaikanalensis</i> Ananthakrishnan & Jagadish, 1966 | Kodaikanal (Tamil Nadu)                                                 | Flowers                                                                       |
| <i>T. latis</i> Bhatti, 1967                               | Sibpore (W. Bengal); Adichannal-<br>lur; Kulthupuzha (Kerala)           | Cow-pea; grass                                                                |
| <i>T. longiceps</i> (Bagnall, 1916)                        | Kulhara (U.P.)                                                          | Rhododendron flower                                                           |
| <i>T. melaneurus</i> Bagnall, 1926                         | Darjeeling (W. Bengal)                                                  | Rose                                                                          |
| <i>T. pallidulus</i> Bagnall, 1924                         | Pusa; Bihar (INDIA); NEPAL                                              | Tobacco flowers; orange flower;<br>Lab-lab flowers; <i>Lantana</i> sp.        |
| <i>T. palmi</i> <sup>4</sup> Karny, 1925                   | Coimbatore; Nilgiris (Tamil Nadu)                                       | <i>Sesamum indicum</i>                                                        |
| <i>T. parvus</i> <sup>4</sup> Schmutz, 1913                | Coimbatore (Tamil Nadu)                                                 | <i>Caesalpinia pulcherrima</i> flowers                                        |
| <i>T. setosus</i> <sup>5</sup> Moulton, 1929               | Balighai (Orissa)                                                       |                                                                               |
| <i>T. tabaci</i> <sup>7</sup> Lindemann, 1888              | All over India                                                          | Flower and shoots of cotton;<br>cabbage leaves, onion, wild bush              |
| <i>T. tanicus</i> (Ananthakrishnan & Jagadish, 1968)       | Kotagiri (Tamil Nadu)                                                   | Flower of <i>Ulex</i> sp.                                                     |
| <i>T. tectus</i> (Zur Strassen, 1975)                      | Changra (BHUTAN)                                                        |                                                                               |

| <i>Name</i>                                              | <i>Distribution</i>                                                 | <i>Host</i>                                                                                                                                                  |
|----------------------------------------------------------|---------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1                                                        | 2                                                                   | 3                                                                                                                                                            |
| Subgenus <b>Athrips</b> Priesner, 1938                   |                                                                     |                                                                                                                                                              |
| <i>A. heveae</i> (Ananthakrishnan & Jagadish, 1968)      | Tenmalai (Kerala)                                                   | Rubber flower                                                                                                                                                |
| Subgenus <b>Isothrips</b> Priesner, 1940                 |                                                                     |                                                                                                                                                              |
| <i>I. orientalis</i> <sup>2, 4, 5, 8</sup> Bagnall, 1915 | All over India                                                      | Jasmine flower; <i>Morinda tinctoria</i> flower                                                                                                              |
| Subgenus <b>Oxyrrhinothrips</b> Priesner, 1933           |                                                                     |                                                                                                                                                              |
| <i>O. beharensis</i> Ramakrishna & Margabandhu, 1939     | Pusa (Bihar)                                                        | Mango                                                                                                                                                        |
| <i>O. rostrata</i> Ramakrishna & Margabandhu, 1939       | Coimbatore (Tamil Nadu)                                             | Cotton                                                                                                                                                       |
| Subgenus <b>Ramaswamiabiella</b> Karny, 1926             |                                                                     |                                                                                                                                                              |
| <i>R. subnudula</i> Karny, 1926                          | Tamil Nadu; Karnataka                                               | Flowers of <i>Calotropis</i> ; <i>Illecebrum lantanum</i> ; <i>Caesalpinia pulcherrima</i> ; <i>Hibiscus rosa-sinensis</i> ; orange; mango and sandal shoots |
| Genus <b>43. Trichromothrips</b> Priesner, 1930          |                                                                     |                                                                                                                                                              |
| <i>T. alis</i> Bhatti, 1967                              | Patan Village (M.P.)                                                | "Jungi" flowers                                                                                                                                              |
| <i>T. arorai</i> Bhatti, 1967                            | Sibpore Botanical Garden (W. Bengal)                                | Grass                                                                                                                                                        |
| <i>T. bellus</i> <sup>2</sup> Priesner, 1930             |                                                                     | Grass                                                                                                                                                        |
| <i>T. priesneri</i> (Bhatti, 1967)                       | Jabalpur (M.P.)                                                     |                                                                                                                                                              |
| Genus <b>44. Tusothrips</b> Bhatti, 1967                 |                                                                     |                                                                                                                                                              |
| <i>T. setiprivus</i> (Karny, 1926)                       | Coimbatore (Tamil Nadu); Sibpore (W. Bengal)                        | Shoots of wild legume; herbage                                                                                                                               |
| <i>T. sumatrensis</i> (Karny, 1925)                      | Tamil Nadu; Delhi; M.P.; Rajasthan; W. Bengal; Maharasthra; J. & K. | <i>Malvestrum</i> ; tomato ( <i>Lycopersicon</i> ); brinjal                                                                                                  |

Subfamily 2. PANCHAETOTHRIPINAE

Genus 1. **Astrothrips** Karny, 1921

*A. asiaticus* (Bhatti, 1967)

*A. globiceps*<sup>8</sup> (Karny, 1913)

*A. lantana* Bhatti, 1967

*A. parvilimbus* Stannard & Mitri, 1962

*A. stannardi* Bhatti, 1967

*A. tumiceps*<sup>4</sup> Karny, 1923

W. Bengal; Tamil Nadu; Kerala;  
Maharashtra; M.P.; Delhi

Poona (Maharashtra)

Jabalpur (M.P.)

Madras

Delhi; Haryana; Rajasthan

M.P.; Tamil Nadu; W. Bengal;  
Punjab; Goa

*Pongamia glabra*; Castor leaves;  
*Wadelia* leaves; *Colocasia* leaves

*Colocasia* leaves

*Lantana* leaves

*Crinum* sp., Castor; grass

*Mirabilis jalapa* leaves; *Lantana*  
leaves; *Ipomea carnea* leaves; *Celosia*  
inflorescence; *Sida*; *Ageratum*;  
*Cynodon*; herbage

Castor leaves; *Wadelia* leaves;  
*Erythrina indica*; *Acacia* sp.

Genus 2. **Caliothrips** Daniel, 1904

*C. graminicola*<sup>2</sup> (Bagnall & Cameron, 1932)

*C. impurus*<sup>2</sup> (Priesner, 1928)

*C. indicus* (Bagnall, 1913)

*C. luckmanni* Wilson, 1975

*C. striatopterus*<sup>4,6</sup> (Kobas, 1893)

W. Bengal; J. & K.; Delhi

M.P.; Tamil Nadu

All over India

M.P.; Tamil Nadu

Delhi; Rajasthan; Tamil Nadu

Grass; *Cannabis sativa*

Grass

Indigo; berisim; onion; brinjal;  
*Cannabis sativa*; sunnhemp flowers;  
date flowers; cauliflower

Mango leaves; grass

Grass; herbage; *Sida*

Genus 3. **Euidothrips** Ananthakrishnan, 1967

*E. apsarus* Ananthakrishnan, 1967

Kalahasthi (Andhra Pradesh)

Grass

Genus 4. **Helionothrips** Bagnall, 1932

*H. bruneipennis*<sup>4</sup> (Bagnall, 1915)

*H. kadaliphilus* (Ramakrishna & Margabandhu, 1931)

*H. nilgircus* (Ananthakrishnan, 1967)

*H. parvus* Bhatti, 1968

Ceylon

Tamil Nadu; Kerala; Maharashtra

Kotagiri (Tamil Nadu)

Mussoorie (U.P.)

*Litsea chinensis*

Banana; *Anona squamosa*; *Colocasia*;  
grass

Bamboo spindles

Fern (*Dryopteris felix*)

| <i>Name</i>                                                                                                                                           | <i>Distribution</i>                                                                 | <i>Host</i>                                                             |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| 1                                                                                                                                                     | 2                                                                                   | 3                                                                       |
| Genus 5. <b>Heliothrips</b> Haliday, 1836<br><i>H. ceylonicus</i> <sup>4</sup> Schmutz, 1913<br><i>H. haemorrhoidalis</i> <sup>4,6</sup> Bouche, 1853 | Andhra Pradesh; Kerala; Karnataka; Tamil Nadu; Maharashtra<br>Tamil Nadu; Karnataka | Garden Croton; Coffee<br>Garden Croton; <i>Melia azadirachta</i> shoots |
| Genus 6. <b>Hercinothrips</b> Bagnall, 1932<br><i>H. bicinctus</i> <sup>2,5</sup> (Bagnall, 1919)                                                     | Coonoor; Kodaikanal (Tamil Nadu)                                                    | <i>Trifolium</i> leaves                                                 |
| Genus 7. <b>Monilothrips</b> Moulton, 1929<br><i>M. kempi</i> <sup>1,2</sup> Moulton, 1929                                                            | Darjeeling (W. Bengal); Mussoorie (U.P.)                                            | <i>Dryopteris</i> and other ferns                                       |
| Genus 8. <b>Noathrips</b> Bhatti, 1967<br><i>N. prakashi</i> Bhatti, 1967                                                                             | Jabalpur (M.P.)                                                                     | Lantana leaves; herbage                                                 |
| Genus 9. <b>Panchaetothrips</b> Bagnall, 1912<br><i>P. indicus</i> Bagnall, 1912                                                                      | Tamil Nadu; Kerala; Bihar                                                           | <i>Curcuma longa</i> , turmeric; arrow-root leaves; banana; cotton      |
| Genus 10. <b>Parthenothrips</b> Uzel, 1895<br><i>P. dracaenae</i> <sup>1</sup> (Heeger, 1852)                                                         | Ootacamund (Tamil Nadu); Jabalpur (M.P.)                                            | Wild <i>Solanum</i> sp.; <i>Citrus aurantifolia</i>                     |
| Genus 11. <b>Phibalothrips</b> Hood, 1918<br><i>P. peringueyi</i> <sup>2</sup> (Faure, 1925)                                                          | Tamil Nadu; W. Bengal                                                               | <i>Panicum</i> and other grasses; maize; Soybean leaflets               |

10

Genus 12. **Retithrips** Marchal, 1910  
*R. syriacus*<sup>3</sup> (Mayet, 1890)

Madras

Cotton; grapevine; *Acalypha*; *Cassia auriculata*; *Ricinis communis*; *Punica granatum*

Genus 13. **Rhipiphorothrips** Morgan, 1913  
*R. cruentatus*<sup>4</sup> Hood, 1919

Tamil Nadu; Kerala; Karnataka; Punjab; W. Bengal

Grapevine leaves; castor; rose; *Careya arborea*; *Anacardium occidentale*; *Punica granatum*; *Terminalia* sp.; *Cyperus* sedges; *Jatropha curcas*; *Lagerstomea* sp.

Genus 14. **Selenothrips** Karny, 1911  
*S. rubrocinctus*<sup>1, 2, 5, 8</sup> (Giard, 1901)

W. Bengal; Kerala

*Aporosa*; *Cardenia* flowers; Cashew-nut leaves

Genus 15. **Tryphactothrips** Bagnall, 1919  
*T. rutherfordi*<sup>4</sup> (Bagnall, 1915)

Tamil Nadu; Punjab

*Datura* flowers; cotton; brinjal Forest tree

Genus 16. **Zaniothrips** Bhatti, 1967  
*Z. ricini* Bhatti, 1967

Jabalpur(M.P.); Sibpore Botanical Garden (W.B.)

Castor leaves

Suborder: **TUBULIFERA**

Family: **PHLAEOTHIRIPIDAE**

Subfamily: **UROTHRIPINAE**

Genus 1. **Ananthakrishnaniella** Stannard, 1970  
*A. tarai* Stannard, 1970

Nainital (U.P.)

Genus 2. **Baenothrips** Crawford, 1948  
*B. asper*<sup>2</sup> (Bournier, 1963)

Kalahasti, (Andhra Pradesh)

Grass

*B. minutus* (Ananthakrishnan, 1964)

Anamalais (Tamil Nadu)

Kodaikanal Hills (Tamil Nadu)

Dry grass

| <i>Name</i>                                           | <i>Distribution</i>                             | <i>Host</i>                                           |
|-------------------------------------------------------|-------------------------------------------------|-------------------------------------------------------|
| 1                                                     | 2                                               | 3                                                     |
| Genus 3. <b>Bournieria</b> Ananthakrishnan, 1966      |                                                 |                                                       |
| <i>B. indica</i> Ananthakrishnan, 1966                | Kodaikanal (Tamil Nadu)                         | Grass                                                 |
| Genus 4. <b>Bradythrips</b> Hood & Williams, 1925     |                                                 |                                                       |
| <i>B. hesperus</i> <sup>1</sup> Hood & Williams, 1925 | Kulathupuzha (Kerala)                           | Decaying twig                                         |
| Genus 5. <b>Habrothrips</b> Ananthakrishnan, 1967     |                                                 |                                                       |
| <i>H. curiosus</i> Ananthakrishnan, 1967              | Madras                                          | Dry twig of <i>Morus alba</i>                         |
| Genus 6. <b>Stephanothrips</b> Trybom, 1912           |                                                 |                                                       |
| <i>S. adnatus</i> Ananthakrishnan, 1972               | Mukteswar (U.P.)                                | Dry twigs                                             |
| <i>S. occidentalis</i> Hood & Williams, 1925          | Tamil Nadu; Kerala; Andhra Pradesh; West Bengal | Dry grass; dry bamboo leaves; dry twigs               |
| Subfamily: PHLAEOTHIRIPINAE                           |                                                 |                                                       |
| Genus 1. <b>Ablemothrips</b> Ananthakrishnan, 1970    |                                                 |                                                       |
| <i>A. maxillaius</i> Ananthakrishnan, 1970            | Kalimpong (W. Bengal)                           | Dry fungus infested bamboo twigs and other dry twigs. |
| Genus 2. <b>Aclystothrips</b> Ananthakrishnan, 1971   |                                                 |                                                       |
| <i>A. aberrans</i> Ananthakrishnan, 1973              | Tirupathi (Andhra Pradesh)                      | Leaf galls of <i>Ficus</i> sp.                        |
| <i>A. priesneri</i> Ananthakrishnan, 1971             | Kiruvatti (Karnataka)                           | Unidentified gall                                     |
| Genus 3. <b>Adelothrips</b> Hood, 1938                |                                                 |                                                       |
| <i>A. nepalensis</i> Pelikan, 1970                    | Likhu Khola (NEPAL)                             |                                                       |
| Genus 4. <b>Adraneothrips</b> Hood, 1925              |                                                 |                                                       |
| <i>A. disjunctus</i> Ananthakrishnan, 1972            | Tirupathi (Andhra Pradesh)                      | Dry twig                                              |
| <i>A. elegans</i> Ananthakrishnan, 1972               | Aryankavu (Kerala)                              | Dry twigs                                             |

*A. madrasensis* Ananthakrishnan, 1968  
*A. stannardi* Ananthakrishnan, 1969

Genus 5. **Aeglothrips** Ananthakrishnan, 1969  
*A. denticulus* Ananthakrishnan, 1969

Genus 6. **Agrothrips** Jacot-Guillarmod, 1939  
*A. insolitus* Ananthakrishnan, 1969

Genus 7. **Aleurodothrips** Franklin, 1909  
*A. fasciapennis*<sup>1,8</sup> (Franklin, 1908)

Genus 8. **Alcothrips** Priesner, 1951  
*A. hadrocerus* (Karny, 1926)

Genus 9. **Alloiothrips** Ananthakrishnan, 1964  
*A. nigrisetis* Ananthakrishnan, 1964

Genus 10. **Ananthakrishnan** Bhatti, 1967  
*A. indica* Bhatti, 1967

Genus 11. **Androthrips** Karny, 1912  
*A. coimbatorensis*<sup>4</sup> Ramakrishna, 1934  
*A. flavipes* Schmutz, 1915  
*A. flavitibia* Moulton, 1932  
*A. melastomae* Zimmermann, 1900  
*A. ramachandrai* Karny, 1926

Genus 12. **Apelaunothrips** Karny, 1925  
*A. indicus* (Ananthakrishnan, 1967)  
*A. lucidus* (Ananthakrishnan, 1965)  
*A. madrasensis* (Ananthakrishnan, 1964)

Madras  
 Madras

Thalavur (Kerala)

Tirumalai (Andhra Pradesh)

Palghat (Kerala), Kolathur (Tamil Nadu) Calcutta (W. Bengal)

Sangleteri (Tamil Nadu)

Salem (Tamil Nadu)

New Delhi

Coimbatore (Tamil Nadu)  
 Tamil Nadu; Kerala; Assam;  
 Meghalaya; Tripura  
 Dehra Dun (U.P.)  
 Madras  
 Courtallam (Tamil Nadu)

Madras  
 Trivandrum; Kulathupuzha  
 (Kerala); Madras; Kodaikanal  
 (Tamil Nadu)  
 Madras; Kodaikanal (Tamil Nadu);  
 Kulathupuzha (Kerala)

Dry grass  
 Dry fungus infested *Thevetia* twigs

Galls of *Gymnosporia* sp.

Dry *Smilax* twigs

Bamboo; *Palmyra* leaf; *Pandanus* sp.

Wild plant

Leaves of *Carissa* sp.

Grass

Bamboo  
 Galls of *Mimusops elengi*

Galls of *Mallotus philippinensi*  
 Gall of *Cordia suaveolens*  
 Galls of *Calyocopteris floribunda*

Decaying vegetation and dry twigs  
 Dried grass

Decaying twigs & vegetation

| <i>Name</i>                                                        | <i>Distribution</i>                                     | <i>Host</i>                                       |
|--------------------------------------------------------------------|---------------------------------------------------------|---------------------------------------------------|
| 1                                                                  | 2                                                       | 3                                                 |
| <b>Genus 13. Antillothrips</b> Stannard, 1957                      |                                                         |                                                   |
| <i>A. graminellus</i> (Ananthakrishnan & Jagadish, 1969)           | Tirupathi (Andhra Pradesh);<br>Tumkur                   | Grass; bamboo                                     |
| <i>A. malabaricus</i> (Ananthakrishnan, 1965)                      | Chalakudi; Palghat (Kerala);<br>Coimbatore (Tamil Nadu) | Grass; bamboo                                     |
| <i>A. micropterus</i> Pitkin, 1976                                 | Chalakudi (Kerala)                                      | Bamboo                                            |
| <i>A. nayari</i> (Ananthakrishnan, 1958)                           | Trivandrum; Thalachira (Kerala)                         | Bamboo sheaths                                    |
| <i>A. varius</i> (Ananthakrishnan & Jagadish, 1969)                | Adur (Kerala); Dehra Dun (U.P.)                         | Palm sheaths; dry twigs                           |
| <b>Genus 14. Apterygothrips</b> Priesner, 1933                     |                                                         |                                                   |
| <i>A. dempax</i> Bhattar Ananth; 1978                              | Kalahati (Andhra Pradesh)                               | Grass                                             |
| <i>A. fungosus</i> <sup>5</sup> (Ananthakrishnan & Jagadish, 1969) | Madras                                                  | Decaying twigs                                    |
| <i>A. hispanicus</i> (Bagnall, 1916)                               | Kulhara, Garhwal (U.P.)                                 | Rhododendron flower                               |
| <i>A. jogensis</i> (Ananthakrishnan & Jagadish, 1969)              | Jog Falls (Karnataka)                                   | Fungus infested branches of <i>Flacourtia</i> sp. |
| <i>A. pellucidus</i> (Ananthakrishnan, 1968)                       | Madras                                                  | <i>Sorghum</i> leaves, grass                      |
| <i>A. pini</i> Ananthakrishnan, 1960                               | Kodaikanal (Tamil Nadu)                                 | Pine needles, dry twigs                           |
| <i>A. rubiginosus</i> (Ananthakrishnan & Jagadish, 1971)           | Kodaikanal (Tamil Nadu)                                 | <i>Lantana</i> sp. twigs                          |
| <b>Genus 15. Araeothrips</b> Ananthakrishnan, 1976                 |                                                         |                                                   |
| <i>A. longisetis</i> Ananthakrishnan, 1976                         | Kanha Reserve Forest (M.P.)                             | Leaves of unidentified tree                       |
| <b>Genus 16. Arrhenothrips</b> Hood, 1919                          |                                                         |                                                   |
| <i>A. acuminatus</i> Ananthakrishnan, 1969                         | Tirupathi (Andhra Pradesh)                              | Galls of <i>Mimusops</i> sp.                      |
| <i>A. dhumrapaksha</i> Ramakrishna, 1928                           | Mysore (Karnataka)                                      | Leaf galls of <i>Ficus retusa</i>                 |
| <i>A. longisetis</i> Sen, 1977                                     | Darjeeling (W. Bengal)                                  | Flower of an unidentified plant                   |
| <i>A. ramakrishnae</i> Hood, 1919                                  | Madras                                                  | Galls of <i>Mimusops elengi</i>                   |

Genus 17. **Austrothrips** Brethes, 1915  
*A. cochinchinensis*<sup>4</sup> Karny, 1923

Courtallam (Tamil Nadu); Calicut,  
 Walayar (Kerala)

Galls of *Calycopteris floribunda*

Genus 18. **Ayyarothrips** Ananthakrishnan, 1971  
*A. abstrusus* Ananthakrishnan, 1971

Joopal (Karnataka)

Marginal leaf galls of wild plant

Genus 19. **Azaleothrips** Ananthakrishnan, 1964  
*A. amabilis* Ananthakrishnan, 1964

Tamil Nadu; Kerala; Goa; U.P.;  
 W. Bengal; M.P.; Maharashtra

Dry twigs; proproots of Banyan  
 tree

Genus 20. **Bamboosiella** Ananthakrishnan, 1957  
*B. bicoloripes* Ananthakrishnan, 1957

Coimbatore (Tamil Nadu)

Bamboo sheaths

Genus 21. **Brachythrips** Reuter, 1899  
*B. dhirgavadana* Ramakrishna, 1928

Mysore (Karnataka)

Leaf galls of *Ficus* sp. & *Sesbania*  
*egyptica*

Genus 22. **Bunothrips** Ananthakrishnan, 1969  
*B. cruralis* Ananthakrishnan, 1969

Tenmalai (Kerala)

Fungus infested roots of a forest  
 tree; bark scrapings

Genus 23. **Byctothrips** Ananthakrishnan, 1973  
*B. ayyari* Ananthakrishnan, 1973

Valparai (Tamil Nadu)

Marginal leaf galls of wild plant

Genus 24. **Calamothrips** Ananthakrishnan, 1967  
*C. fastigatus* Ananthakrishnan, 1967

Kotagiri

Grass

Genus 25. **Callothrips** Ananthakrishnan, 1969  
*C. ascitus* Ananthakrishnan, 1969

Kiruvatti Forest (Karnataka)

Dry rust infested leaves

Genus 26. **Carissothrips** Ananthakrishnan, 1964  
*C. nigrescens* Ananthakrishnan, 1964

Tirupathi (Andhra Pradesh)

Leaves of *Carissa* sp.

Genus 27. **Chiraplothrips** Priesner, 1930  
*C. graminellus*<sup>2</sup> Priesner, 1938

Madras

*Chloris barbata*

| <i>Name</i>                                                    | <i>Distribution</i>                                     | <i>Host</i>                                   |
|----------------------------------------------------------------|---------------------------------------------------------|-----------------------------------------------|
| 1                                                              | 2                                                       | 3                                             |
| <b>Genus 28. Chiridothrips</b> Ramakrishna & Margabandhu, 1939 |                                                         |                                               |
| <i>C. indicus</i> Ramakrishna & Margabandhu, 1939              | Coimbatore (Tamil Nadu)                                 | <i>Dolichos lab-lab</i>                       |
| <b>Genus 29. Chlarathrips</b> Ananthakrishnan, 1967            |                                                         |                                               |
| <i>C. tersus</i> Ananthakrishnan, 1967                         | Madras (Tamil Nadu); Kottarakara (Kerala)               | Grass                                         |
| <b>Genus 30. Corycidothrips</b> Ananthakrishnan, 1972          |                                                         |                                               |
| <i>C. inquilinus</i> Ananthakrishnan, 1972                     | Trivandrum (Kerala)                                     | Galls of <i>Terminalia chebula</i>            |
| <b>Genus 31. Crotonothrips</b> Ananthakrishnan, 1967           |                                                         |                                               |
| Subgenus 1. <b>Crotonothrips</b> s.str.                        |                                                         |                                               |
| <i>C. coorgensis</i> Ananthakrishnan, 1976                     | Murnad (Karnataka)                                      | Galls of <i>Memecylon</i>                     |
| <i>C. dantahasta</i> (Ramakrishna, 1928)                       | Mangalore (Karnataka)                                   | Leaf galls of <i>Memecylon</i> sp.            |
| <i>C. davidi</i> Ananthakrishnan, 1972                         | Kolli Hills (Tamil Nadu)                                | Leaf galls of <i>Santalum album</i>           |
| <i>C. dissimilis</i> Ananthakrishnan, 1976                     | Madurai (Tamil Nadu)                                    | Galls of <i>Memecylon</i>                     |
| <i>C. gallarum</i> Ananthakrishnan, 1967                       | Murnad (Karnataka)                                      | Galls of unidentified plant                   |
| <i>C. memecylonicus</i> Ananthakrishnan, 1976                  | Cherambady (Kerala)                                     | Galls of <i>Memecylon</i>                     |
| <i>C. mimicus</i> (Ananthakrishnan, 1969)                      | Pattanamthitta (Kerala)                                 | Galls of <i>Secamone emetica</i>              |
| <i>C. parvus</i> Ananthakrishnan, 1976                         | Murnad (Karnataka)                                      | Galls of <i>Memecylon</i>                     |
| Subgenus 2. <b>Inermothrips</b> Muraleedharan & Sen, 1978      |                                                         |                                               |
| <i>I. cacharensis</i> Muraleedharan & Sen, 1978                | Loharband; Silchar (Assam)                              | Leaf galls of wild plant                      |
| <b>Genus 32. Dixothrips</b> Ananthakrishnan, 1969              |                                                         |                                               |
| <i>D. onerosus</i> Ananthakrishnan, 1969                       | Tirupathi Hills (Andhra Pradesh)<br>Trivandrum (Kerala) | Leaf pouch galls of <i>Terminalia chebula</i> |

Genus **33. Dolicholepta** Priesner, 1932  
*D. flaviantennatus* Seshadri & Ananthakrishnan, 1954  
*D. gracilipes* Ramakrishna & Margabandhu, 1939  
*D. inquilinus* Ananthakrishnan, 1954

Genus **34. Dolichothrips** Karny, 1912  
*D. assimilis* Priesner & Seshadri, 1952  
*D. citripes* (Bagnall, 1921)  
*D. confusus* Ananthakrishnan, 1968  
*D. fumipennis* (Bagnall, 1921)  
*D. indicus* (Hood, 1919)

*D. malhavii* Ananthakrishnan, 1961  
*D. montanus* Ananthakrishnan, 1964  
*D. nesius* Stannard, 1961  
*D. ochripes* Karny, 1926

*D. zyziphi* (Bagnall, 1923)

Genus **35. Ecacanthothrips** Bagnall, 1908  
*E. tibialis*<sup>4,5</sup> (Ashmead, 1905)

Genus **36. Eothrips** Hood, 1915  
*E. coimbatorensis* Ramakrishna, 1928  
*E. crassicornis* (Karny, 1913)  
*E. distinctus* Ananthakrishnan, 1967  
*E. sirumalaiensis* Ananthakrishnan, 1968

Singampatti (Tamil Nadu)  
Pattupur (Orissa)  
Tambaram (Tamil Nadu)

Valparai (Tamil Nadu)  
Pusa (Bihar)  
Adichanallur  
Kurscong (W. Bengal)  
Coimbatore (Tamil Nadu) Mala-  
bar (Kerala) Bangalore (Karna-  
taka)  
Bhavipur (U.P.)  
Coonoor (Tamil Nadu)

Coimbatore (Tamil Nadu); Guntur  
(Andhra Pradesh)  
Pareshnath (Bihar)

Kerala; Tamil Nadu; W. Bengal;  
Meghalaya

Udaipur (Rajasthan); Coimbatore  
(Tamil Nadu)  
Horsley Hills, Madanapalle (Andhra  
Pradesh)  
Panchmarchi (M.P.)  
Sirumalai

Foliage of certain Solanaceous  
weeds  
*Abutilon indicum*  
Leaf galls of *Zizyphus* sp.

*Macaranga indica* flowers  
*Alentillon indicum*  
Leaf buds of *Diascorea* sp.

—  
*Ailanthus* sp.; shoots of Persian  
Nim, *Cassia emarginata* and *Cochlo-  
spermum gossypium* shoots  
Leaf galls of *Malhavia futtaporensis*  
*Lantana*

—  
*Cassia tora*; *Cassia auriculata*

*Zizyphus rugosus*

Dry Neem bark; Moringa bark;  
dry coconut sheath; dry twigs;  
dry twigs of *Erythrina*; dry *Areca*  
sheaths.

Leaf galls of Jasmine; *Vitis*

Galls of an unidentified plant

Galls of an unidentified plant  
Galls

| <i>Name</i>                                                     | <i>Distribution</i>                                                                   | <i>Host</i>                                                        |
|-----------------------------------------------------------------|---------------------------------------------------------------------------------------|--------------------------------------------------------------------|
| 1                                                               | 2                                                                                     | 3                                                                  |
| <b>Genus 37. Eugynothrips</b> Priesner, 1926                    |                                                                                       |                                                                    |
| <i>E. longus</i> Schmutz                                        | —                                                                                     | —                                                                  |
| <i>E. priesneri</i> Ramakrishna, 1928                           | Coonoor (Tamil Nadu)                                                                  | Garden shrub                                                       |
| <b>Genus 38. Euoplothrips</b> Hood, 1918                        |                                                                                       |                                                                    |
| <i>E. malabaricus</i> Ramakrishna & Margabandhu, 1931           | Taliparamba; North Arcot Dt. (Tamil Nadu)                                             | <i>Piper nigrum</i>                                                |
| <b>Genus 39. Euryaplothrips</b> Ramakrishna & Margabandhu, 1931 |                                                                                       |                                                                    |
| <i>E. crassus</i> <sup>2</sup> Ramakrishna & Margabandhu, 1931  | Coimbatore (Tamil Nadu)                                                               | <i>Amaranthus</i> flower heads                                     |
| <b>Genus 40. Eurhynchothrips</b> Bagnall, 1918                  |                                                                                       |                                                                    |
| Subgenus 1. <b>Eurhynchothrips</b> s.str. 1918                  |                                                                                       |                                                                    |
| <i>E. ordinarius</i> (Hood, 1919)                               | Coimbatore (Tamil Nadu); N. Malabar; Palghat (Kerala)                                 | <i>Sesbania</i> sp.; mango leaf; <i>Mallotus philippinensis</i>    |
| Subgenus 2. <b>Mimothrips</b> Priesner, 1935                    |                                                                                       |                                                                    |
| <i>M. orientalis</i> Ananthakrishnan, 1966                      | Kovilpatti (Tamil Nadu)                                                               | Leaves of wild plant                                               |
| <b>Genus 41. Giganthothrips</b> Zimmerman, 1900                 |                                                                                       |                                                                    |
| <i>G. elegans</i> <sup>4</sup> Zimmerman, 1900                  | Perur; Coimbatore (Tamil Nadu); Pusa (Bihar); Bangalore (Karnataka); Barkuda (Orissa) | <i>Ficus retusa</i> ; <i>Ficus obtusa</i> ; <i>Ficus glomerata</i> |
| <i>G. gardneri</i> Ananthakrishnan, 1960                        | Mussoorie (U.P.)                                                                      | Leaves of an unidentified plant                                    |
| <i>G. ochroscelis</i> Priesner, 1951                            | Singampatti (Tamil Nadu)                                                              | Creeper fig ( <i>Ficus heterophylla</i> )                          |
| <i>G. nigrodentatus</i> (Karny, 1930)                           | Moodbidri (Karnataka)                                                                 | Leaf rolls of <i>Planchona</i> sp.                                 |
| <i>G. seshadrii</i> (Ananthakrishnan, 1964)                     | Wynaad (Kerala)                                                                       | <i>Terminalia levaes</i>                                           |
| <i>G. tibialis</i> <sup>4</sup> (Bagnall, 1921)                 | Taliparamba (Kerala); Siruguppa (Karnataka); Dehra Dun (U.P.)                         | <i>Careya arborea</i> ; wild shrub                                 |

Genus **42. Glubothrips** Ananthakrishnan, 1969  
*G. mucidus* Ananthakrishnan, 1969

Kallar (Tamil Nadu); Tenmalai (Kerala)

Dry & decaying twigs

Genus **43. Gynaikothrips** Zimmerman, 1900  
*G. bengalensis* Ananthakrishnan, 1973  
*G. cecidii* Ananthakrishnan, 1968  
*G. flaviantennatus* Moulton, 1929  
*G. gardneri* (Moulton, 1928)  
*G. imitator* Ananthakrishnan, 1968  
*G. malabaricus* Ramakrishna, 1928  
*G. microchaetus* Ananthakrishnan & Jagadish, 1969  
*G. schefflericola* Ananthakrishnan & Viswanath, 1975  
*G. uzeli*<sup>1,2,3,4</sup> Zimmerman, 1900

Calcutta  
Mahadev Hills (M.P.)  
Balighai (Orissa)

Leaf fold galls of *Ficus bengalensis*  
Unidentified gall

—  
Yercaud  
North Malabar  
Dharwar (Karnataka)  
Murnad (Karnataka)  
Tamil Nadu; Orissa; Assam;  
W. Beagal

—  
Galls of *Macaranga* sp.  
Leaves of *Ficus bengalensis*  
Galls of *Ficus* sp.  
Horn galls of *Schefflera*  
*Ficus retusa*; *Ficus obtusa*

Genus **44. Haplothrips** Amyot & Serville, 1843

Subgenus **1. Haplothrips** s.str.

*H. andresi*<sup>2</sup> Priesner, 1930  
*H. bagrolis* Bhatti, 1973  
*H. bicolor* (Ananthakrishnan, 1964)  
*H. ceylonicus*<sup>4</sup> Schmutz, 1913  
*H. ganglbaueri*<sup>4</sup> Schmutz, 1913  
*H. gowdeyi*<sup>4,8</sup> (Franklin, 1908)

Valparai (Tamil Nadu)  
Bagrol (H.P.)  
Bapatla (Andhra Pradesh); Courtallam (Tamil Nadu)  
Madras  
Andhra; Tamil Nadu; Karnataka; U.P.; Rajasthan; W. Bengal  
Tamil Nadu; Rajasthan, W. Bengal

Tea flowers  
Wheat  
Psyllid galls; grass

*H. longisetosus* Ananthakrishnan, 1955  
*H. pirus* Bhatti, 1967  
*H. reuteri*<sup>2,5</sup> (Karny, 1907)  
*H. tenuipennis*<sup>4</sup> Bagnall, 1918

Malabar (Kerala)  
New Delhi  
Dehra Dun (U.P.)  
Tamil Nadu; Maharashtra; M.P.; Rajasthan; Assam; W. Bengal

*Ficus* sp.  
Grass; Jasmine flower; *Lantana*  
Grass; wild flowers; *Amaranthus*; *Eleusine*; *Solanum* leaves; *Lantana* flowers; Chrysanthemum flowers  
Wild flower  
Leaf mines of Jamun (*Syzygium*)  
—  
Tea bushes; rose; *Polygonum* inflorescence; *Zizyphus* flowers; mango inflorescence; grass; *Dolichos lab-lab*

| <i>Name</i>                                           | <i>Distribution</i>                               | <i>Host</i>                                                                                                                                                                                                     |
|-------------------------------------------------------|---------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1                                                     | 2                                                 | 3                                                                                                                                                                                                               |
| Subgenus <b>2. Trybomiella</b> Bagnall, 1926          |                                                   |                                                                                                                                                                                                                 |
| <i>T. apicalis</i> <sup>4</sup> Bagnall, 1915         | U.P.; Maharashtra; Gujarat; Tamil Nadu; W. Bengal | <i>Cynodon</i> and other grass                                                                                                                                                                                  |
| <i>T. articulatus</i> <sup>2</sup> Bagnall, 1926      | Hyderabad (Andhra Pradesh)                        | Grass                                                                                                                                                                                                           |
| <i>T. bagnalli</i> <sup>2</sup> (Trybom, 1910)        | Tambaram (Tamil Nadu)                             | Grass                                                                                                                                                                                                           |
| <i>T. clarisetis</i> <sup>2</sup> Priesner, 1930      | U.P.; Gujarat; Tamil Nadu                         | <i>Celosia</i> ; <i>Amaranthus</i> ; grass; bamboo sheaths.                                                                                                                                                     |
| <i>T. euphorbiae</i> <sup>4</sup> Priesner, 1931      | Waltair (Andhra Pradesh); Anand (Maharashtra)     | <i>Euphorbia</i> flowers; grass                                                                                                                                                                                 |
| <i>T. nigricornis</i> <sup>2</sup> (Bagnall, 1910)    | Coimbatore; Tambaram (Tamil Nadu)                 | Chrysanthemum flowers; grass                                                                                                                                                                                    |
| <i>T. talpa</i> <sup>2</sup> Priesner, 1930           | Waltair (Andhra Pradesh)                          | Grass                                                                                                                                                                                                           |
| <i>T. tirumalraoi</i> Ramakrishna & Margabandhu, 1931 | Northern Circars                                  | <i>Colocasia</i>                                                                                                                                                                                                |
| Genus <b>45. Hoplandrothrips</b> Hood, 1912           |                                                   |                                                                                                                                                                                                                 |
| <i>H. corticis</i> Ananthakrishnan, 1972              | Bhowali (U.P.)                                    | Dry Pine twigs                                                                                                                                                                                                  |
| <i>H. flavipes</i> <sup>2</sup> Bagnall, 1923         | Kerala; Karnataka; Tamil Nadu; Assam; Meghalaya   | Decaying coconut sheaths; wild Palm sheath; under decaying calyx of fruit of <i>Borassus flabellifer</i> ; decaying sheath of <i>Areca</i> , decaying Guava; decaying Banana sheath; dry <i>Dioscorea</i> twigs |
| <i>H. graminis</i> Ananthakrishnan, 1964              | Madras                                            | Grass                                                                                                                                                                                                           |
| <i>H. natalensis</i> <sup>2</sup> (Trybom, 1912)      | Dehra Dun (U.P.)                                  | Dried fungus infested prop roots of Banyan                                                                                                                                                                      |
| Genus <b>46. Hoplothrips</b> Amyot & Serville, 1843   |                                                   |                                                                                                                                                                                                                 |
| <i>H. angusticeps</i> <sup>1</sup> (Hood, 1908)       | Erumeli (Kerala)                                  | Dry twigs                                                                                                                                                                                                       |
| <i>H. fungosus</i> Moulton, 1928                      | Tamil Nadu; Karnataka; West Bengal                | Dry and decaying twigs                                                                                                                                                                                          |

*H. nemorius* Ananthakrishnan, 1971  
*H. orientalis* (Ananthakrishnan, 1969)

*H. transvaalensis*<sup>2</sup> (Hood, 1924)

Genus **47. Idiothrips** Faure, 1933

*I. ficus* Bhatti, 1967

Genus **48. Karnyothrips** Watson, 1922

*K. alpha* Pitkin, 1976

*K. flavipes*<sup>7</sup> (Jones, 1912)

*K. fungulus* Ananthakrishnan, 1973

*K. melaleucus*<sup>7</sup> (Bagnall, 1911)

*K. mucidus* (Ananthakrishnan & Jagadish, 1971)

*K. nigriflavus* Ramakrishna, 1934

Genus **49. Kochummania** Ananthakrishnan, 1969

*K. excelsa* Ananthakrishnan, 1969

Genus **50. Leeuwenia** Karny, 1912

*L. coriacea* (Bagnall, 1921)

*L. eugeniae* Bagnall, 1924

*L. maculans* Priesner & Seshadri, 1952

*L. ramakrishnae* Ramk., 1925

*L. vorax* Ananthakrishnan, 1970

Karnataka; Kerala; Tamil Nadu  
 Ootacamund; Kodaikanal (Tamil  
 Nadu); Tirupathi (Andhra  
 Pradesh)  
 Madras; Courtallam; Kodaikanal  
 (Tamil Nadu); Tirupathi (Andhra  
 Pradesh)

Deolali (Maharashtra); Mandore  
 (Rajasthan); Bhopal (M.P.); New  
 Delhi

Kerala, Tamil Nadu

—  
 Mudumalai (Tamil Nadu); Tiru-  
 pathi (Andhra Pradesh); Devi-  
 kulam (Kerala); Bhowali (U.P.)  
 Kerala; Tamil Nadu  
 Vythri (Kerala)  
 Kerala; Tamil Nadu

Thalavur (Kerala)

Dehra Dun (U.P.)  
 Kodaikanal (Tamil Nadu)  
 Singampatti (Tamil Nadu)  
 Bangalore (Karnataka);  
 Tambaram (Tamil Nadu)  
 Thenmalai (Kerala)

Dry twigs  
 Rust infested dry twigs of *Rubus* ps.

Decaying wood and twigs

Prop roots of *Ficus bengalensis*;  
*Citrus* leaves; dry sheaths of  
*Phoenix*; dry twigs of *Prosopis*

Bamboo; Sugarcane

—  
 Decaying wood and twigs

Wild grass; bamboo  
 Dry twigs  
 Bamboo; grass

Galls of *Litsea* sp.

Leaves of *Eugenia operculata*  
*Eugenia jambolana*  
 Cardamom leaves  
*Eugenia jambolana*  
 Galls of *Eugenia* sp.

| <i>Name</i>                                                | <i>Distribution</i>                                                  | <i>Host</i>                                         |
|------------------------------------------------------------|----------------------------------------------------------------------|-----------------------------------------------------|
| 1                                                          | 2                                                                    | 3                                                   |
| <b>Genus 51. <i>Liophlaeothrips</i> Priesner, 1919</b>     |                                                                      |                                                     |
| <i>L. ablusus</i> Ananthakrishnan, 1971                    | Palghat (Kerala)                                                     | Galls of Urticiaceae plant                          |
| <i>L. amoenus</i> Ananthakrishnan, 1966                    | Mahabaleswar (Maharashtra)                                           | Grass                                               |
| <i>L. cecidii</i> Ananthakrishnan, 1964                    | Madras                                                               | Leaf rolls of <i>Morinda</i>                        |
| <i>L. curtus</i> Ananthakrishnan & Jagadish, 1969          | Tirupathi (Andhra Pradesh)                                           | Galls of <i>Argyreria</i> sp.                       |
| <i>L. dentipes</i> (Seshadri & Ananthakrishnan, 1954)      | Walayar Forest, Malabar Dt. (Kerala)                                 | Leaves of wild plant                                |
| <i>L. nitidus</i> Ananthakrishnan, 1968                    | Tirupathi (Andhra Pradesh)                                           | Dry twigs                                           |
| <i>L. pavettae</i> Ananthakrishnan & Jagadish, 1969        | Tirupathi (Andhra Pradesh)                                           | Galls of <i>Pavetta</i> sp.                         |
| <i>L. pictus</i> Ananthakrishnan, 1968                     | Tambaram (Tamil Nadu); Tirupathi (Andhra Pradesh); Tenmalai (Kerala) | Dead and decaying branches                          |
| <i>L. reperticus</i> Ananthakrishnan & Muraleedharan, 1974 | Kolli Hills, Salem Dist. (Tamil Nadu)                                | Unknown plant                                       |
| <i>L. segnis</i> Ananthakrishnan & Jagadish, 1969          | Londa                                                                | Unidentified Rubiaceae gall                         |
| <i>L. succintus</i> Ananthakrishnan & Jagadish, 1969       | Kuthera, near Palghat (Kerala)                                       | Galls of wild plant                                 |
| <i>L. tenebrosus</i> Ananthakrishnan & Jagadish, 1969      | Tirupathi (Andhra Pradesh)                                           | Galls of <i>Pavetta</i> sp.                         |
| <i>L. vichitravarna</i> (Ramakrishna, 1928)                | Bangalore (Karnataka); Coimbatore (Tamil Nadu)                       | <i>Eugenia jambolana</i> and <i>Mimusops elengi</i> |
| <b>Genus 52. <i>Liothrips</i> Uzel, 1895</b>               |                                                                      |                                                     |
| <i>L. aberrans</i> Muraleedharan & Sen, 1978               | Darjeeling Dist. (W. Bengal); Gangtok (Sikkim)                       | —                                                   |
| <i>L. abstrusus</i> Ananthakrishnan & Muraleedharan, 1974  | Dharwar (Karnataka)                                                  | Galls of wild plant                                 |
| <i>L. aequilus</i> Ananthakrishnan & Jagadish, 1969        | Tirupathi (Andhra Pradesh)                                           | Galls of <i>Eugenia</i> sp.                         |
| <i>L. ananthakrishnani</i> Sen, 1976                       | Tawang (Arunachal Pradesh)                                           | Leaves of unknown plant                             |
| <i>L. associatus</i> Ananthakrishnan & Jagadish, 1969      | Salem (Tamil Nadu)                                                   | Horn galls of <i>Ficus</i> sp.                      |
| <i>L. ater</i> Ananthakrishnan & Jagadish, 1968            | Thenmalai (Kerala)                                                   | Gall                                                |
| <i>L. bosei</i> Moulton, 1928                              | Dehra Dun (U.P.)                                                     | Galls of <i>Mallotus philippinensis</i>             |
| <i>L. cecidii</i> Ananthakrishnan & Jagadish, 1968         | Thenmalai (Kerala)                                                   | Gall                                                |

*L. chavicae*<sup>4</sup> (Zimmerman, 1900)

*L. dampfi*<sup>2, 5</sup> Karny, 1921

*L. digressus* Ananthakrishnan, 1971

*L. emulatus* Ananthakrishnan, 1976

*L. epacrus* Ananthakrishnan & Muraleedharan, 1974

*L. eugeniae* Priesner

*L. eugeniae artabotrys* Ananth. & Varadarsan, 1978

*L. exilis* (Ananthakrishnan & Jagadish, 1969)

*L. flavescens* Ananthakrishnan & Jagadish, 1968

*L. flavitibia* (Moulton, 1929)

*L. fragilis* Ananthakrishnan, 1976

*L. fumipennis* (Karny, 1913)

*L. furvus* Ananthakrishnan & Jagadish, 1968

*L. gracilis* (Karny, 1913)

*L. himalayanus* Ananthakrishnan & Jagadish, 1970

*L. hradeensis* Uzel, 1895

*L. indicus* Ananthakrishnan, 1972

*L. inquilinus* Ananthakrishnan & Jagadish, 1967

*L. interlocatus* (Karny, 1926)

*L. jogensis* Ananthakrishnan & Jagadish, 1967

*L. kanani* (Moulton,)

*L. karnyi* (Bagnall, 1914)

*L. kiriti* Ramakrishna, 1928

*L. kolliensis* Ananthakrishnan, 1972

*L. litseae* Moulton

*L. machilus* Ananthakrishnan & Varadarasan, 1978

*L. malabaricus* Ananthakrishnan & Jagadish, 1967

*L. minys* Ananthakrishnan, 1972

*L. morindae* Ananthakrishnan & Muraleedharan, 1974

*L. morulus* Ananthakrishnan & Jagadish, 1970

Wynaad (Kerala)

Cawnpore (U.P.)

Tirupathi (Andhra Pradesh)

Thimbam (Tamil Nadu)

Pachmarhi (M.P.)

Thenmalai (Kerala)

Coorg (Karnataka)

Goa

Thenmalai (Kerala)

Calcutta

Thimbam (Tamil Nadu)

Thenmalai (Kerala)

Courtallam (Tamil Nadu)

Kulathupuzha (Kerala)

Kurseong (W. Bengal)

Courtallam; Yercaud (Tamil Nadu)

Panchgani (Maharashtra)

Sagar (M.P.)

Travancore

Jog Falls (Karnataka)

Ceylon

Coimbatore (Tamil Nadu)

Kolli Hills, Salem Dist. (Tamil Nadu)

Peermadu (Kerala)

Courtallam and Yercaud (Tamil Nadu)

Courtallam (Tamil Nadu)

Ootacamund (Tamil Nadu)

Kurseong (W. Bengal)

Pepper leaf and leaf galls *Piper nigrum*

*Tamarix gallica*

Galls of *Loranthus* sp.

Horn galls of *Schefflera* sp.

Galls of wild plant

Galls of *Eugenia* sp.

Leaf galls of *Artabotrys* sp.

Unidentified gall

Gall

Horn galls of *Schefflera* sp.

Galls

Leaf rolls of *Planchona* sp.

Wild unidentified plant

Galls of *Macaranga* sp.

Strongly wrinkled leaves of *Maytenus senegalensis*

Galls of *Eugenia* sp.

Inside psyllid galls in *Terminalia* leaves

*Flacourtia* sp.

Marginal leaf galls of *Piper nigrum*

Mango leaf

Leaf galls of unidentified wild shrub

Leaf galls of *Machilus macranthes*

Galls of *Macaranga* sp.

Galls of *Jasminum* sp.

Leaves of *Morinda* sp.

Unidentified plant

| <i>Name</i>                                               | <i>Distribution</i>                                                                             | <i>Host</i>                                     |
|-----------------------------------------------------------|-------------------------------------------------------------------------------------------------|-------------------------------------------------|
| 1                                                         | 2                                                                                               | 3                                               |
| <i>L. moultoni</i> (Ramakrishna, 1928)                    | Marudamalai, Coimbatore (Tamil Nadu)                                                            | Wild shrub                                      |
| <i>L. mucronis</i> Ananthakrishnan & Jagadish, 1967       | Bangalore                                                                                       | Galls of <i>Mallotus philippinensis</i>         |
| <i>L. nanus</i> Ananthakrishnan, 1972                     | Thuraiyur, Trichi Dist. and Marudamalai; Coimbatore (Tamil Nadu)                                | Leaf galls of <i>Jasminum</i> sp.               |
| <i>L. nubilis</i> Ananthakrishnan & Jagadish, 1968        | Peermade (Kerala)                                                                               | Galls                                           |
| <i>L. pallicrus</i> <sup>4</sup> (Karny, 1913)            | Nilgiri Hills (Tamil Nadu)                                                                      | Galls of wild plant                             |
| <i>L. pallipes</i> (Karny, 1913)                          | Wynaad (Kerala)                                                                                 | Tender leaf rolls of Pepper                     |
| <i>L. ramakrishnae</i> Ananthakrishnan & Jagadish, 1969   | Salem (Tamil Nadu)                                                                              | Horn galls of <i>Ficus</i> sp.                  |
| <i>L. retusus</i> Ananthakrishnan, 1976                   | Murnad (Karnataka)                                                                              | Horn galls of <i>Schefflera</i> sp.             |
| <i>L. seshadrii</i> Ananthakrishnan & Muraleedharan, 1974 | Valparai, Annamalai (Tamil Nadu)                                                                | Wild plant                                      |
| <i>L. sordidus</i> Ananthakrishnan, 1972                  | Kolli Hills, Salem Dist. (Tamil Nadu)                                                           | Leaf galls of unidentified plant                |
| <i>L. spectabilis</i> Ananthakrishnan, 1972               | Kotagiris, Nilgiris (Tamil Nadu)                                                                | Leaf galls of <i>Loranthus</i> sp.              |
| <i>L. strigosus</i> Ananthakrishnan & Jagadish, 1968      | Eanathu (Kerala)                                                                                | Galls of <i>Cinnamomum</i> sp.                  |
| <i>L. tersus</i> Ananthakrishnan & Jagadish, 1967         | Kiruvatti Forest, Hubli (Karnataka)                                                             | Wild beetings                                   |
| <i>L. tibialis</i> Priesner, 1951                         | Valparai (Tamil Nadu)                                                                           | Leaves of wild Pepper                           |
| <i>L. variabilis</i> Ananthakrishnan & Jagadish, 1967     | Burliar (Tamil Nadu)                                                                            | Pepper galls                                    |
| <i>L. viticola</i> (Karny, 1913)                          | Vilakkudy (Kerala)                                                                              | Galls of <i>Vitis</i> sp.                       |
| <i>L. wittmeri</i> Zur Strassen, 1975                     | Chimakothi (BHUTAN)                                                                             |                                                 |
| <b>Genus 53. Lygothrips</b> Ananthakrishnan, 1964         |                                                                                                 |                                                 |
| <i>L. jambuvasi</i> (Ramakrishna, 1928)                   | Marudamalai; Coimbatore; Kodaikanal; Annamalais (Tamil Nadu); Araku Valley (A.P.); Sagar (M.P.) | Leaf galls of <i>Eugenia</i> sp.                |
| <b>Genus 54. Macrophthalthmothrips</b> Karny, 1924        |                                                                                                 |                                                 |
| <i>M. splendidus</i> Ananthakrishnan, 1968                | Kiruvatti Forest (Karnataka); Kollimalai Hills, Salem Dt. and Madras (Tamil Nadu)               | Decaying bark and dry twigs of <i>Erythrina</i> |

|                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Genus <b>55. Mallothrips</b> Ramakrishna, 1928<br/> <i>M. indicus</i> Ramakrishna, 1928</p>                                                                                                                                                                                                                                                                                         | <p>Coimbatore; Salem; Pondicherry;<br/>         Tambaram (Tamil Nadu); Tiru-<br/>         pathi (Andhra Pradesh)</p>                                                                                                                             | <p>Leaf galls of <i>Eugenia jambolana</i></p>                                                                                                                                                                                                                                                                       |
| <p>Genus <b>56. Margaritothrips</b> Priesner, 1933<br/> <i>M. flavus</i> Bhatti, 1965<br/> <i>M. longus</i> Bhatti, 1967<br/> <i>M. sumatrensis</i><sup>4</sup> Priesner, 1933</p>                                                                                                                                                                                                     | <p>Jabalpur (M.P.)<br/>         Delhi<br/>         Adichanallur (Kerala)</p>                                                                                                                                                                     | <p>Herbage<br/>         Herbage<br/>         Dry twigs of chillies</p>                                                                                                                                                                                                                                              |
| <p>Genus <b>57. Maxillothrips</b> Bhatti, 1978<br/> <i>M. arorai</i> (Bhatti &amp; Hattar, 1974)</p>                                                                                                                                                                                                                                                                                   | <p>Bhiwani (Haryana)</p>                                                                                                                                                                                                                         | <p>Flowering <i>Zizyphus</i> sp.</p>                                                                                                                                                                                                                                                                                |
| <p>Genus <b>58. Membrothrips</b> Bhatti, 1978<br/> <i>M. indicus</i> (Hood, 1919)</p>                                                                                                                                                                                                                                                                                                  | <p>Tamil Nadu</p>                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                     |
| <p>Genus <b>59. Mesandrothrips</b> Priesner, 1933<br/> <i>M. inquilinus</i><sup>4</sup> (Priesner, 1921)</p>                                                                                                                                                                                                                                                                           | <p>Periantalamanna (Kerala); Cour-<br/>         tallam (Tamil Nadu); Araku Valley<br/>         (Andhra Pradesh)</p>                                                                                                                              | <p><i>Pavetta</i> galls</p>                                                                                                                                                                                                                                                                                         |
| <p>Genus <b>60. Mesicothrips</b> Priesner, 1931<br/> <i>M. inquilinus</i> Ananthakrishnan, 1967<br/> <i>M. plicans</i> Priesner, 1951</p>                                                                                                                                                                                                                                              | <p>Yercaud (Tamil Nadu)<br/>         Valparai (Tamil Nadu)</p>                                                                                                                                                                                   | <p>Leaf galls of <i>Ficus</i> sp.<br/>         Folded leave of wild plant</p>                                                                                                                                                                                                                                       |
| <p>Genus <b>61. Mesothrips</b> Zimmerman, 1900<br/> <i>M. augusticornis</i><sup>4</sup> Bagnall, 1924<br/> <i>M. apatelus</i> Karny, 1926<br/> <i>M. bhimabahu</i> Ramakrishna, 1928<br/> <i>M. cracens</i> Ananthakrishnan, 1968<br/> <i>M. extensivus</i> Ananthakrishnan &amp; Jagadish, 1969<br/> <i>M. jordani</i> Zimmerman, 1900<br/> <br/> <i>M. malloti</i> Moulton, 1928</p> | <p>—<br/>         Ceylon<br/>         Kollegal<br/>         Kollegal<br/>         Murnad (Karnataka)<br/>         Tamil Nadu; Kerala<br/>         Karnataka; Courtallam (Tamil<br/>         Nadu) and Calcutta<br/>         Dehra Dun (U.P.)</p> | <p>—<br/>         Bushes<br/>         Leaves of <i>Ficus retusa</i><br/>         Leaf galls of <i>Ficus retusa</i><br/>         Galls of <i>Secamone</i> sp.<br/>         Galls of <i>Anogeissus</i> sp.<br/>         Leaf galls of <i>Ficus</i> sp.<br/> <br/>         Galls of <i>Mallotus philippinensis</i></p> |

| <i>Name</i>                                                | <i>Distribution</i>                                                                                             | <i>Host</i>                                                                          |
|------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 1                                                          | 2                                                                                                               | 3                                                                                    |
| <i>M. manii</i> Ananthakrishnan, 1972                      | Kolli Hills, Salem Dist. (Tamil Nadu)                                                                           | Leaf galls of <i>Santalum album</i>                                                  |
| <i>M. melinocnemis</i> Karny, 1926                         | Thaliparamba and Mangalore (Tamil Nadu)                                                                         | Galls of <i>Pothos scandens</i>                                                      |
| Genus <b>62. Mystrothrips</b> Priesner, 1949               |                                                                                                                 |                                                                                      |
| <i>M. dammermani</i> (Priesner, 1933)                      | Madras (Tamil Nadu); Kiruvatti (Karnataka)                                                                      | Fungus infested dry leaves                                                           |
| Genus <b>63. Nanothrips</b> Faure, 1938                    |                                                                                                                 |                                                                                      |
| <i>N. nigrus</i> (Ananthakrishnan, 1971)                   | Kurseong (W. Bengal)                                                                                            | Drying vegetation                                                                    |
| <i>N. typicus</i> Ananthakrishnan, 1964                    | Madras (Tamil Nadu); Tirupathi (Andhra Pradesh)                                                                 | Dry twigs of <i>Sesbania grandiflora</i> ; dry Jasmine twigs                         |
| Genus <b>64. Neodixothrips</b> Sen and Muraleedharan, 1976 |                                                                                                                 |                                                                                      |
| <i>N. assamensis</i> Sen & Muraleedharan, 1976             | Loharband, Cachar Dist. (Assam)                                                                                 | Tubular leaf galls                                                                   |
| Genus <b>65. Neoheegeria</b> Schmutz, 1909                 |                                                                                                                 |                                                                                      |
| <i>N. hrasvamukha</i> Ramakrishna, 1928                    | Malabar (Kerala)                                                                                                | <i>Mallotus philippinensis</i>                                                       |
| <i>N. montana</i> Ananthakrishnan & Jagadish, 1970         | Kurseong (W. Bengal)                                                                                            | Leaf curls of <i>Amarantus</i> sp.                                                   |
| <i>N. verbasci</i> (Osborn, 1896)                          | Coimbatore (Tamil Nadu)                                                                                         | Inflorescence of wild Labiatae                                                       |
| Genus <b>66. Neothrips</b> Hood, 1908                      |                                                                                                                 |                                                                                      |
| <i>N. lepidus</i> Ananthakrishnan, 1971                    | Tenmalai (Kerala)                                                                                               | Dried roots of wild tree                                                             |
| Genus <b>67. Neurothrips</b> Hood, 1924                    |                                                                                                                 |                                                                                      |
| <i>N. indicus</i> Ananthakrishnan, 1964                    | Jodhpur (Rajasthan); Madras; Valparai; Periyar (Tamil Nadu); Lonavola (Maharashtra); Tirupathi (Andhra Pradesh) | Prop roots of Banyan; dry <i>Carissa</i> leaves, dry <i>Thevetia</i> twigs; dry bark |

|                                                                                                                                                                                                                        |                                                                                      |                                                                                                    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| <p>Genus <b>68. Ocnothrips</b> Ananthakrishnan, 1969<br/> <i>O. indicus</i> Ananthakrishnan, 1969</p>                                                                                                                  | Thekkady (Kerala)                                                                    | Galls of <i>Piper</i> sp.                                                                          |
| <p>Genus <b>69. Ocythrips</b> Ananthakrishnan, 1972<br/> <i>O. rarus</i> Ananthakrishnan, 1972</p>                                                                                                                     | Kalimpong (W. Bengal)                                                                | Dried bamboo leaf                                                                                  |
| <p>Genus <b>70. Opidnothrips</b> Ananthakrishnan, 1971<br/> <i>O. corticulus</i> Ananthakrishnan, 1971</p>                                                                                                             | Kulathupuzha (Kerala)                                                                | Dry twigs                                                                                          |
| <p>Genus <b>71. Pegothrips</b> Sen &amp; Muralcedharan, 1976<br/> <i>P. meghalaya</i> Sen &amp; Muralcedharan, 1976</p>                                                                                                | Songsak, Garo Hills (Meghalaya)                                                      | Leaf galls of wild plant                                                                           |
| <p>Genus <b>72. Phenothrips</b> Ananthakrishnan, 1967<br/> <i>P. decoratus</i> Ananthakrishnan, 1967</p>                                                                                                               | Kottarakkara (Kerala)                                                                | Grass                                                                                              |
| <p>Genus <b>73. Phiarothrips</b> Ananthakrishnan, 1968<br/> <i>P. reperticus</i> Ananthakrishnan, 1968</p>                                                                                                             | Kulathupuzha (Kerala)                                                                | Grass                                                                                              |
| <p>Genus <b>74. Phlaeothrips</b> Haliday, 1836<br/> <i>P. anacardii</i> Newman, 1855<br/> <i>P. nilgiricus</i> Ananthakrishnan, 1967</p>                                                                               | Mysore (Karnataka)<br>Naduvattam, Nilgiris (Tamil Nadu)                              | Decaying twigs                                                                                     |
| <p>Genus <b>75. Phorinothrips</b> Ananthakrishnan, 1967<br/> <i>P. levis</i> Ananthakrishnan &amp; Varadarasan, 1978<br/> <i>P. loranthe</i> Ananthakrishnan, 1967<br/> <i>P. minusculus</i> Ananthakrishnan, 1971</p> | Thekkady (Kerala)<br>Moodabidri, Mangalore (Karnataka)<br>Chathanur, Quilon (Kerala) | Within galls of <i>Vitis</i> sp.<br>Galls of <i>Loranthus</i> sp.<br>Galls of <i>Loranthus</i> sp. |
| <p>Genus <b>76. Phylladothrips</b> Priesner, 1933<br/> <i>P. karnyi</i> Priesner, 1933</p>                                                                                                                             | Kiruvatti, Dharvar Dist. (Karnataka)                                                 | Dry Cinnamon leaves                                                                                |
| <p>Genus <b>77. Plectrothrips</b> Hood, 1908<br/> <i>P. corticinus</i> Priesner, 1935<br/> <i>P. eximius</i> Ananthakrishnan, 1969<br/> <i>P. pallipes</i><sup>8</sup> Hood, 1916</p>                                  | Gudalur (Tamil Nadu)<br>Madras<br>Punalur & Aryankavu (Kerala)                       | Smut infested twigs<br>Dry fungus infested leaves<br>Dry twigs                                     |

| <i>Name</i>                                               | <i>Distribution</i>                                         | <i>Host</i>                                         |
|-----------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------|
| 1                                                         | 2                                                           | 3                                                   |
| Genus <b>78. Pnigmothrips</b> Priesner, 1953              |                                                             |                                                     |
| <i>P. medanensis</i> <sup>4</sup> Priesner, 1953          | Mount Stuart, Annamalais (Tamil Nadu)                       | Galls of <i>Pothos</i>                              |
| Genus <b>79. Podothrips</b> Hood, 1913                    |                                                             |                                                     |
| Subgenus <b>1. Podothrips</b> s.str.                      |                                                             |                                                     |
| <i>P. bicolor</i> Seshadri & Ananthakrishnan, 1954        | Madras; Calcutta                                            | Bamboo leaves                                       |
| <i>P. canizoi</i> Bhatti, 1978                            | Hoshiarpur (Punjab); Delhi                                  | <i>Arundo donax</i> ; grass stumps                  |
| Subgenus <b>2. Kentronothrips</b> , Moulton, 1928         |                                                             |                                                     |
| <i>K. lucasseni</i> <sup>4,8</sup> (Kruger, 1890)         | Madras (Tamil Nadu); Hyderabad and Waltair (Andhra Pradesh) | <i>Andropogon pertusus</i> ; grass                  |
| <i>K. moultoni</i> Ananthakrishnan, 1965                  | Tirupathi (Andhra Pradesh)                                  | Grass                                               |
| <i>K. placitus</i> Ananthakrishnan, 1966                  | Singampatti (Tamil Nadu)                                    | Grass                                               |
| Subgenus <b>3. Melampodothrips</b> Priesner, 1937         |                                                             |                                                     |
| <i>M. semiflavus</i> <sup>1,2</sup> Hood, 1913            | Hoshiarpur (Punjab)                                         | Between stem and leaf sheath of <i>Arundo donax</i> |
| <i>M. graminum</i> <sup>2</sup> Priesner, 1937            |                                                             |                                                     |
| Subgenus <b>4. Neopodothrips</b> Ananthakrishnan, 1965    |                                                             |                                                     |
| <i>N. distinctus</i> Ananthakrishnan, 1965                | Madura (Tamil Nadu)                                         | Grass                                               |
| Subgenus <b>5. Saucrothrips</b> Ananthakrishnan, 1967     |                                                             |                                                     |
| <i>S. scitulus</i> Ananthakrishnan, 1967                  | Keezhur (Tamil Nadu)                                        | Grass                                               |
| Genus <b>80. Praepodothrips</b> Priesner & Seshadri, 1952 |                                                             |                                                     |
| <i>P. cymbapogoni</i> Ananthakrishnan, 1956               | Sirumalai Hills, Dindigul (Tamil Nadu)                      | <i>Cymbapogon citratus</i>                          |

*P. indicus* Priesner & Seshadri, 1952  
*P. nigrocephalus* Ananthakrishnan, 1964  
*P. priesneri* Ananthakrishnan, 1955

Genus **81. Psenothrips** Ananthakrishnan, 1967

*P. priesneri* (Ananthakrishnan, 1964)

Genus **82. Pygmaeothrips** Karny, 1920

*P. columniceps* Karny, 1920

Genus **83. Pyknothrips** Ananthakrishnan, 1964

*P. reticulatus* Ananthakrishnan, 1964

Genus **84. Ramakrishniella** Karny, 1926

*R. nirmalapaksha* Ramakrishna, 1928

*R. unispina* Karny, 1926

Genus **85. Rhynchothrips** Hood, 1912

*R. champakae* Ramakrishna & Margabandhu, 1939  
 (=a new genus to be described)

*R. perandaphagus* (Ramakrishna, 1928)

*R. raoensis* (Ramakrishna, 1928  
 (=a new genus to be described)

Genus **86. Salothrips** Ananthakrishnan, 1976

*S. indicus* Ananthakrishnan, 1976

Genus **87. Scelothrips** Priesner, 1951

*S. menoni* (Ananthakrishnan, 1949)

Genus **88. Schedothrips** Ananthakrishnan 1969

*S. orientalis* (Ananthakrishnan, 1967)

*S. tumidus* Ananthakrishnan, 1969

Valparai (Tamil Nadu)  
 Kodaikanal Hills (Tamil Nadu)  
 Madras

Grass  
 Bamboo sheath

Madras

Leaf galls of *Walsura piscidia*

Madras (Tamil Nadu); Punalur,  
 Ernakulam (Kerala); Jog Falls  
 (Karnataka)

Decaying coconut sheaths; dry  
 twigs; dried inflorescence of Palm

Tirupathi (Andhra Pradesh)

Leaves of *Flacourtia* sp.

Marudamalai, Coimbatore (Tamil  
 Nadu)  
 Taliparamba (Tamil Nadu)

*Eugenia* sp. & wild shrub

Leaves of a wild plant

Kalimpong (W. Bengal)

*Michelia champaka*

Coimbatore (Tamil Nadu)  
 Taliparamba (Tamil Nadu)

*Vitis quadrangularis*  
 Leaf galls of *Mallotus philippinensis*  
 and flowers of *Anacardium occidentale*

Tirupathi (Andhra Pradesh)

Dry twigs

Valparai (Tamil Nadu)

Leaves of unidentified wild plant

Tambaram (Tamil Nadu)  
 Tirupathi (Andhra Pradesh)

Galls of *Ventilago* sp.  
 Galls of *Ventilago* sp.

| <i>Name</i>                                             | <i>Distribution</i>                                                   | <i>Host</i>                                                             |
|---------------------------------------------------------|-----------------------------------------------------------------------|-------------------------------------------------------------------------|
| 1                                                       | 2                                                                     | 3                                                                       |
| Genus <b>89. Segnothrips</b> Ananthakrishnan, 1965      |                                                                       |                                                                         |
| <i>S. trivandrensis</i> Ananthakrishnan, 1965           | Trivandrum (Kerala)                                                   | Grass                                                                   |
| Genus <b>90. Socothrips</b> Ananthakrishnan, 1972       |                                                                       |                                                                         |
| <i>S. verrucosus</i> Ananthakrishnan, 1972              | Kollimalai (Tamil Nadu); Tirupathi Hills (Andhra Pradesh)             | Dry twigs                                                               |
| Genus <b>91. Sphingothrips</b> Ananthakrishnan, 1971    |                                                                       |                                                                         |
| <i>S. trachypogon</i> (Karny)                           | Tirupathi (Andhra Pradesh)                                            | Unidentified gall                                                       |
| Genus <b>92. Stannardiana</b> Ananthakrishnan, 1964     |                                                                       |                                                                         |
| <i>S. variegata</i> Ananthakrishnan, 1964               | Andhra Pradesh, Tamil Nadu; Karnataka                                 | Inflorescence of <i>Euphorbia anethorum</i>                             |
| Genus <b>93. Stannardothrips</b> Ananthakrishnan, 1965  |                                                                       |                                                                         |
| <i>S. longirostris</i> Ananthakrishnan, 1965            | Hyderabad (Andhra Pradesh)                                            | Dry vegetation                                                          |
| Genus <b>94. Stictothrips</b> Hood, 1924                |                                                                       |                                                                         |
| <i>S. fimbriata</i> (Ananthakrishnan, 1953)             | Madras; Guindy; Kodaikanal (Tamil Nadu)                               | <i>Lantana</i> flowers; dry <i>Citrus</i> twigs; dry grass; dry twigs   |
| Genus <b>95. Stigmothrips</b> Ananthakrishnan, 1964     |                                                                       |                                                                         |
| <i>S. bambusae</i> Ananthakrishnan, 1965                | Calicut (Kerala)                                                      | Dry bamboo spindles                                                     |
| <i>S. bhowalii</i> Ananthakrishnan, 1971                | Bhowali (U.P.)                                                        | Dry sal leaves                                                          |
| <i>S. consimilis</i> <sup>5</sup> Ananthakrishnan, 1969 | Urukunnu; Ranni Forest (Kerala); Agumbe Forest; Kiruvatti (Karnataka) | Dry fungus infested fallen leaves; dry twigs of coffee plant; dry twigs |
| <i>S. infirmus</i> <sup>5</sup> Ananthakrishnan, 1971   | Kurseong (W. Bengal)                                                  |                                                                         |
| <i>S. limpidus</i> Ananthakrishnan, 1964                | Calicut (Kerala); Kallar (Tamil Nadu)                                 | Dry Bamboo spindles; decaying leaves sheaths                            |

*S. nilgiriensis* Ananthakrishnan, 1971  
*S. pteris* Ananthakrishnan, 1971

Genus **96. Strepterothrips** Hood, 1933

*S. orientalis* Ananthakrishnan, 1964

Genus **97. Synergotherips** Ananthakrishnan, 1971

*S. prolatus* Ananthakrishnan, 1971

Genus **98. Tetradothrips** Priesner, 1951

*T. faoliiperda* (Karny, 1926)

Genus **99. Teuchothrips** Hood, 1919

*T. eugeniae* Seshadri & Ananthakrishnan, 1954

*T. longus* (Schmutz, 1913)  
 (= a new genus to be described)

Genus **100. Thilakothrips** Ramakrishna, 1928

*T. babuli* Ramakrishna, 1928

Genus **101. Thlibothrips** Priesner, 1951

*T. inquilinus* Ananthakrishnan & Varadarasan, 1978

Genus **102. Treherniella** Watson, 1923

*T. inferna* Priesner, 1932  
 (= a new species to be described by Kellie O' Neil)

Genus **103. Trichinothrips** Bagnall, 1929

*T. breviceps*<sup>4</sup> Bagnall, 1926

Ooty (Tamil Nadu)  
 Kodaikanal (Tamil Nadu)

Dry ferns  
 Dry ferns

Madras

Decaying bark; decaying vegetation; dry twigs; dry coconut sheaths; Areca sheaths

Tirupathi (Andhra Pradesh)

Galls of unidentified plant

Moodbidri, Mangalore (Tamil Nadu); Dhoni, Palghat (Kerala)

Galls of *Pothos scandens*

Ambasamudram (Tamil Nadu)  
 Salem; Courtallum (Tamil Nadu);  
 Agumbe Forest (Karnataka)

Leaf galls of *Eugenia jambolana*  
 Leaf of rolls of *Pavetta* sp.

Bangalore (Karnataka); Kolattur (Tamil Nadu); Secunderabad; Tirupathi; Gudur (Andhra Pradesh); New Delhi

Leaf galls of *Acacia leuchophloea*

Ranchi (Bihar)

Within bud galls of *Mangifera indica*

Trivandrum (Kerala)

Grass

Coimbatore (Tamil Nadu)

Stem of Sapota tree *Achras sapota*

| <i>Name</i>                                                       | <i>Distribution</i>                                            | <i>Host</i>                                            |
|-------------------------------------------------------------------|----------------------------------------------------------------|--------------------------------------------------------|
| 1                                                                 | 2                                                              | 3                                                      |
| <b>Genus 104. Tylothrips Hood, 1937</b>                           |                                                                |                                                        |
| <i>T. indicus</i> Sen & Muraleedharan, 1976                       | Mawphlang, Shillong (Meghalaya)                                | Wild plant                                             |
| <b>Genus 105. Xylaplothrips Priesner, 1928</b>                    |                                                                |                                                        |
| <i>X. debilis</i> Ananthakrishnan & Jagadish, 1971                | Kulathupuzha; Aryankavu (Kerala)<br>Tirupathi (Andhra Pradesh) | Dry twigs                                              |
| <i>X. emineus</i> Ananthakrishnan & Jagadish, 1971                | Aryankavu; Tenmalai (Kerala)                                   | Dry twigs                                              |
| <i>X. flavitibia</i> Ananthakrishnan & Jagadish, 1969             | Courtallum (Tamil Nadu); Pachmarhi (M.P.); Allahabad (U.P.)    | Wild plant galls                                       |
| <i>X. flavus</i> Ananthakrishnan, 1964                            | Sirumalai Hills                                                | Influence of wild palm                                 |
| <i>X. inquilinus</i> <sup>4</sup> (Priesner, 1921)                | Tirupathi (Andhra Pradesh); Alagarkoil Perintalmanna           | Galls of <i>Pavetta</i> sp.                            |
| <i>X. ligis</i> Ananthakrishnan & Jagadish, 1971                  | Tirumalai (Andhra Pradesh)                                     | Dry twigs                                              |
| <i>X. micans</i> Ananthakrishnan & Jagadish, 1971                 | Aryankavu (Kerala); Kodaikanal (Tamil Nadu)                    | <i>Lantana</i> sp. twigs; dry twigs                    |
| <i>X. pictipes</i> (Bagnall, 1919)                                | Malabar (Kerala); Hubli (Karnataka)                            | Diseased berries of black pepper; grass                |
| <i>X. pusillus</i> Ananthakrishnan & Jagadish, 1969               | Tirupathi (Andhra Pradesh); Aryankavu (Kerala)                 | Dry <i>Smilax</i> twigs                                |
| <i>X. tener</i> Ananthakrishnan & Jagadish, 1969                  | Goa-Londa border                                               | Dry twigs                                              |
| <b>Subfamily IDOLOTHRIPINAE</b>                                   |                                                                |                                                        |
| <b>Genus<sup>4</sup> 1. Aesthesiothrips Ananthakrishnan, 1960</b> |                                                                |                                                        |
| <i>A. jatrophae</i> Ananthakrishnan, 1960                         | Dehra Dun (U.P.)                                               | <i>Jatropha curcus</i> flowers                         |
| <b>Genus 2. Allothrips Hood, 1908</b>                             |                                                                |                                                        |
| <i>A. pillichellus bicolor</i> Ananthakrishnan, 1964              | Tamil Nadu; Karnataka; Kerala; Andhra Pradesh; West Bengal     | Bamboo leaves; dry coconut sheath, dry twigs; dry bark |

*A. pillichellus indicus* Ananthakrishnan, 1958  
*A. pillichellus montanus* Ananthakrishnan, 1968

Genus<sup>4</sup> **3. Bactrothrips** Karny, 1912

*B. idolomorphus* Karny, 1910

*B. luteus* Ananthakrishnan, 1973

Genus **4. Decothrips** Ananthakrishnan, 1969

*D. anacardii* Ananthakrishnan, 1969

Genus **5. Diaphorothrips** Karny, 1920

*D. unguipes* Karny, 1920

Genus<sup>4</sup> **6. Diceratothrips** Bagnall, 1908

Subgenus **1. Diceratothrips**

*D. brevisetosus* Ananthakrishnan & Jagadish, 1970

*D. longisetis* Ananthakrishnan & Jagadish, 1970

*D. vitreipennis* (Prienser, 1939)

Subgenus **2. Dichaetothrips**

*D. beesoni* (Moulton, 1928)

*D. gloveri* (Ramakrishna & Margabandhu, 1939)

*D. indicus* (Bagnall, 1921)

*D. niger*<sup>4</sup> (Schmutz, 1913)

*D. uredinis* Ananthakrishnan & Jagadish, 1970

*D. usitatus* Ananthakrishnan & Jagadish, 1970

Madras  
 Pachmarhi (M.P.)

Dry twigs of *Thevetia neriifolia*  
 Wild dry twigs beating

Aryankavu (Kerala); Bhowali  
 (U.P.)  
 Bhowali (U.P.)

Dry & decaying leaves of wild tree  
 & Sal  
 Dry Sal leaves

Kottarakara; Kulathupuzha; Ten-  
 malai (Kerala)

Fungus infested bark of *Anacardium*  
*occidentale*; dry teak twigs

Madras; Kumili; Kollimalai  
 (Tamil Nadu); Joopal (Karna-  
 taka); Thekkady (Kerala)

Dry twigs of *Sesbania* sp.; dry twigs  
 of *Erythrina* sp., dry twigs; dry  
 twigs of *Thevetia*

Tirupathi (Andhra Pradesh); Vyi-  
 thri (Kerala)  
 Darjeeling (W.Bengal)  
 Simla (H.P.); Peermade (Kerala)

Dry *Smilax* twigs; dry *Passiflora*  
 twigs  
 Dry twigs  
 Dry *Ulex* twigs; dry twigs

Dehra Dun (U.P.)  
 Ranchi (Bihar)  
 Dehra Dun (U.P.)  
 Adichanallur; Tenmalai (Kerala)  
 Ooty (Tamil Nadu)  
 Madras; Burliar (Tamil Nadu);  
 Tirupathi (Andhra Pradesh)

Twigs of *Ficus religiosa*  
*Zizyphus jujuba*  
 Bark of half dead Sal tree  
*Areca* sheaths; dry teak branches  
 Decaying twigs  
 Dry *Sesbania* sp. twigs; dry *Nerium*  
 twigs; coconut sheath; dry *Clematis*  
 twigs; dry twigs.

| <i>Name</i>                                                 | <i>Distribution</i>                                                       | <i>Host</i>                                                                         |
|-------------------------------------------------------------|---------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 1                                                           | 2                                                                         | 3                                                                                   |
| <b>Genus 7. <i>Dinothrips</i> Bagnall, 1908</b>             |                                                                           |                                                                                     |
| <i>D. juglandis</i> Moulton, 1933                           | Lopchu, Darjeeling Dt. (W.Bengal)                                         | Under bark of <i>Juglans regia</i>                                                  |
| <i>D. longicauda</i> (Ananthakrishnan, 1961)                | Ramangulli; Bombay                                                        | Hollow of Bamboo                                                                    |
| <i>D. sumatrensis</i> <sup>4</sup> Bagnall, 1908            | Tamil Nadu, Karnataka; Kerala; Assam; Meghalaya (INDIA); Samchi (BHUTAN). | Dry twigs of <i>Sesbania</i> ; under logs of wood; Citrus borer holes               |
| <i>D. spinosus</i> <sup>4</sup> (Schmutz, 1913)             | Kumaon, Dehra Dun (U.P.); Malabar (Kerala); Kiruvatti (Karnataka)         | Log of <i>Mallotus philippinensis</i>                                               |
| <b>Genus 8. <i>Elaphridia</i> Ananthakrishnan, 1964</b>     |                                                                           |                                                                                     |
| <i>E. crassiceps</i> <sup>4</sup> Bagnall, 1921             | Nilgiris; Mambakkam; (Tamil Nadu); Tirupathi (Andhra Pradesh); Goa        | Wild beets of dry twigs; dry grass clusters; dry <i>Smilax</i> twigs                |
| <b>Genus 9. <i>Elaphrothrips</i> Buffa, 1909</b>            |                                                                           |                                                                                     |
| <b>Subgenus 1. <i>Cradothrips</i> Ananthakrishnan, 1973</b> |                                                                           |                                                                                     |
| <i>C. insignis</i> Ananthakrishnan, 1973                    | Almora (U.P.)                                                             | Dry twigs                                                                           |
| <b>Subgenus 2. <i>Elaphrothrips</i> s.str.</b>              |                                                                           |                                                                                     |
| <i>E. curvipes</i> <sup>4</sup> Priesner, 1929              | Phuntsholding (BHUTAN); Kalimpong (W.B.)                                  | Dry twigs                                                                           |
| <i>E. denticollis</i> <sup>4</sup> (Bagnall, 1909)          | Tamil Nadu Kerala; Karnataka                                              | Dry leaves                                                                          |
| <i>E. greeni</i> <sup>4</sup> (Bagnall, 1914)               | Kiruvatti Forest (Karnataka)                                              | Decaying bark                                                                       |
| <i>E. notabilis</i> Ananthakrishnan, 1973                   | Kerala; Tamil Nadu; Karnataka; Andhra Pradesh                             | Dry <i>Areca</i> sheaths; decaying bark; dry leaves; Sandal.                        |
| <i>E. procer</i> <sup>4</sup> (Schmutz, 1913)               | Tamil Nadu; Kerala; Karnataka; Maharashtra                                | Dry twigs of <i>Sesbania</i> ; dry <i>Areca</i> sheath; dry coffee twigs; dry twigs |
| <i>E. spiniceps</i> <sup>4</sup> Bagnall, 1932              | Kathgodam (U.P.)                                                          | Dry twigs                                                                           |

Genus **10. Gastrothrips** Hood, 1912*G. acuticornis*<sup>1</sup> (Hood, 1925)*G. falcatus* (Ananthakrishnan, 1968)Tamil Nadu; Andhra Pradesh;  
KeralaTamil Nadu; Kerala; Andhra  
Pradesh; GoaDry twigs of Jasmine; dry *Burleria*  
twigs; dry twigsDecaying leaves & twigs; dry twigs;  
dry *Smilax* twigsGenus **11. Idolothrips** Haliday, 1852*I. halidayi* Newman, 1856*I. schenklingi* Karny, 1920Mysore  
Ceylon*Anacardium* sp.Genus **12. Ischyrothrips** Schmutz, 1913*I. crassus* Schmutz, 1913

Hyderabad (Andhra Pradesh)

Dead twigs

Genus **13. Loyolaia** Ananthakrishnan, 1964*L. indica* Ananthakrishnan, 1964

Madras

Dry &amp; decaying twigs

Genus **14. Machatothrips** Bangall, 1908*M. corticosus* Ananthakrishnan, 1972*M. indicus* Ananthakrishnan & Jagadish, 1970*M. silvaticus* Ananthakrishnan, 1972

Tenmalai (Kerala)

Aryankavu (Kerala); Kiruvatti  
Forest (Karnataka)

Kanha Forest (M.P.)

Dry twigs

Dry decaying leaves &amp; twigs

Dry twigs from fallen trees

Genus **15. Meiothrips** Priesner, 1929*M. menoni* Ananthakrishnan, 1964Karnataka; Kerala; Andhra  
PradeshDecaying *Areca* sheaths; dry leaves  
& twigsSubgenus **Aculeathrips** Kudo & Ananthakrishnan, 1975*A. nepalensis* Kudo & Ananthakrishnan, 1974

NEPAL

Genus **16. Neosmerinthothrips** Schmutz, 1913*N. fructuum*<sup>4</sup> Schmutz, 1913Andhra Pradesh; Kerala; Karna-  
taka; Tamil Nadu; W. Bengal;  
M.P.

Madurai (Tamil Nadu)

Kerala; Tamil Nadu; Andhra  
Pradesh; Goa

Dry twigs

Stem galls of *Dactylethra candida*

Dry twigs; dry grass

| <i>Name</i>                                                                                                                                                                                     | <i>Distribution</i>                                                                     | <i>Host</i>                                                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| 1                                                                                                                                                                                               | 2                                                                                       | 3                                                                             |
| Genus <b>17. Nesidiothrips</b> Mound, 1974<br><i>N. alius</i> (Ananthakrishnan, 1970)                                                                                                           | Aryankavu (Kerala); Tirupathi (Andhra Pradesh)                                          | Dry twigs                                                                     |
| Genus <b>18. Nesothrips</b> Kirkaldy, 1907<br><i>N. brevicollis</i> <sup>5</sup> (Bagnall, 1914)                                                                                                | Aryankavu (Kerala); Pachmarhi (M.P.)                                                    | Dry twigs                                                                     |
| Genus <b>19. Mecynothrips</b> Bagnall, 1908<br><i>M. simplex</i> <sup>4</sup> Bagnall, 1912                                                                                                     | Kerala; Karnataka, Manipur                                                              | Fungus infested <i>Areca</i> sheaths; dry leaves of mango; dry leaves & twigs |
| Genus <b>20. Oedaleothrips</b> Hood, 1916<br><i>O. congoensis</i> <sup>2</sup> Hood, 1952<br><i>O. ramamurthii</i> Ananthakrishnan, 1964<br><i>O. ramamurthii indicus</i> Ananthakrishnan, 1973 | Tamil Nadu; Andhra Pradesh<br>Andhra Pradesh; Tamil Nadu<br>Tirupathi (Andhra Pradesh)  | Dry grass<br>Dry grass<br>Dry grass                                           |
| Genus <b>21. Percnothrips</b> Ananthakrishnan, 1967<br><i>P. turbinatus</i> Ananthakrishnan, 1967                                                                                               | Madras; Kodaikanal; Kollimalai (Tamil Nadu); Joopal (Karnataka)                         | Dry & decaying twigs; proproots of Banyan; dry Prosopis twigs                 |
| Genus <b>22. Polyphemothrips</b> Schmutz, 1909<br><i>P. cracens</i> Ananthakrishnan, 1968                                                                                                       | Kallar; Madras; Annamalais (Tamil Nadu); Tirupathi (Andhra Pradesh); Aryankavu (Kerala) | Dry fungus infested twigs; Burleria twigs; Prosopis twigs                     |
| <i>P. enormis</i> Ananthakrishnan, 1969                                                                                                                                                         | Kallar (Tamil Nadu); Tirupathi (Andhra Pradesh)                                         | Dry fungus infested twigs                                                     |
| <i>P. fumidus</i> Ananthakrishnan, 1972                                                                                                                                                         | Mukteswar (U.P.)                                                                        | Dry twigs                                                                     |
| <i>P. indicus</i> (Ananthakrishnan, 1955)                                                                                                                                                       | Tamil Nadu; Kerala; Andhra Pradesh                                                      | Decaying twigs                                                                |
| <i>P. megacephalus</i> Ananthakrishnan, 1969                                                                                                                                                    | Kalimpong (W. Bengal)                                                                   | Fungus infested branches                                                      |

*P. mirandus* Ananthakrishnan, 1969  
*P. minor* Hood  
*P. (Adelothrips) nepalensis* Pelikan, 1970  
*P. ruidus* Ananthakrishnan, 1969  
*P. stannardi* Ananthakrishnan, 1972  
*P. subtilis* Ananthakrishnan, 1972

Genus **23. Priesneriana** Ananthakrishnan, 1956

*P. kabandha* (Ramakrishna, 1928)

Genus **24. Pygothrips** Hood, 1915

*P. amplus*<sup>2</sup> Faure, 1949

Genus **25. Pyrgothrips** Karny, 1924

*P. breviceps* (Bagnall, 1914)  
*P. faurei* (Ananthakrishnan, 1964)

Genus **26. Rhaebothrips** Karny, 1913

*R. lativentris*<sup>1,4,5,6,8</sup> Karny, 1913

Genus **27. Scotothrips** Priesner, 1939

*S. claripennis*<sup>2,3,8</sup> (Moulton, 1934)

Genus **28. Stinothrips** Ananthakrishnan, 1969

*S. typicus* (Ananthakrishnan, 1967)

Genus **29. Symphyothrips** Hood & Williams, 1915

*S. aberrans* Ananthakrishnan, 1971

Genus **30. Tiarothrips** Priesner, 1935

*T. subramanii* (Ramakrishna, 1925)

Genus **31. Veerabahuthrips** Ramakrishna, 1932

*V. bambusae* Ramakrishna, 1932

Kallar (Tamil Nadu)

Fungus infested twigs

Likhu Khola (NEPAL)

Kallar (Tamil Nadu)

Dchra Dun (U.P.)

Kodaikanal (Tamil Nadu)

Fungus infested twigs  
 Dry fungus infested twigs  
 Dry twigs

Tamil Nadu; Kerala; Karnataka

Dry *Prosopis* twigs; dry grass; dry  
 & decaying twigs.

Madras; Kollimalai (Tamil Nadu)  
 Aryankavu (Kerala)

Dry *Cassia* twigs; dry *Polyalthia*  
 twigs; dry Propois twigs

Simla (H.P.)

Madras; Tambaram (Tamil Nadu)  
 Trivandrum (Kerala)

Dried grass clumps

West Bengal; Tripura

Dry twigs

Madras (Tamil Nadu); Aryankavu  
 (Kerala)

Dry twigs; coconut sheaths; decay-  
 ing wood; decaying bark

Kotaigiri (Tamil Nadu)

Dry *Imperata* grass

Tirupathi (Andhra Pradesh);  
 Kollimalai (Tamil Nadu)

*Smilax* twigs; dry twigs

Mambakkam (Tamil Nadu)

Dry fungus infested *Palmyra* leaves

Coimbatore (Tamil Nadu)

Bamboo leaves

## APPENDIX II

## LIST OF INDIAN GENERA OF THYSANOPTERA

[Note:—Mer.=Merothripidae; Aeol.=Aeolothripidae; Het.=Heterothripidae; Phl.=Phlaeothripidae; Thr.=Thripidae]

|                                        |                                                                                                                                                                        |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Ablemothrips</i> Ananthakrishnan    | Phl. ( <i>Oriental Ins.</i> , <b>3</b> (3): 289, 1969), type gen. <i>A. maxillatus</i> Ananth.                                                                         |
| <i>Aclystothrips</i> Ananthakrishnan   | Phl. ( <i>Marcellia</i> , <b>37</b> (3): 111, 1971), type gen. <i>A. priesneri</i> Ananth.                                                                             |
| <i>Adelothrips</i> Hood                | Phl. ( <i>Revista de Ent.</i> , 1938 :380), type gen. <i>A. xanthopus</i> Hood.                                                                                        |
| <i>Adiheterothrips</i> Ramakrishna     | Het. ( <i>Mcm. Dept. Agri. India, Ent. Ser</i> <b>10</b> (7), 1928: 247), type gen. <i>A. jambudvipae</i> Ramk.                                                        |
| <i>Adraneothrips</i> Hood              | Phl. ( <i>Psyche</i> , <b>32</b> , 1925: 54), type gen. <i>Haplothrips</i> (?) <i>tibialis</i> Hood ( <i>Ins. Insec. Menstr.</i> 1914: 39).                            |
| <i>Aeglothrips</i> Ananthakrishnan     | Phl. ( <i>Senckbergiana biol.</i> , <b>50</b> (3-4), 1969: 179), type gen. <i>A. denticulus</i> Ananth.                                                                |
| <i>Aeolothrips</i> Haliday             | Aeol. ( <i>Ent. Mag.</i> , 1836: 451), type gen. <i>A. albicinctus</i> Ananth.                                                                                         |
| <i>Aesthesiothrips</i> Ananthakrishnan | Phl. ( <i>J. Zool. Soc. India</i> , <b>12</b> (2), 1960: 253), type gen. <i>A. jatrophae</i> Ananth.                                                                   |
| <i>Agalmothrips</i> Priesner           | Thr. ( <i>Publ. Inst. Desert Egypte</i> , <b>13</b> : 264, 1965) type gen. <i>A. parviceps</i> Priesner, 1965.                                                         |
| <i>Agriothrips</i> Ananthakrishnan     | Thr. ( <i>Bull. Ent.</i> , <b>7</b> , 1966: 28), type gen. <i>A. brevisetosus</i> Ananth.                                                                              |
| <i>Agrothrips</i> Jacot-Guillarmod     | Phl. ( <i>J. ent. Soc. S. Afr.</i> , <b>2</b> , 1939: 40), type gen. <i>A. priesneri</i> Jacot-Guillarmod.                                                             |
| <i>Ajothrips</i> Bhatti                | Thr. ( <i>Bull. Ent.</i> , <b>8</b> , 1967: 58), type gen. <i>A. karma</i> Bhatti.                                                                                     |
| <i>Alathrips</i> Bhatti                | Thr. ( <i>Oriental Ins.</i> , <b>3</b> (4), 1969: 373), type gen. <i>Hyalopterothrips roonwali</i> Bhatti ( <i>Proc. zool. Soc. India</i> , <b>14</b> (2), 1962: 177). |
| <i>Aleurodothrips</i> Franklin         | Phl. ( <i>Ent. News</i> , <b>20</b> , 1909: 228), type gen. <i>Cryptothrips fasciapennis</i> Franklin ( <i>Proc. U.S. Nat. Mus.</i> , 1908: 727).                      |
| <i>Allelothrips</i> Bagnall            | Aeol. ( <i>Ann. Mag. nat. Hist. Ser</i> <b>10</b> (10), 1932: 288), type gen. <i>A. cincticornis</i> Bagnall.                                                          |
| <i>Alocothrips</i> Priesner            | Phl. ( <i>Ind. J. Ent.</i> , <b>13</b> (2), 1952: 195), type gen. <i>Trichothrips hadrocerus</i> Karny ( <i>Mem. Dept. Agri. Ent. Ser.</i> , <b>9</b> (6), 1926: 220). |

- Alloiothrips* Ananthakrishnan Phl. (*Ent. Ts. Arg.*, **85**(3-4), 1964: 218), type gen. *A. nigrisetis* Ananth.
- Allothrips* Hood Phl. (*Bull. Illinois State Lab. Na. Hist.*, **8**, 1908: 373), type gen. *A. megacephalus* Hood.
- Amalothrips* Ananthakrishnan Thr. (*Ann. Soc. Ent. Fr.*, **3**(1), 1967: 227), type gen. *A. flaccidus* Ananth.
- Amblythrips* Bagnall Thr. (*J. econ. Biol.*, **6**, 1911: 3), type gen. *Thrips ericae* Hal. (*Ent. Mag.*, 1836: 448).
- Amphithrips* Ananthakrishnan Thr. (*Bull. Ent.*, **6**, 1965: 20), type gen. *A. argutus* Ananth.
- Ananthakrishnana* Bhatti Phl. (*Thysanoptera Nova Indica*, 1967: 22), gen. *A. indica* Bhatti.
- Ananthakrishnaniella* Stannard Phl. (*Proc. R. ent. Soc. Lond.*, **39** (7-8), 1970: 118), type gen. *A. tarai* Stannard
- Anaphothrips* Uzel Thr. (*Mon. Ord. Thysanoptera*, 1895: 142), type gen. *Thrips obscura* Mull. (*Zool. Dan. Prodrom*, 1776: 96).
- Anascirtothrips* Bhatti Thr. (*Bull. Ent.*, **2**, 1961: 26), type gen. *A. arorai* Bhatti.
- Androthrips* Karny Phl. (*Zentralbl. Bacteriol. Parasitenk.*, 1911), type gen. *Mesothrips melastomae* Zimm. (*Bull. Inst. Bot. Buitenzorg*, 1900: 17).
- Aneurothrips* Karny Thr. (*Marcellia*, **11**, 1912: 117), type gen. *A. punctipennis* Karny
- Antillothrips* Stannard Phl. (*Illinois Biol. Monogr.*, **25**, 1957: 35), type gen. *A. graminatus* Stannard
- Apelaunothrips* Karny Phl. (*Notulae Ent.*, 1925: 82), type gen. *Ophidothrips medioflavus* Karny (*Deli. Proefst. Medan*, 1925: 50)
- Aplerygothrips* Priesner Phl. (*Bull. Soc. R. Ent. d'Egypte*, 1933: 1), type gen. *A. haloxylis* Priesner.
- Aptinothrips* Haliday Thr. (*Ent. Mag.*, **3**, 1836: 445), type gen. *Thrips rufa* Gmelin (*Systema Naturae*, Ed. **13** (1), 1790: 2224).
- Araeothrips* Ananthakrishnan Phl. (*Proc. Indian Acad. Sci.*, **83B**(5), 1976: 202), type gen. *A. longisetis* Ananth.
- Arathrips* Bhatti Thr. (*Thysanoptera Nova Indica*, 1967: 16), type gen. *A. cus* Bhatti.
- Aroidothrips* Ananthakrishnan Thr. (*J. Bombay nat. Hist. Soc.*, **57**(3), 1960: 562), type gen. *A. longistylus* Ananth'
- Arrhenothrips* Hood Phl. (*Ins. Insec. Menstr.*, **7**, 1919: 98), type gen. *A. ramakrishnae* Hood.

- Ascirtothrips* Priesner Thr. (*Publ. Inst. Desert Egypte*, **13**, 1960: 252), type gen. *A. efflaoutoni* Priesner.
- Asprothrips* Crawford Thr. (*Proc. ent. Soc. Wash.*, **40**, 1938: 109), type gen. *A. raii* Crawford.
- Astrothrips* Karny Thr. (*Treubia*, **1**(4), 1921: 215), type gen. *Heliothrips globiceps* Karny (*Arch. f. Naturg.* 1913: 125).
- Austrothrips* Brethes Phl. (*Ann. Mus. Nac. Buenos Aires*, 1915: 89), type gen. *A. verae* Brethes.
- Ayyaria* Karny Thr. (*Mem. Dept. Agri. Ent. Ser.*, **9**, 1926: 190), type gen. *A. chaeotphora* Karny.
- Ayyarothrips* Ananthakrishnan Phl. (*Marcellia*, **37**(3), 1971: 120), type gen. *A. abstrusus* Ananth.
- Azaleothrips* Ananthakrishnan Phl. (*Ent. Ts. Arg.*, **85**(3-4), 1964: 220), type gen. *A. amabilis* Anan.
- Bactrothrips* Karny Phl. (*Ent. Rundschau*, 1912: 130), type gen. *B. longiventris* Karny.
- Baliothrips* Uze Thr. (*Mon. Ord. Thys.* :204, 1895), type gen. *Thrips dispar* Hal. (*Ent. Mag.*, 1836).
- Bamboosiella* Ananthakrishnan Phl. (*Ent. News*, LXVIII: 1957), type gen. *B. bicoloripes* Anan.
- Bathrips* Bhatti Thr. (*Bull. Ent. Madras* **3**: 34, 1962), type gen. *Taeniothrips melanicornis* Shumsher (*Indim. J. Ent.* **7**: 179, 1945).
- Bolacidothrips* Priesner Thr. (*Bull. Soc. R. Ent. d'Egypte*, **14**(1): 6, 1930), typ. gen. *E. graminis* Pries.
- Bournieria* Ananthakrishnan Phl. (*Bull. Ent.* **7**: 3, 1966), typ. gen. *B. indica* Anan.
- Brachythrips* Reuter Phl. (*Acta Soc. Faun. Flor. Fenn.* **17**(2): 28, 1899), typ. gen. *B. flavicornis* Reut.
- Biltothrips* Bhatti Thr. (*Oriental Ins.*, **7**(3): 438, 1973), typ. gen. *Sericothrips minutus* Bhatti (*Thysanoptera Nova Indica*, 1967).
- Bradythrips* Hood & Williams Phl. (*Psyche*: 68, 1925), typ. gen. *B. hesperus* Hood & Will.
- Bunothrips* Ananthakrishnan Phl. (*Oriental insects* **3**: 293, 1969), typ. gen. *Bunothrips cruralis* Ananth.
- Byctothrips* Ananthakrishnan Phl. (*Oriental Ins.*, **7**(4): 540, 1973), typ. gen. *B. ayyari* Ananth.
- Calamothrips* Ananthakrishnan Phl. (*Ann. Soc. Ent. France* (N.S.), **3**(1): 23, 1967), typ. gen. *C. fastigatus* Ananth.
- Caliothrips* Daniel Thr. (*Ent. News*, **15**(9): 296, 1904), typ. gen. *C. woodworthi* Daniel.

- Callothrips* Ananthakrishnan Phl. (*Indian Forester*, **95**(3): 176), typ. gen. *C. ascitus* Anan.
- Capitothrips* Bhatti Thr. (*Oriental Ins.*, **8**(4): 481, 1974), typ. gen. *C. subramanii* Bhatti.
- Caprithrips* Faure Thr. (*Bull. Brooklyn Ent. Soc.* **28**(1): 12, 1933), typ. gen. *C. analis* Faure.
- Carissothrips* Ananthakrishnan Phl. (*Ent. Ts. Arg.* **85**(3-4): 99, 1964), typ. gen. *C. nigrescens* Ananth.
- Ceratothripoides* Bagnall Thr. (*Ann. Mag. nat. Hist.*, **9**(1): 201, 1918), typ. gen. *C. brunneus* Bagn. (Synonym of *Taeniothrips* Serv. based on monstra).
- Ceratothrips* Reuter Thr. (*Act. Soc. Faun. For. Fenn.* :65, 1899), typ. gen. *C. trybom* Reut.
- Chaetanaphothrips* Priesner Thr. (*Thys. Eur.* **1**: 204, 1926), typ. gen. *Euthrips orchidii* Mlt. (*U.S. Dept. Agric. Tech. Ser.* **12**: 52, 1907).
- Chiraplothrips* Priesner Phl. (*Bull. Soc. Roy. Ent. Egypte* **14**(4): 271, 1930), typ. gen. *C. faureanus* Pr. Subgenus of *Haplothrips*.
- Chiridothrips* Ramakrishna & Margabandhu Phl. (*Rec. Ind. Mus.*, **41**: 32, 1939), typ. gen. *C. indicus* R. & M.
- Chirothrips* Haliday Thr. (*Ent. Mag.*, **3**(5): 444, 1836), typ. gen. *C. manicata* Hal.
- Chlarathrips* Ananthakrishnan Phl. (*Ann. Soc. Ent. Fr. (N.S.)* **3**(1): 230, 1976), typ. gen. *C. tersus* Ananth.
- Chleothrips* Priesner Thr. (*Zool. Anz.* 159: 159, 1957), typ. gen. *Thrip oryzae* Williams (*Bull. Ent. Res.*, **6**: 253, 1916).
- Corcithrips* Bhatti Thr. (*Oriental Ins.*, **7**(3): 409, 1973), typ. gen. *C. hartwigi* Bhatti.
- Corycidothrips* Ananthakrishnan Phl. (*Marcellia*, **37**(5): 4, 1972), typ. gen. *C. inquilinus* Ananth.
- Craspedothrips* Zur strassen Thr. (*Senck. Biol.*, 47(6): 43, 1966), typ. *Physothrips hargreavesi* (Karny) (*Bull. Ent. Res.* **16**(2): 127, 1925).
- Crotonothrips* Ananthakrishnan Phl. (*Oriental Insects* **1**(1-2): 119, 1957), typ. gen. *C. gallarum* Anan.
- Ctenidothrips* Priesner Thr. (*Ind. J. Ent.* VIII(2): 185, 1951), typ. gen. *C. bambusae* Pries.
- Ctenothrips* Franklin Thr. (*Ent. News*, **18**: 247, 1907), typ. gen. *C. bridwelli* Frkl.

- Danothrips* Bhatti Thr. (*Oriental Ins.*, **5**(3): 337, 197), typ. gen. *D. setifer* Bhatti.
- Decothrips* Ananthakrishnan Phl. (*Indian Forester*, **95**(3): 182, 1969), typ. gen. *D. anacardii* Ananth.
- Dendrothripoides* Bagnpall Thr. (*Ann. Mag. Nat. Hist.* (9)**12**: 624, 1923), typ. gen. *D. ipomeae* Bagn.
- Dendrothrips* Uzel Thr. (*Mon. Ord. Thys.* :159, 1895), typ. gen. *D. tiliae* Uz.
- Diaphorothrips* Karny Phl. (*Ent. Mitt.*, **7**: 86, 1920), typ. gen. *D. unguipes* Karny
- Diarthrothrips* Williams Thr. (*Bull. Ent. Res.*, **6**: 193, 269, 1915), typ. gen. *D. coffeae* Will.
- Diceratothrips* Bagnall Phl. (*Trans. Nat. Hist. Soc. Northum* **3**, 1908), typ. gen. *D. bicornis* Bagn.
- Dichromothrips* Priesner Thr. (*Stylops*, **1**: 110, 1932), typ. gen. *D. erchids* Pries.
- Dixothrips* Ananthakrishnan Phl. (*Oriental Insi*, **3**(3): 294, 1969), typ. gen. *D. onerosus* Ananth.
- Dolicholepta* Priesner Phl. (*Rev. Zool. Bot. Afr.* **22**: 198, 1932), typ. gen. *Dolichothrips giraffa* Karny (*Zool. Anz.*, :299, 1920).
- Dolichothrips* Karny Phl. (*Zool. Anz.*, **40**: 299, 1920), typ. gen. *D. longicollis* Karny.
- Dorcadothrips* Priesner Thr. (*Bull. Zoc. R. Ent. Egypte* **16**(3): 49, 1932), Typ. gen. *D. caespitis* Priesner.
- Ecacanthothrips* Bagnall Phl. (*Ann. Soc. Ent. Belg.* **52**: 348, 1909), typ. gen. *Acanthothrips sanguineus* Bagnall (*Ann. Mag. nat. Hist.*, (8)**1**: 362, 1908.)
- Ednathrips* Bhatti Thr. (*Oriental Ins.*, **10**(3): 320, 1976), typ. gen. *E. pardus* Bhatti.
- Elaphridia* Ananthakrishnan Phl. (*Opuscula Ent. Sppl.* **25**: 90, 1964), typ. gen. *Elaphrothrips crassiceps* Bagnall (*Ann. Mag. nat. Hist.* (10)**13**: 627, 1934).
- Elaphrothrips* Buffa Phl. (*Redia* **5**: 162, 1909), typ. gen. *Idolothrips coniferarum* Pergande (*Ent. News*, **7**: 63, 1896).
- Elbuthrips* Bhatti Thr. (*Oriental Ins.*, **7**(3): 410, 1973), typ. gen. *E. latis* Bhatti.
- Eothrips* Hood Phl. (*Entomologist* **48**: 106, 1915), typ. *Dolerothrips crassicornis* Karny (*Bull. Jard. Bot. Buitenzorg.* 84, 1913).

- Ernothrips* Bhatti      Thr. (*Thy. nova Indica* :18, 1967), subgenus of *Thrips* — raised to generic rank (*Oriental Ins.*, **4**(3): 376, 1969), typ. gen. *E. lobatus* Bhatti.
- Erotidothrips* Priesner      Mero. (*Rev. zool. bot. Afric.*, **32**: 154, 1939), typ. gen. *E. mirabilis* Pries.
- Erythrothrips* Moulton      Aeol. (*Tech. Ser. U.S. Bur. Ent.*, **21**: 34 1911), typ. gen. *E. arizonae* Moul.
- Eugynothrips* Priesner      Phl. (*Treubia, suppl.*, **8**: 157, 1926), typ. gen. *Cryptothrips concephali* Karny (*Bull. Jard. Bot. Buitenzorg* :98, 1918).
- Euidothrips* Ananthakrishnan      Thr. (*Oriental Ins.*, **1**(1-2):118, 1967), typ. gen. *E. asperas* Ananth.
- Euoplothrips* Hood      Phl. (*Mem. Queensld. Mus.*, **6**: 140, 1918), typ. gen. *E. bagnalli* Hood.
- Euphysothrips* Bagnall      Thr. (*Ann. Mag. Nat. Hist.*, (9)**18**: 646, 1926), typ. gen. *E. minozzii* Bagn.
- Eurhynchothrips* Bagnall      Phl. (*Ann. Mag. Nat. Hist.*, (9)**1**: 213, 1918), typ. gen. *E. convergens* Bagn.
- Euryaplothrips* Ramakrishna & Margabandhu      Phl. (*J. Bombay Nat. Hist. Soc.*, **34**(4): 1037, 1931), typ. gen. *E. crassus* Ram. & Marg.
- Exothrips* Priesner      Thr. (*Rev. zool. bot. Afric.*, **32**(2): 162. 1939), typ. gen. *E. monstrosus* Pries. Synonym of *Parexothrips* Pries. (Bhatti, *Oriental Ins.*, **3**(4): 376, 1960).
- Florithrips* Bhatti      Thr. (*Oriental Ins.*, **3**(4): 377, 1969), typ. gen. *Taeniothrips traegardhi* Trybom.
- Foliothrips* Bhatti      Thr. (*Oriental Ins.*, **6**(4): 543, 1972), typ. gen. *F. oratus* Bhatti.
- Frankliniella* Karny      Thr. (*Mitt. Nat. Ver. Univ. Wien.*, **8**(2): 46, 1910), typ. gen. *Thrips intonsa* Tryb. (*Ent. Tidskr.* 1895).
- Franklinothrips* Back      Aeol. (*Ent. News.*, **23**: 73, 1912), typ. gen. *Aeolothrips vespiformis* L.C. Crawf. *Pomona Coll. Journ. Ent.*, **1**(4): 110, 1909).
- Gastrothrips* Hood      Phl. (*Proc. Ent. Soc. Wash.*, **14**: 156, 1912), typ. gen. *G. ruficauda* (Hood).
- Gelothrips* Bhatti      Aeol. (*Thys. Nova Indica* : **5**, 1967), Subgenus of *Aeolothrips*; type subgenus, *G. alis* Bhatti.
- Gigantothrips* Zimmerman      Phl. (*Bull. Inst. Bot. Buitenzorg*, **7**: 18, 1900), typ. gen. *G. elegans* Zimm.

- Glubothrips* Ananthakrishnan Phl. (*Oriental Ins.*, **3**(3): 295, 1969), typ. gen. *G. mucidus* Anan.
- Gnomonothrips* Ramakrishna & Margabandhu Thrip. (*Rec. Ind. Mus.*, **41**: 28, 1939), typ. gen. *G. coimbatorensis* Ram. & Marg
- Gynaikothrips* Zimmerman Phl. (*Bull. Inst. Bot. Buitenzorg* **7**: 13, 1900) typ. gen. *G. uzeli* Zimm.
- Habrothrips* Ananthakrishnan Phl. (*Oriental Ins.*, **1**: 137, 1967), typ. *H. curiosus* Anan.
- Haplothrips* Amyot & Serville Phl. (*Hist. Nat. Ins. Hem.* : **640**, 1843), typ. gen. *Phloeothrips albipennis* Burmeister (= *Thrips aculeatus* F. (*Syst. Rhyn.* : 312, 1803).
- Helionothrips* Bagnall Thrip. (*Ann. Mag. Nat. Hist.*, (10)**10**: 506, 1932), typ. gen. *Heliothrips brunneipennis* Bagn. (*Ann. Mag. nat. Hist.*, (8)**15**: 318, 1915).
- Heliothrips* Haliday Thrip. (*Ent. Mag.*, **3**(5): 443, 1836, typ. gen. *Thrips haemorrhoidalis* Bouche (*Nat. Schadl. Garten-Ins* : 206, 1833).
- Hercinothrips* Bagnall Thrip. (*Ann. Mag. Nat. Hist.*, (10)**10**: 506, 1932), typ. gen. *Heliothrips bicinctus* Bagn. (*Ann. Mag. nat. Hist.*, (4)**9**: 258, 1919).
- Holarthrothrips* Bagnall Het. (*Ann. Mag. Nat. Hist.*, (9)**20**: 562, 1927), typ. gen. *H. tenuicornis* Bagn.
- Hoplandrothrips* Hood Phl. (*Proc. Ent. Soc. Wash.*, **14**: 145, 1912), typ. gen. *Phloeothrips (Hoplandrothrips) xanthopus* Hood.
- Hoplothrips* Amyot & Serville Phl. (*Hist. Nat. Ins. Hem.* : 640, 1843), typ. gen. *Thrips corticis*. De Geer (*Mem. p. serv. a. Hist. des. Ins.*, **3**: 11, 1773).
- Hydatothrips* Karny Thrip. (*Wiss. Ergebn. Zentralafrika Exped.* 1907-1908, **4**: 281, 1913), typ. gen. *H. adolffriderici* Karny. Synonym (?) of *Sericothrips* Hal.
- Idiothrips* Faure Phl. (*Bull. Brooklyn. Ent. Soc.* **28**(2): 59, 1933), typ. gen. *I. bellus* Faure.
- Idolothrips* Haliday Phl. (*List of the specimens of Homopterous Insects in the collection of Brit. Mus.*, 1096, 1852), typ. gen. *I. spectrum* Hal.
- Indothrips* Bhatti Aeol. (*Thys. nova Indica* : 2, 1967), typ. gen. *I. bhushani* Bhatti.
- Indusiothrips* Priesner Thr. (*Indian J. ent.* **13**: 183, 1952), typ. gen. *I. seshadrii* Pries.

- Ischyrothrips* Schmutz Phl. (*Sitz. Akad. Wiss. Wien.*, **122**: 1074, 1913), typ. gen. *I. crassus* Schm.
- Karnyothrips* Watson Phl. (*Univ. Flo. Agri. Exp. Sta. Bull.*, **168**: 23, 1924), typ. gen. *Karnyia weigeli* Wats. (*Florida Ent.* :7, 1922) = *Haplothrips flavipes* Jones (*U.S. Dept. Agr. Techn. Ser.* **23**: 18, 1912). Synonym of *Watsoniella* Karny.
- Kochummania* Ananthakrishnan Phl. (*Senck. Biol.*, **50**: 184, 1969), typ. gen. *K. excelsa* Anan.
- Krasiothrips* Kudo Thr. (*Kontyu*, **45**(1): 4, 1977), typ. gen. *K. coluckus* Kudo.
- Kazinothrips* Bhatti Thr. (*Oriental Ins.*, **7**(3): 432, 1973), typ. gen. *Zonothrips luridus* Ananthakrishnan (*Oriental Ins.*, **1**(1-2): 114-116, 1967).
- Laplothrips* Bhatti Thr. (*Oriental Ins.*, **6**(4): 544, 1972), typ. gen. *L. bicolor* Bhatti.
- Leeuwenia* Karny Phl. (*Marcellia* **11**: 161, 1912), typ. gen. *L. gladiatrix* Karny.
- Lefroyothrips* Priesner Thr. (*Treubia* **16**: 499, 1938), typ. subgen. *Taeniothrips lefroyi* Bagn. (*Ann. Mag. Nat. Hist.*, : 292, 1913), Subgen. of *Taeniothrips* Serv.
- Liophlaeothrips* Priesner Phl. (*Sitz. Akad. Wiss. Wien.*, **128**: 138, 1919), typ. gen. *L. glaber* Pries.
- Liothrips* Uzel Phl. (*Mon. Ord. Thys.* : 261, 1895), typ. gen. *Phloeothrips setinodis* Reut. (*Scott. Naturalist* : 310, 1880).
- Loyolaia* Ananthakrishnan Phl. (*Ent. Ts. Arg.*, **85**(1-2): 106, 1964), typ. gen. *L. indica* Anan.
- Lygothrips* Ananthakrishnan Phl. (*Opuscula Ent. Suppl.*, **25**: 60, 1964), typ. *Eothrips jambuvasi* Ramk. (*Mem. Dept. Agric. Ind. Ent. Ser.* **10**(7): 300, 1928).
- Machatothrips* Bagnall Phl. (*Trans. Nat. Hist. Northumb.*, **3**: 189, 1908), typ. gen. *M. biuncinatus* Bagnall.
- Macrophthalmothrips* Karny Phl. (*Treubia*, **3**(1): 34, 1922), typ. gen. *Ophthalmothrips argus* Karny (*Act. Soc. Ent. Cech.*, **17**: 38, 1920).
- Mallothrips* Ramakrishna Phl. (*Mem. Dept. Agri. India, Ent. Ser.*, **10**: 308, 1928), typ. gen. *M. indicus* Ram.
- Margaritothrips* Priesner Phl. (*Konowia*, **11**(1): 53, 1932), typ. gen. *M. karnyanus* Pries.
- Mecynothrips* Bagnall Phl. (*Ann. Mag. Nat. Hist.*, : 356, 1908), typ. gen. *M. wallacei* Bagn.

- Megalurothrips* Bagnall Thr. (*Ann. Mag. Nat. Hist.*, (8)**15**: 589, 1915), typ. gen. *M. typicus* Bagn. Synonym of *Taeniothrips* Serv. raised to the rank of genus by Bhatti (1969).
- Maxillothrips* Bhatti Phl. (*Entomon*, **3** (2): 226, 1978), typ. gen. *Dolicholepta arora*, Bhatti & Hattar, 1974 (*Oriental Insects*, **8** [4]: 551).
- Membrothrips* Bhatti Phl. (*Entomon*, **3** (2): 226, 1978) typ. gen. *Neoheegeria indica* Hood, 1919 (*Insect. Inscit. Menstr.*, **7** (3): 96).
- Meiothrips* Priesner Phl. (*Treubia*, **11**: 197, 1929), typ. gen. *Idolothrips annulatus* Pries.
- Melanthrips* Haliday Aeol. (*Ent. Mag.*, **3**: 450, 1836), typ. gen. *Thrips fuscus* Sulz. (*Abgek. Gesch. Ins.*, **112**: 1776).
- Merothrips* Hood Mer. (*Proc. Ent. Soc. Wash.*, **14**(3): 132, 1912), typ. gen. *M. morgani* Hood.
- Mesandrothrips* Priesner Phl. (*Konowia* **12**: 80, 1933), typ. gen. *Haplothrips inquilinus* Pries. (*Treubia*: 4, 6, 1921).
- Mesicothrips* Priesner Phl. (*Indian. J. Ent.*, **13**(2): 190-91, 1951), typ. gen. *M. plicans* Pries.
- Mesothrips* Zimmerman Phl. (*Bull. Inst. Bot. Buitenzorg*, **7**: 12, 1900), typ. gen. *M. jordani* Zimm.
- Micothrips* Ananthakrishnan Thr. (*Bull. Ent.*, **6**: 18-19, 1968), typ. gen. *M. fasciatus* Anan.
- Microcephalothrips* Bagnall Thr. (*Ann. Mag. Nat. Hist.*, (9)**18**: 113, 1926), typ. gen. *Thrips abdominalis* L.C. Crawf. *Pomona Coll. Journ.*: 157, 1910).
- Monilothrips* Moulton Thr. (*Rec. Ind. Mus.*, **31**(2): 93, 1929), typ. gen. *M. kempfi* Moulton.
- Mycterothrips* Trybom Thr. (*Denkschr. med.-naturw. Ges. Jena* **4**(1): 158, 1910), typ. gen. *M. laticauda* Tryb.
- Mymarothrips* Bagnall Aeol. (*Ann. Mag. Nat. Hist.*, (10)**1**: 306, 1928), typ. gen. *M. ritchianus* Bagn.
- Mystrothrips* Priesner Phl. (*Bull. Soc. Fouad ler Ent.*, **33**: 117, 1969), typ. gen. *Sagenothrips dammermani* Pries. *Konowia*: 75, 1933).
- Nanothrips* Faure Phl. (*Publ. Univ. Pretoria, Nat. Sci.*, **4**: 3, 1938), typ. gen. *N. breviceps* Faure. Synonym of *Sophiothrips* Hood.
- Neocorynothrips* Ramakrishna & Margabandhu Thr. (*Rec. Ind. Mus.*, **41**: 21, 1939), typ. gen. *N. asiaticus* Ram. & Marg.

- Neodixothrips* Sen & Muraleedharan Phl. (*Entomon*, **1**(2): 178, 1976), typ. gen. *N. assamensis* Sen & Muraleedharan
- Neoheegeria* Schmutz Phl. (*Ann. Mus. Wien*, **23**: 344, 1909), typ. gen. *N. dalmatica* Schmutz.
- Neohydatothrips* John. Thr. (*Bull. Ann. Soc. Ent., Belg.*, **:33**, 1929), typ. gen. *N. latercostriatus* John.
- Neolimothrips* Shumsher Thr. (*Indicn, J. Ent.* **4**: 8, 1942), typ. gen. *N. brachycephalus* Shumsh.
- Neosmerinthothrips* Schmutz Phl. (*Sitz. Akad. Wiss. Wien.*, **122**(7): 1051, 1913), typ. gen. *N. fructuum* Schmutz.
- Neothrips* Hood Phl. (*Bull. Ill. State Lab.*, **8**: 371, 1908), typ. gen. *N. corticis* Hood.
- Nesidiothrips* Mound Phl. (*Bull. Brit. Mus. (Nat. Hist.) Ent.*, **31**: 156, 1974), typ. gen. *Nesothrips alius* Ananth. *J. zool. Soc. India*, **22**: 52, 1970).
- Nesothrips* Kirkaldy Phl. (*Proc. Hawaii Ent. Soc.*, **1**: 102, 1907), typ. gen. *N. oahuensis* Kirk.
- Neurothrips* Hood Phl. (*Ent. News.*, **35**: 315, 1924), typ. gen. *Acanthothrips magnafemoralis* Hinds (*Monogr.* :199, 1902).
- Noathrips* Bhatti Thr. (*Thys. nova Indica* :9, 1969), typ. gen. *N. prakashii* Bhatti.
- Ocnothrips* Ananthakrishnan Phl. (*Senck. Biol.*, **50**(3-4): 188, 1969), typ. gen. *C. indicus* Anan.
- Ocythrips* Ananthakrishnan Phl. (*Oriental Ins.*, **6**(4): 440, 1972), typ. gen. *O. rarus* Ananth.
- Oedaleothrips* Hood Phl. (*Bull. Brooklyn Ent. Soc.*, **11**(3): 64, 1916), typ. gen. *O. hookeri* Hood.
- Opidnothrips* Ananthakrishnan Phl. (*Oriental Ins.*, **5**(2): 191, 1971), typ. gen. *O. corticulus* Anan.
- Organothrips* Hood Thr. (*Proc. Hawaii Ent. Soc.*, **10**(3): 423, 1940), typ. gen. *O. bianchii* Hood.
- Orothrips* Moulton Aeol. (*U.S. Dept. Agr., Tech. Ser.* **12**: 45, 1907), typ. gen. *O. kelloggi* Moulton.
- Oxythrips* Uzel Thr. (*Mon. Ord. Thys.*, :133, 1895), typ. gen. *O. ajugae* Uz.
- Palmiothrips* Bhatti Thr. (*Senckenbergiana biol.*, **59**(1-2): 101, 1978) typ. gen. *Hemianaphothrips palmae* (Ramk. 1934).
- Panchaetothrips* Bagnall Thr. (*Rec. Ind. Mus.*, **7**: 257, 1912), typ. gen. *P. indicus* Bagn.
- Parthenothrips* Uzel Thr. (*Mon. Ord. Thys.* :170, 1895), typ. gen. *Heliothrips dracaenae* Heeg. (*Sitz. Akad. Wiss. Wien.* :365, 1852).

- Pegothrips* Sen & Muraleedharan Phl. (*Entomon*, **1**(2): 175, 1976), typ. gen. *P. maghalaya* Sen & Muraleedharan.
- Parsiothrips* Bhatti Thr. (*Oriental Ins.*, **4**(2): 205, 1970), typ. gen. *P. fuscus* Bhatti.
- Pellothrips* Ananthakrishnan Thr. (*Oriental Ins.*, **2**(2): 204, 1968), typ. gen. *Ornothrips fuscus* Anan. (*Bull. Ent. Madras*, **6**: 15, 1965).
- Percnothrips* Ananthakrishnan Phl. (*Ann. Soc. Ent. France*, **3**(1): 233, 1967), typ. gen. *P. turbinatus* Anan.
- Phenothrips* Ananthakrishnan Phl. (*Oriental Ins.*, **1**(2): 128, 1967), typ. gen. *P. decoratus* Anan.
- Phiarothrips* Ananthakrishnan Phl. (*Oriental Ins.*, **2**(1): 49, 1968), typ. gen. *P. reperticus* Anan.
- Phibalothrips* Hood Thr. (*Mem. Queens. Mus.*, **6**: 125, 1918), typ. gen. *P. exilis* Hood.
- Phlaeothrips* Haliday Phl. (*Ent. Mag.*, **3**(5): 442, 1836), typ. gen. *P. coriaceus* Hal.
- Phorinothrips* Ananthakrishnan Phl. (*Oriental Ins.*, **1**(1-2): 126, 1967), typ. gen. *P. loranthe* Anan.
- Phylladothrips* Priesner Phl. (*Konowia*, **12**(1-2): 79, 1933), typ. gen. *P. karnyi* Pries.
- Plectrothrips* Hood Phl. (*Bull. Illin. State Lab.*, **8**: 370, 1908), typ. gen. *P. antennatus* Hood.
- Prigmothrips* Priesner Phl. (*Treubia*, **22**(2): 349, 1953), typ. gen. *P. medanensis* Pries.
- Podothrips* Hood Phl. (*Insec. Inscit. Menstr.*, **1**(6): 67, 1913), typ. gen. *P. semiflavus* Hood.
- Polyphemothrips* Schmutz Phl. (*Annal. naturh. Hofmus Wien.*, **23**: 276, 1909), typ. gen. *P. brasiliensis*, Schmutz.
- Praepodothrips* Priesner & Seshadri Phl. (*Indian J. Agric. Sci.*, **22**(4): 425, 1952), typ. gen. *P. indicus* Pries. & Sesh.
- Priesneriana* Ananthakrishnan Phl. (*Zool. Anz.*, **157**: 138, 1956), typ. gen. *Gnophothrips kabandha* Ramk. (*Mem. Dept. Agri. Ent. Ser.*, **10**: 293, 1928).
- Priesneriola* Ananthakrishnan Thr. (*Bull. Ent.*, **5**: 52, 1964), typ. gen. *P. o'neillae* Anan.
- Projectothrips* Moulton Thr. (*Rec. Ind. Mus.*, **31**: 95, 1929), typ. gen. *P. pruthi* Moulton.
- Psenothrips* Ananthakrishnan Phl. (*Oriental Ins.*, **1**(1-2): 128, 1967), typ. gen. *Teuchothrips priesneri* Ananthakrishnan (*Ent. Tidskr.*, **83**(3-4): 234, 1967).

- Pseudodendrothrips* Schmutz Thr. (Sitz. Akad. Wiss. Wien, :998, 1913), typ. gen. *P. ornatissimus* Schm.
- Psilothrips* Hood Thr. (Proc. Biol. Soc. Wash., :198, 1927), typ. gen. *P. pardalotus* Hood.
- Pygmaeothrips* Karny Phl. (Acta. Soc. Ent. Czech., **17**: 40, 1920), typ. gen. *P. columniceps* Karny.
- Pseudodendrothrips* Schmutz Thr. (Sitz. Akad. Wiss. Wien., (1), **122**(7): 998, 1913), typ. gen. *P. ornatissimus* Schmutz.
- Pygothrips* Hood Phl. (Proc. Biol. Soc. Wash., **28**: 49, 1915), typ. gen. *P. rugicauda* Hood.
- Pyrgothrips* Karny Phl. (Ark. f. zool. (2), **17A**: 35, 1924), typ. gen. *P. conocephalus* Karny.
- Ramakrishnaiella* Karny Phl. (Mem. Dept. Agric. Ind. Ent. Ser., **9**: 232, 1926), typ. gen. *R. unispina* Karny.
- Retithrips* Marchal Thr. (Bull. Soc. Ent. d'Egypte, **2**(1): 17, 1910), typ. gen. *Heliothrips syriacus* Mayet (Ins. de la Vigne: 451, 1890).
- Rhaebothrips* Karny Phl. (Formosa — Ausbente Suppl. Ent., **2**: 128, 1913), typ. gen. *R. lativentris* Karny.
- Rhamphothrips* Karny Thr. (Zeitschr. Wiss. Insectenbiol., **10**(8-9), 123: 1913), typ. gen. *Rhyncnothrips tenuirostris* Karny (Zool. Anz., **40**(10-11), 297: 1912).
- Rhipiphorothrips* Morgan Thr. (Proc. U.S. Nat. Mus., **46**: 17, 1913), typ. gen. *R. pulchellus* Morg.
- Rhynchothrips* Hood Phl. (Proc. Ent. Soc. Wash., **14**: 141, 1912), typ. gen. *R. pruni* Hood.
- Salothrips* Ananthakrishnan Phl. (Proc. Indian Acad. Sci., **83B**(5) 1976: 204-205), type. gen. *S. indicus* Ananth.
- Salpingothrips* Hood Thr. (Journ. New York Ent. Soc., **43**(2): 157, 1935), typ. gen. *S. minimus* Hood.
- Scelothrips* Priesner Phl. (Indian. J. Ent., **13**: 188, 1951), typ. gen. *S. menoni* Pries.
- Schedothrips* Ananthakrishnan Phl. (Senck. biol., **50**(3-4) 192, 1969), typ. gen. *Teuchothrips orientalis* Anan. (Oriental Ins., **1**(1-2): 132, 1967).
- Sciothrips* Bhatti Thr. (Oriental Ins., **3**(4): 379, 1969), typ. gen. *Ramakrishnothrips cardamomi* (Ramk.).
- Scirtothrips* Shull Thr. (Ent. News, **20**(5): 222, 1909), typ. gen. *S. ruthveni* Shull.
- Scolothrips* Hinds Thr. (Proc. U.S. Nat. Mus., **26**: 157, 1902), typ. gen. *S. sexmaculatus* Hinds.

- Scotothrips* Priesner Phl. (*Proc. R. Ent. Soc. London* (B), **8**(4): 75, 1938), typ. gen. *Adiaphorothrips elephas* Karny (*Soc. Ent. Cech.*, :48, 1920).
- Segnothrips* Ananthakrishnan Phl. (*Entmol. Ts. Arg.* **86**(1-2): 49, 1965), typ. gen. *S. trivandrensis* Anan.
- Selenothrips* Karny Thr. (*Ent. Rundschau*, **28**: 180, 1911), typ. gen. *Physopus rubrocincta* Giard (*Agr. News Barbados*: 58, 1913).
- Sericothrips* Halday Thr. (*Ent. Mag.*, **3**(5): 444, 1836), typ. gen. *S. staphylinus* Hal.
- Smilothrips* Bhatti Thr. (*Oriental Ins.*, **10**(3): 323, 1976), typ. gen. *S. productus* Bhatti.
- Socothrips* Ananthakrishnan Phl. (*Oriental Ins.*, **6**(4): 427, 1972), typ. gen. *S. verrucosus* Ananth.
- Smerignothrips* Priesner Thr. (*Treubia*, **16**: 507, 1938), typ. gen. *S. salaciae* Pries.
- Smilothrips* Bhatti Thr. (*Mon. Ord. Thys.* :206, 1895), typ. gen. *S. biuncinatus* Uz.
- Sorothrips* Priesner Thr. (*Bull. Soc. R. Ent. d'Egypte* :88, 1936), typ. gen. *Thrips longistylus* Tryb. (*Swed. Exped. Egypt. etc. Uppsala* :8, 1911).
- Sphingothrips* Ananthakrishnan Phl. (*Marcellia*, **37**(3): 115, 1971), typ. gen. *Dolerothrips trachypogon* Karny.
- Stannardiana* Ananthakrishnan Phl. (*Ent. Ts. Arg.* **85**(1-2): 115, 1964), typ. gen. *S. variegata* Anan.
- Stannardothrips* Ananthakrishnan Phl. (*Ent. Ts. Arg.* **86**(1-2): 51, 1965), typ. gen. *S. longirostris* Anan.
- Stephanothrips* Trybom Phl. (*Ark. f. Zool.*, **7**(33): 42, 1912), typ. gen. *S. buffai* Tryb.
- Stictothrips* Hood Phl. (*Psyche*, **31**(6): 295, 1924), typ. gen. *Phloeothrips maculatus* Hood (*Ent. News*, 20 :250, 1909).
- Stinothrips* Ananthakrishnan Phl. (*Indian Thysanoptera*: 55, 1969), typ. gen. *Ischnothrips typicus* Ananth. (*Ann. Soc. ent. Fr. (N.S.)*, **3**: 235, 1967).
- Strepterothrips* Hood Phl. (*Journ. New York Ent. Soc.*, **41**: 431, 1933), typ. gen. *S. conradi* Hood.
- Streothrips* Bhatti Aeol. (*Oriental Ins.*, **5**(1): 89, 1971), typ. gen. *Aeolothrips arorai* Bhatti (*Thysanoptera Nova Indica*: 4, 1967).
- Symphyothrips* Hood & Williams Phl. (*J. New York Ent. Soc.*, **23**: 131, 1915), typ. gen. *S. punctatus* Hood & Williams.
- Synerogothrips* Ananthakrishnan Phl. (*Marcellia*, **37**(3): 117, 1971), typ. gen. *S. prolatus* Ananth.

- Taeniothrips* Serville Thr. (*Hist. nat. des. Ins. Hemipt.* :644, 1843), typ. gen. *Thrips picipes* Zett. *Faun. Ins. Lapon* :561, 1828).
- Tetradothrips* Priesner Phl. (*Indian J. Ent.* **13** (2): 198, 1951), typ. gen. *Eothrips folliperda* Karny (Mem. Dept. Agr. India E.S. **9**(6): 22, 1926).
- Thilakothrips* Ramakrishna Phl. (*Mem. Dept. Agri. India, Ent. Ser.* **10**: 275, 1928), typ. gen. *T. babuli* Ram.
- Thlibothrips* Pries. Phl. (*Indian. J. Ent.* **13**(2): 199, 1951), typ. gen. *Gynaikothrips atavus* Karny *Zeit. wiss. Ins. Biol.* :204, 1915).
- Thrips* Linnaeus Thr. (*Systema Naturae*, 10th edition: 457, 1758), typ. gen. *Thrips physapus* L.
- Trichinothrips* Priesner Phl. (*Konowia*, **13**(3): 251, 1935), typ. gen. *Kleothrips subramanii* Ram. (*J. Bombay Nat. Hist. Soc.* :2, 1925).
- Treherniella* Watson Phl. (*Synopsis*: 81, 1923), typ. gen. *Haplothrips orlando* Wats. & Osb. *Florida Euggist*: 116, 1918).
- Trichinothrips* Bagnall Phl. (*Ann. Mag. Nat. Hist.*, (10)**3**: 604, 1929), typ. gen. *T. branderi* Bagn.
- Trichromothrips* Priesner Thr. (*Bull. Soc. R. Ent. d'Egypte* **14**(1) 9, 1930), typ. gen. *T. bellus* Pries.
- Tryphactothrips* Bagnall Thr. (*Ann. Mag. Nat. Hist.*, (9)**4**: 256, 1919), (typ. gen. *Dinurothrips rutherfordi* Bagn. *A.M.N.H.* 319, 1915).
- Tusothrips* Bhatti Thr. (*Thys. nova Indica*: 16, 1967), typ. gen. *Myctrothrips pseudosetiprivus* R. & M. (*Ind. J. Ent.* **1**(3): 42, 1939).
- Tylothrips* Hood Phl. (*Revista de Ent.*, **7**(4): 494, 1937), typ. gen. *T. concolor* Hood.
- Uredothrips* Ananthakrishnan Phl. (*Indian Forester* **95**(3): 184, 1969), typ. gen. *U. indicus* Anan.
- Veerabahuthrips* Ramakrishna Phl. (*Rec. Ind. Mus.*, **34**: 278, 1932), typ. gen. *V. bambusae* Ram.
- Zylaplothrips* Priesner Phl. (*Thys. Eur.*: 572, 1928), typ. gen. *Cryptothrips fuliginosus* Schille (*Akad Wiss. Krakow*: 7, 1910).
- Zaniothrips* Bhatti Thr. (*Thys. nova Indica*: 6, 1967), typ. gen. *Z. ricini* Bhatti.

**APPENDIX III****HOST PLANTS OF INDIAN THYSANOPTERA****ABEACEAE***Cedrus deodara**Hydatothrips proximus* Bhatti, 1973 — male cone*Oxythrips kochummani* Ananthakrishnan, 1969 — male cone**ACANTHACEAE***Barleria* sp.*Kazinothrips luridus* (Ananthakrishnan, 1967)*Ruellia* sp.*Micothrips fasciatus* Ananthakrishnan, 1965**AMARANTACEAE***Aerva* sp.*Ascirtothrips antilope* (Prienscr, 1923)*Alternanthera* sp.*Chaetanaphothrips orchidii* (Moulton, 1907)*Amarantus* sp.*Euryaplothrips crassus* Ramakrishna & Margabandhu, 1931 — flower heads*Haplothrips clarisetis* Priesner, 1930*Haplothrips gowdeyi* (Franklin, 1908)*Celosia* sp.*Astrothrips stannardi* Bhatti, 1967 — inflorescence*Haplothrips clarisetis* Priesner, 1930**AMARYLLIDACEAE***Crinum* sp.*Astrothrips parvilimbus* Stannard & Mitri, 1962**ANACARDIACEAE***Anacardiun occidentale**Rhipiphorothrips cruentatus* Hood, 1919*Selenothrips rubrocinctus* (Giard, 1901)*Scirtothrips dorsalis* (Hood)*Thrips hawaiiensis* (Morgan, 1913)*Anacardium* sp.*Idolothrips halidayi* Newman, 1856

*Mangifera indica*

- Aeolothrips collaris* Priesner, 1919 — tender leaves  
*Caliothrips luckmani* Wilson, 1975 — leaves  
*Exothrips hemavarna* (Ramakrishna & Margabandhu, 1931)  
*Ramaswamihiella subnudula* Karny, 1926 — leaves  
*Rhipiphorothrips cruentatus* Hood, 1919 — tender leaves  
*Scirtothrips dorsalis* Hood, 1919 — inflorescence  
*Thrips (Oxyrrhinothrips) beharensis* Ramakrishna & Margabandhu, 1939 — leaves  
*Eurhynchothrips ordinarius* (Hood, 1919) — leaves  
*Haplothrips ganglbaueri* Schmutz, 1913 — inflorescence  
*Haplothrips tenuipennis* Bagnall, 1918 — inflorescence  
*Neoheegeria mangiferae* (Priesner) — inflorescence

## ANONACEAE

*Anona squamosa*

- Helionothrips kadaliphilus* (Ramakrishna & Margabandhu, 1931)  
*Artabotrys* sp.  
*Liothrips eugeniae artabotrys* Ananthakrishnan & Varadarasan, 1978

## APOCYNACEAE

*Carissa* sp.

- Dendrothrips sexmaculatus* Bagnall, 1916  
*Alloiothrips nigrisetis* Ananthakrishnan, 1964 — leaves  
*Carissothrips nigrescens* Ananthakrishnan, 1964

## ARACEAE

*Colocasia antiquorum*

- Caliothrips indicus* (Bagnall, 1913) — leaves  
*Heliothrips haemorrhoidalis* Bouche, 1853 — leaves  
*Helionothrips kadaliphilus* (Ramk. & Marg., 1931) — leaves  
*Colocasia* sp.  
*Astrothrips asiaticus* (Bhatti, 1967)  
*Astrothrips globiceps* (Karny, 1913) — leaves  
*Helionothrips kadaliphilus* (Ramakrishnan & Margabandhu, 1931)  
*Haplothrips tirumalraoi* Ramakrishna & Margabandhu, 1931

*Pothos scandens*

- Mesothrips melinocnemis* Karny, 1926 — gall  
*Tetradothrips foliiperda* (Karny, 1926) — gall  
*Pothos* sp.

- Pnigmothrips medanensis* Priesner, 1953

*Richardia* sp.

*Aroidothrips longistylus* Ananthakrishnan, 1961

#### ARALIACEAE

*Schefflera racemosa*

*Liothrips associatus* Ananth. & Jagadish, 1969 — galls

*Liothrips ramakrishnae* Ananth. & Jagadish, 1969 — galls

*Schefflera* sp.

*Gynaikothrips schefflericola* Ananthakrishnan & Viswanathan, 1975 — gall

*Liothrips emulatus* Ananthakrishnan, 1976 — gall

*Liothrips fragilis* Ananthakrishnan, 1976 — gall

*Liothrips retusus* Ananthakrishnan, 1976 — gall

#### ASCLEPIADACEAE

*Calotropis* sp.

*Ramaswamiahiella subnudula* Karny, 1926

*Cynachum alatum*

*Thrips brunneus* Ananthakrishnan & Jagadish, 1968

#### BIXACEAE

*Flacourtia* sp.

*Liothrips jogensis* Ananthakrishnan & Jagadish, 1967

#### BORAGINACEAE

*Cordia obliqua*

*Androthrips melastomae* Zimmerman, 1900 — gall

*Cordia suaveolens*

*Aneurothrips priesneri* Bhatti, 1971 — gall

*Cassia auriculata*

*Retithrips syriacus* (Mayet, 1890)

#### CAESALPINAE

*Cassia emarginata*

*Dolichothrips indicus* (Hood, 1919)

*Cassia* sp.

*Mycterothrips nilgiriensis* (Ananthakrishnan, 1960)

## CANNACEAE

*Canna indica*

- Asprothrips indicus* (Bagnall, 1919) — leaves  
*Thrips hawaiiensis* (Morgan, 1913) — leaves  
*Haplothrips gowdeyi* (Franklin, 1908) — flowers  
*Haplothrips nigricornis* (Bagnall, 1910) — leaves

*Maranta arundinacea*

- Anaphothrips sudanensis* Trybom  
*Asprothrips indicus* (Bagnall, 1919)  
*Panchaetothrips indicus* Bagnall, 1912 — leaves

## CAPPARIDACEAE

*Capparis decidua*

- Alathrips roonwali* (Bhatti, 1963) — flowers  
*Mycterothrips acaciae* Priesner, 1932 — flowers

## CELASTRACEAE

*Maytenus senegalensis*

- Aeglothrips denticulus* Ananthakrishnan, 1969 — gall  
*Liothrips indicus* Ananthakrishnan, 1972 — strongly wrinkled leaves

## CHENOPODIACEAE

*Suaeda fruticosa*

- Ascirtothrips varius varius* Bhatti, 1967

## COMBRETACEAE

*Anogeissus* sp.

- Lygothrips jambuvasi* (Ramakrishna, 1928) — gall  
*Mesothrips extensivus* Ananth. & Jagadish, 1969 — gall

*Calycopteris floribunda*

- Androthrips ramachandrai* Karny, 1926 — gall  
*Austrothrips cochinchinensis* Karny, 1923 — gall

*Terminalia chebula*

- Coryciodothrips inquilinus* Ananthakrishnan, 1972 — gall  
*Dixothrips onerosus* Ananthakrishnan, 1969 — gall

*Terminalia tomentosa*

- Zaniothrips ricini* Bhatti, 1967

*Terminalia* sp.*Rhipiphorothrips cruentatus* Hood, 1919*Androthrips flavipes* Schmutz, 1915*Gigantothrips seshadrii* (Ananthakrishnan, 1964) — leaves*Liothrips interlocatus* (Karny, 1926) — psyllid gall

## COMPOSITAE

*Ageratum* sp.*Astrothrips stannardi* Bhatti, 1967*Carthamus tinctorius**Thrips carthami* Shumsher, 1945*Centaurea cyanea**Aeolothrips meridionalis* Priesner, 1948*Chrysanthemum**Microcephalothrips abdominalis* (Crawford, 1910) — flowers*Hapolthrips gowdeyi* (Franklin, 1908)*Haplothrips nigricornis* (Bagnall, 1910) — flowers*Wadelia* sp.*Astrothrips asiaticus* (Bhatti, 1967) — leaves*Astrothrips tumiceps* Karny, 1923 — leaves

## CONVOLVULACEAE

*Argyreia* sp.*Liophlaeothrips curtus* Ananth. & Jagadish, 1969 — gall*Ipomea carnea**Astrothrips stannardi* Bhatti, 1967 — leaves*Psilothrips indicus* Bhatti, 1967*Ipomea staphylina**Craspedothrips minor* (Bagnall, 1921)*Dendrothripoides innoxius* (Karny, 1914)*Ipomea* sp.*Bathrips melanicornis* (Shumsher, 1945) — leaves*Dorcadothrips similis* Ananthakrishnan, 1967

## CRUCIFERAE

*Brassica campestris**Aeolothrips collaris* (Priesner, 1919)*Thrips flavus* Schrank, 1776*Thrips hawaiiensis* (Morgan, 1913)

*Brassica oleraceae**Caliothrips indicus* (Bagnall, 1913) — leaves*Frankliniella schultzei* (Trybom, 1910)*Thrips tabaci* Lindeman, 1888 — leaves

## Cauliflower

*Caliothrips indicus* (Bagnall, 1913) — leaves*Frankliniella schultzei* (Trybom, 1910)*Thrips flavus* Schrank, 1776*Thrips tabaci* Lindeman, 1888 — leaves*Nasturtius* sp.*Thrips albipes* Bagnall, 1914

## CUCURBITACEAE

*Benincasa cerifera**Frankliniella schultzei* (Trybom, 1910)*Cucurbita maxima**Frankliniella schultzei* (Trybom, 1910)*Luffa acutangula**Mycterothrips moultoni* Seshdri & Ananth., 1954 — leaves

## CYPERACEAE

*Cyperus bulbosus**Gnomonothrips coimbatorensis* Ramk. & Marg., 1939

## DIASCORIACEAE

*Dioscoria* sp.*Dolichothrips confusus* Ananthakrishnan, 1968 — leaf buds

## ERICACEAE

*Rhododendron**Thrips ciliatus* Bhatti, 1969 — flowers*Thrips himalayanaus* (Pelikan, 1970)*Thrips longiceps* (Bagnall, 1916) — flowers*Apterygothrips fungosus* (Ananth. & Jagadish, 1969)

## EUPHORBIACEAE

*Acalypha* sp.*Retithrips syriacus* (Mayet, 1890)*Aporosa* sp.*Selenothrips rubrocinctus* (Giard, 1901)

*Codiaeum variegatum*

*Ayyaria chaetophora* Karny, 1926

*Heliothrips ceylonicus* Schmutz, 1913

*Heliothrips haemorrhoidalis* Bouche, 1833 — leaves

*Neocorynothrips asiaticus* Ramk. & Marg., 1939

*Euphorbia antequorum*

*Stannardina variegata* Ananthakrishnan, 1964

*Euphorbia* sp.

*Haplothrips euphorbiae* Priesner, 1931 — flowers

*Jatropha curcus*

*Rhipiphorothrips cruentatus* Hood, 1919

*Aesthesiothrips jatrophae* Ananthakrishnan, 1960

*Macaranga indica*

*Dolichothrips assimilis* Priesner & Seshadri, 1952 — flowers

*Macaranga* sp.

*Gynaikothrips imitator* Ananthakrishnan, 1968 — gall

*Liothrips hradecensis* Uzel, 1895 — gall

*Liothrips interlocatus* (Karny, 1926) — gall

*Liothrips malabaricus* Ananth. & Jagadish, 1967 — gall

*Mallotus alba*

*Thlibothrips malloti* Ananthakrishnan, 1961 — leaves

*Mallotus philippinensis*

*Androthrips flavipes* Schmutz, 1915 — gall

*Androthrips flavitibia* Moulton, 1932 — gall

*Eurynchothrips ordinarius* (Hood, 1919)

*Liothrips bosei* Moulton, 1928 — gall

*Liothrips mucronis* Ananth. & Jagadish, 1967 — gall

*Mesothrips malloti* Moulton, 1928 — gall

*Neoheegeria hrsvamukha* Ramakrishna, 1928 — gall

*Rhynchothrips rapensis* Ramakrishna, 1928 — gall

*Ricinus communis*

*Astrothrips asiaticus* (Bhatti, 1967) — leaves

*Astrothrips parvilimbus* Stannard & Mitri, 1962

*Astrothrips tumicps* Karny, 1923

*Ayyaria chaetophora* Karny, 1926 — shoots

*Craspedothrips minor* (Bagnall, 1921)

*Hydatothrips ramaswamiahi* Karny, 1926

*Megalurothrips distalis* (Karny, 1913)

*Mycterothrips ricini* (Shumsher, 1945)

- Retithrips syriacus* (Mayet, 1890)  
*Rhipiphorothrips cruentatus* Hood, 1919  
*Scirtothrips dorsalis* Hood, 1919  
*Zaniothrips ricini* Bhatti, 1967 — leaves

#### FILICINAE

- Ctenothrips smilax* Bhatti, 1976  
*Dorcadothrips albus* Bhatti, 1978  
*Hydatothrips proximus* Bhatti, 1973  
*Indusiothrips seshadrii* Ramakrishna, 1934 — sporangia  
*Laplothrips bicolor* Bhatti, 1972  
*Parsiothrips fuscus* Bhatti, 1970  
*Scirtothrips pteridicola* Ananthakrishnan, 1968  
*Dryopteris felix-mas*  
*Helionothrips parvus* Bhatti, 1968  
*Dryopteris* sp.  
*Monilothrips kempfi* Moulton, 1929

#### IRADACEAE

##### Gladiolus

- Taeniothrips gladiolis* Moulton & Steinweden, 1931  
*Taeniothrips simplex* (Morison) — flower

#### LABIATAE

- Neoheegeria verbasci* (Osborn, 1896) — inflorescence  
*Lagerstroemia* sp.  
*Rhipiphorothrips cruentatus* Hood, 1919

#### LAURACEAE

##### Cinnamomum sp.

- Liothrips strigosus* Ananth. & Jagadish, 1968 — gall  
*Litsea chinensis*  
*Helionothrips bruneiensis* (Bagnall, 1915)  
*Litsea* sp.  
*Kochummania excelsa* Ananthakrishnan, 1969 — gall  
*Machilus macranthes*

- Liothrips machilus* Ananthakrishnan & Varadarasan, 1978 — gall

## LEGUMINOSAE

*Alhagi pseudoalhagi**Hydatothrips atactus* Bhatti, 1973*Hydatothrips ramaswamiahi* Karny, 1926*Caesalpinia pulcherrima**Ramaswamiahiella subnudulla* Karny, 1926*Scirtothrips oligocheatus* (Karny, 1926)*Thrips parvus* Schmutz, 1913*Cassia auriculata**Dolichothrips ochripes* Karny, 1926 — shoots*Cassia tora**Dolichothrips ochripes* Karny, 1926 — shoots

## LILIACEAE

*Dendrothrips stannardi* (Ananthakrishnan, 1957) — sheaths*Allium cepa**Aeolothrips collaris* (Priesner, 1919) — flower*Caliothrips indicus* (Bagnall, 1913) — leaves*Thrips tabaci* (Lindeman, 1888) — shoots*Asperagus* sp.*Alathrips roonwali* (Bhatti, 1963)

## LORANTHACEAE

*Loranthus* sp.*Liothrips digressus* Ananthakrishnan, 1971 — gall*Liothrips spectabilis* Ananthakrishnan, 1972 — leaf galls*Phorinothrips loranhi* Ananthakrishnan, 1967 — gall*Phorinothrips minusculus* Ananthakrishnan, 1971 — gall

## LYTHRACEAE

*Punica granatum**Frankliniella schultzei* (Trybom, 1910)*Retithrips syriacus* (Mayet, 1890)*Rhipiphorothrips cruentatus* Hood, 1919*Scirtothrips oligochetus* (Karny, 1926)*Scolothrips indicus* Priesner, 1950

## MAGNOLIACEAE

*Michelia champaca**Rhynchothrips champakae* Ramk. & Marg., 1939

## MALVACEAE

*Abutilon indicum**Dolicholepta gracilipes* Ramk. & Marg., 1939*Gossypium herbaceum**Frankliniella schultzei* (Trybom, 1910) — flowers*Panchaetothrips indicus* Bagnall, 1912 — leaves*Retithrips syriacus* (Mayet, 1890) — leaves*Scirtothrips dorsalis* (Hood, 1919, — leaf buds & fruits*Scirtothrips oligochaetus* (Karny, 1926) — flower & shoots*Thrips (Oxyrrhinothrips) beharensis* Ramk. & Marg. 1939*Thrips tabaci* Lindeman, 1888 — leaves, flowers & shoots*Hibiscus rosa-sinensis**Ramaswamiahiella subnudula* Karny, 1926 — flowers*Malvasirum* sp.*Tusothrips sumatrensis* (Karny, 1925)*Sida* sp.*Astrothrips stannardi* Bhatti, 1967*Caliothrips striatopterus* (Kobus, 1893)

## MELASTOMACEAE

*Memecylon* sp.*Crotonothrips coorgensis* Ananthakrishnan, 1976 — gall*Crotonothrips dantahasta* (Ramakrishna, 1928) — leaf gall*Crotonothrips dissimilis* Ananthakrishnan, 1976 — gall*Crotonothrips memecylonicus* Ananthakrishnan, 1976 — gall*Crotonothrips parvus* Ananthakrishnan, 1976 — gall

## MELIACEAE

*Azadirachta indica**Erythrothrips asiaticus* (Ramk. & Marg., 1931) — flowers*Indothrips bhushani* Bhatti, 1967*Hydatothrips ramaswamiahi* Karny, 1926 — inflorescence*Melia azadirach**Heliothrips haemorrhoidalis* Bouche, 1833 — shoots*Walsura piscidia**Psenothrips priesneri* (Ananthakrishnan, 1964) — leaf galls

## MIMOSAE

*Acacia arabica**Florithrips traegardhi* (Trybom, 1911)*Scirtothrips dorsalis* Hood, 1919 — leaves

*Acacia leuchophloea**Thilakothrips babuli* Ramakrishna, 1928 — leaf galls*Acacia polalyricaefolia**Thrips apicatus* Priesner, 1934*Acacia suma**Tusothrips setiprivus* (Karny, 1926)*Acacia* sp.*Astrothrips tumiceps* Karny, 1923*Dendrothrips aspersus* Bhatti, 1971 — leaves*Foliothrips oratus* Bhatti, 1972 — leaves*Thrips hispidus* Ananthakrishnan & Jagadish, 1966*Pithecolobium dulce**Biltothrips minutus* (Bhatti, 1967) — sappilng

## MORACEAE

*Cannabis sativa**Caliothrips graminicola* Bagnall & Cameron, 1932*Caliothrips indicus* (Bagnall, 1913)*Ficus bengalensis**Azaleothrips amabilis* Ananthakrishnan, 1964 — aerial roots*Gigantothrips elegans* Zimmerman, 1900 — leaves*Gynaikothrips malabaricus* (Ramakrishna, 1928) — leaves*Neurothrips indicus* Ananthakrishnan, 1964 — aerial roots*Ficus benjamina**Androthrips flavipes* Schmutz, 1915 — leaf gall*Gynaikothrips bengalensis* Ananthakrishnan, 1973 — leaf gall*Mesothrips jordani* (Zimmerman, 1900) — leaf gall*Ficus glomerata**Gigantothrips elegans* Zimmerman, 1900*Ficus heterophylla**Gigantothrips ochroscelis* Priesner, 1951*Ficus obtusa**Gigantothrips elegans* Zimmerman, 1900*Ficus religiosa**Indothrips bhushani* Bhatti, 1967 — leaves*Mymarothrips bolus* Bhatti, 1967 — leaves*Streothrips arorai* (Bhatti, 1967) — leaves

*Anascirtothrips ficus* Bhatti, 1967 — leaves

*Hydatothrips atactus* Bhatti, 1973 — leaves

*Ficus retusa*

*Androthrips flavipes* Schmutz, 1915 — leaves

*Arrhenothrips dhumrapaksha* Ramakrishna, 1928 — leaf gall

*Brachythrips dhirghavadana* Ramakrishna, 1928 — leaf gall

*Gigantothrips elegans* Zimmerman, 1900 — leaves

*Gynaikothrips uzeli* Zimmerman, 1900 — leaves

*Mesandrothrips inquilinus* (Priesner, 1921) — gall

*Mesothrips apatelus* Karny, 1926 — leaf gall

*Mesothrips bhimabahu* Ramakrishna 1928 — leaf gall

*Ficus* sp.

*Aclystothrips aberrans* Ananthakrishnan, 1973 — leaf gall

*Haplothrips ceylonicus* Schmutz, 1913

*Liothrips associatus* Ananth. & Jagadish, 1969 — horn gall

*Liothrips ramakrishnae* Ananth. & Jagadish, 1969 — horn gall

*Mesicothrips inquilinus* Ananthakrishnan, 1967 — leaf gall

*Mesothrips jordani* Zimmerman, 1900 — leaf gall

*Morus alba*

*Frankliniethrips megalops* (Trybom, 1912)

*Mymarothrips garuda* Ramk. & Marg., 1931 — leaves

## MUSACEAE

*Musa sapientum*

*Astrothrips parvilimbus* (Stannard & Mitri, 1962) — fruit peal

*Helionothrips kadaliphilus* (Ramk. & Marg., 1931) — leaves

*Panchaeothrips indicus* Bagnall, 1912 — leaves

*Scolothrips asura* Ramk. & Marg., 1931 — leaves

*Thrips hawaiiensis* (Morgan, 1913) — flowers

## MYRTACEAE

*Careya arborea*

*Rhipiphorothrips cruentatus* Hood, 1919

*Gigantothrips tibialis* Bagnall, 1921

*Eugenia jambolana*

*Leeuwenia eugeniae* Bagnall, 1924

*Leeuwenia ramakrishnae* Ramakrishna, 1925

*Liophlaeothrips vichitravarna* (Ramakrishna, 1928)

*Mallothrips indicus* Ramakrishna, 1928 — leaf gall

*Teuchothrips eugeniae* Seshadri & Ananth., 1954 — leaf gall

*Eugenia operculata**Leeuwenia coriacea* (Bagnall, 1921)*Eugenia* sp.*Leeuwenia vorax* Ananthakrishnan, 1970 — gall*Liothrips aequilus* Ananth. & Jagadish, 1969 — gall*Liothrips inquilinus* Ananth. & Jagadish, 1967 — gall*Lygothrips jambuvasi* (Ramakrishna, 1928) — leaf gall*Ramakrishniella nirmalapaksha* Ramakrishna, 1928*Syzigium* sp.*Haplothrips pirus* Bhatti, 1967 — leaf galls & leaf mines

## NYCAGINACEAE

*Boerhaavia* sp.*Hydatothrips boerhaaviae* Seshadri & Ananth., 1954*Mirabilis jalapa**Astrothrips stannardi* Bhatti, 1967 — leaves

## OLEACEAE

*Jasminum**Bathrips jasminae* Ananthakrishnan, 1968*Bathrips melanicornis* (Shumsher, 1945)*Dendrothrips jasminum* Ramk. & Marg. 1939*Thrips (Isothrips) orientalis* Bagnall, 1915 — flowers*Eothrips coimbatorensis* Ramakrishna, 1928 — leaf galls*Haplothrips ganglbaueri* Schmutz, 1913 — flowers*Liothrips minys* Ananthakrishna, 1972 — gall*Liothrips nanus* Ananthakrishnan, 1972 — leaf galls*Linociera* sp.*Androthrips flavipes* Schmutz, 1915 — gall*Mesicothrips plicans* Priesner, 1951 — gall

## ORCHIDACEAE

*Dichromothrips indicus* Mound, 1976*Dichromothrips phalaenopsidis* Sakimura, 1955 — epiphytic on mango*Cymbidium bicolor**Heliothrips haemoarhoidalis* Bouche, 1833 — leaves*Mycterothrips nilgiriensis* (Ananthakrishnan, 1960) — flowers*Thrip flavus* Schrank, 1776 — flowers*Dendrobium* sp.*Dichromothrips nakahari* Mound, 1976 — stem

## PALMACEAE

*Areca catechu*

*Rhipiphorothrips cruentatus* Hood, 1919 — tender leaves

*Thrips hawaiiensis* (Morgan, 1913) — inflorescence

*Stigmothrios limpidus* Ananthakrishnan, 1964 — old dry fungus infested leaves

*Areca* sp.

*Antillothrips varius* (Ananth. & Jagadish, 1969)

*Calamus tenuis*

*Bolacidothrips graminis indicus* Ananthakrishnan, 1966 — sheath

*Capitothrips subramanii* Bhatti, 1974 — spindle

*Cocos nucifera*

*Ecacanthothrips tibialis* (Ashmead, 1905) — dry sheath

*Haplothrips ceylonicus* Schmutz, 1913 — flowers

*Phoenix dactylifera*

*Adiheterothrips jambudvipae* Ramakrishna, 1928 — flowers

*Palmiothrips palmae* (Ramakrishna, 1934) — flowers heads

*Phoenix sylvestris*

*Caliothrips indicus* (Bagnall, 1913)

## PANDANACEAE

*Pandanus* sp.

*Projectothrips bhatti* Ananthakrishnan, 1973

*Projectothrips pruthi* Moulton, 1929

*Aleurodothrips fasciapennis* (Franklin, 1908)

## PAPILIONACEAE

*Arachis hypogea*

*Caliothrips indicus* (Bagnall, 1913) — tender leaves

*Frankliniella schultzei* (Trybom, 1910) — flowers

*Megalurothrips distalis* (Karny, 1913) — flowers

*Retithrips syriacus* (Meyet, 1890) — tender leaves

*Scirtothrips fulleri* Faure, 1929 — leaves

*Taeniothrips longistylus* Karny, 1931 — flowers

*Canavalia gladiata*

*Hydatothrios ramaswamiahi* Karny, 1926 — shoots

*Crotalaria juncea*

*Caliothrips indicus* (Bagnall, 1913) — leaves & flowers

*Frankliniella schultzei* (Trybom, 1910)

*Megalurothrips distalis* (Marny, 1913) — flowers

*Thrips hawaiiensis* (Morgan, 1913) — flowers

*Haplothrips ceylonicus* Schmutz, 1913) — flowers

*Dolichos lab-lab*

*Ayyaria chaetophora* Karny, 1926 — leaves

*Frankliniella schultzei* (Trybom, 1910) — flowers

*Megalurothrips distalis* (Karny, 1913) — flowers

*Thrips palmi* Karni, 1925

*Haplothrips tenuipennis* Bagnall, 1918

*Erythrina indica*

*Astrothrips tumiceps* Karny, 1923

*Indigofera tinctoria*

*Caliothrips indicus* (Bagnall, 1913)

*Hydatothrips ramaswamihi* Karny, 1926 — leaves

*Dolicholepta fulvus* Ananthakrishnan, 1964 — leaves

*Peuraria phaseoloida*

*Hydatothrips ananthakrishnani* Bhatti, 1973

*Peuraria* sp.

*Hydatothrips aureus* Bhatti, 1973

*Pongamia glabra*

*Megalurothrips distalis* (Karny, 1913) — flowers

*Megalurothrips peculiaris* (Bagnall, 1918) — flowers

*Megalurothrips typicus* (Bagnall, 1915)

*Sesbania aegyptica*

*Rhamphothrips aurues* (Ananthakrishnan, 1954) — leaves

*Sesbania* sp.

*Eurynchothrips ordinarius* (Hood, 1919)

*Tephrosis* sp.

*Projectothrips bhatti* Ananthakrishnan, 1973

*Ulex* sp.

*Aeolothrips nigricornis* Ananthakrishnan, 1968 — flowers

*Thrips tanicus* (Ananth. & Jagadish, 1968)

*Vigna catiang*

*Ayyaria chaetophora* Karny, 1926 — flowers

*Taeniothrips longistylus* Karny, 1931 — flowers

*Thrips ignobilis* Ananth. & Jagadish, 1969

## PEDALIACEAE

*Sesamum indicum**Frankliniella schultzei* (Trybom, 1910) — flowers*Ramaswamihiella subnudula* Karny, 1926 — flowers*Thrips palmi* Karny, 1925

## PINACEAE

*Apterygothrips pini* Ananthakrishnan, 1961 — needles*Pinus* sp.*Hydatothrips proximus* Bhatti, 1973 — needles

## PIPERACEAE

*Piper nigrum**Euoplothrips malabaricus* Ramk. Marg., 1931*Liothrips chavicae* (Zimmerman, 1900) — leaf gall*Liothrips karnyi* (Bagnall, 1914)*Liothrips pallipes* (Karny, 1913) — tender leaf rolls*Liothrips tibialis* Priesner, 1951 — leaves*Liothrips variabilis* Ananth. & Jagadish, 1967 — gall*Piper* sp.*Androthrips flavipes* Schmutz, 1915 — gall*Ocnothrips indicus* Ananthakrishnan, 1969 — gall

## POACEAE (=Gramineae)

*Allelothrips pandynai* (Ramk. & Marg., 1931)*Erythrothrips asiaticus* (Ramk. & Marg., 1931)*Gelothrips cinctus* (Hood)*Melanthrips baileyi* Ananthakrishnan, 1965*Melanthrips indicus* Bhatti, 1967*Agalmothrips parviceps* Priesner, 1964*Amalothrips flaccidus* Ananthakrishnan, 1967*Anaphothrips latis* Bhatti, 1967*Anaphothrips obscurus* (Muller, 1776)*Anaphothrips sudanensis* Trybom*Arathrips cus* Bhatti, 1967*Astrothrips parvilimbus* Stannard & Mitri, 1962*Ayyaria chaetophora* Karny, 1926*Baliothrips glandularis* (Ananth. & Jagadish, 1967)*Baliothrips graminis* (Ananth. & Jagadish, 1967)*Baliothrips tenebricus* (Ananth. & Jagadish, 1968)*Bolacidothrips evittatus* Sakimura, 1958

- Bolacidothrips graminis indicus* Ananthakrishnan, 1966  
*Caliothrips graminicola* Bagnall & Cameron, 1932  
*Caliothrips impurus* (Priesner, 1928)  
*Caliothrips luckmani* (Wilson, 1975)  
*Caliothrips striatopterus* (Kobus, 1893)  
*Cpairhtrips melanophthalmus* (Bagnall, 1927)  
*Caprithrips orientalis* Bhatti, 1973  
*Ceratothrips alis* (Bhatti, 1967)  
*Chaetanaphothrips leeuweni* (Karny, 1914)  
*Chaetanaphothrips orchidii* (Moulton, 1907)  
*Chirothrips africanus* Prienser, 1932  
*Chloethrips blandus* zur Strasseu, 1975  
*Danothrips setifer* Bhatti, 1971  
*Dorcadothrips caespitis* Priesner, 1932  
*Dorcadothrips fasciatus* Bhatti, 1967  
*Ednathrips pardus* Bhatti, 1976  
*Ernothrips lobatus* Bhatti, 1967  
*Exothrips anolis* (Bhatti, 1967)  
*Exothrips cephalicus* Bhatti, 1975  
*Exothrips deemax* Bhatti, 1975  
*Exothrips poorva* Bhatti, 1975  
*Euidothrips apsarus* Ananthakrishnan, 1967  
*Helionothrips kadaliphilus* (Ramk. & Marg., 1931)  
*Hydatothrips ananthakrishnani* Bhatti, 1973  
*Hydatothrips aureus* Bhatti, 1973  
*Hydatothrips boerhaaviae* (Seshadri & Ananth., 1954)  
*Hydatothrips ramaswamiahi* Karny, 1926  
*Mycterothrips acaciae* Priesner, 1932  
*Smeringothrips salaciae* Priesner, 1938  
*Smilothrips productus* Bhatti, 1976  
*Thrips apicatus* Prienser, 1934  
*Thrips coloratus* Schmutz, 1913  
*Trichromothrips alis* Bhatti, 1967  
*Trichromothrips bellus* Priesner, 1930  
*Adraneothrips madrasensis* Ananthakrishnan, 1978  
*Ananthakrishnana indica* Bhatti, 1967  
*Antillothrips graminellus* (Ananth. & Jagadish, 1969)  
*Antillothrips malabaricus* (Ananthakrishnan, 1965)  
*Apterygothrips pellucidus* (Ananthakrishnan, 1968)  
*Baenothrips asper* (Bournier, 1963)  
*Baenothrips minutus* (Ananthakrishnan, 1964)

*Bournieria indica* Ananthakrishnan, 1966  
*Calamothrips fastigatus* Ananthakrishnan, 1967  
*Clarathrips tersus* Ananthakrishnan, 1967  
*Haplothrips articulatus* Bagnall, 1926  
*Haplothrips ganglbaveri* Schmutz, 1913  
*Haplothrips gowdeyi* (Franklin, 1908)  
*Haplothrips talpa* Priesner, 1930  
*Haplothrips tenuipennis* Bagnall, 1918  
*Haplothrips apicalis* Bagnall, 1915  
*Haplothrips bagnalli* (Trybom, 1910)  
*Haplothrips clarisetis* Priesner, 1930  
*Haplothrips euphorbiae* Priesner, 1931  
*Karnyothrips alpha* Pitkin, 1976  
*Karnyothrips melaleucus* (Bagnall, 1911)  
*Karnyothrips nigroflavus* Ramakrishna, 1934  
*Liophlaeothrips amoenus* Ananthakrishnan, 1966  
*Phenothrips decoratus* Ananthakrishnan, 1967  
*Phiarothrips reperticus* Ananthakrishnan, 1968  
*Podothrips graminum* Priesner, 1937  
*Podothrips lucasseni* (Kruger, 1890)  
*Podothrips moultoni* Ananthakrishnan, 1965  
*Podothrips placitus* Ananthakrishnan, 1966  
*Podothrips scitulus* Ananthakrishnan, 1967  
*Praepodothrips nigrocephalus* Ananthakrishnan, 1964  
*Segnothrips trivandrensis* Ananthakrishnan, 1965

*Andropogon pertusus*

*Podothrips lucasseni* (Kruger, 1890)

*Arundo donax*

*Baliothrips faurei* (Bhatti, 1963)

*Podothrips canizoi* Bhatti, 1978

*Bambusa aurandinacea*

*Agriothrips brevisetosus* Ananthakrishnan, 1966 — spindles  
*Baliothrips bambusae* (Shumsher, 1945) — leaves  
*Baliothrips bicolor* (Ananth. & Jagadish, 1967)  
*Baliothrips dissidens* (Ananth. & Jagadish, 1967)  
*Bolacidothrips graminis indicus* Ananthakrishnan, 1966 — spindles  
*Ctenidothrips bambusae* (Shumsher, 1945) — spindle  
*Helionothrips nilgiricus* (Ananthakrishnan, 1967)  
*Nrolimothrips brachycephalus* Shumsher, 1945 — leaf roll  
*Aleurodothrips fasciapennis* (Franklin, 1908)

- Allothrips bicolor* Ananthakrishnan, 1964 — spindle  
*Androthrips coimbatorensis* Ramakrishna, 1934  
*Antillothrips graminellus* (Ananth. & Jagadish,  
*Antillothrips malabaricus* (Ananthakrishnan, 1965)  
*Antillothrips micropterus* Pitkin, 1976  
*Antillothrips nayari* (Ananthakrishnan, 1958) — sheath  
*Bamboosiella bicoloripes* Ananthakrishnan, 1957 — sheath  
*Haplothrips clarisetis* Priesner, 1930 — sheath  
*Karnyothrips alpha* Pitkin, 1976  
*Karnyothrips melaleucus* (Bagnall, 1911)  
*Karnyothrips nigroflavus* Ramakrishna, 1934  
*Podothrips bicolor* Seshadri & Ananth., 1954 — leaves  
*Praepodothrips priesneri* Ananthakrishnan, 1965  
*Veerabahuthrips bambusae* Ramakrishna, 1928  
*Coix lachryma*  
*Melanthrips affluens* Ananthakrishnan, 1966  
*Cynodon* sp.  
*Astrothrips stannardi* Bhatti, 1967  
*Haplothrips apicalis* Bagnall, 1915  
*Eleusine coracana*  
*Anaphothrips sudanensis* (Trybom) — leaf sheaths & leaves  
*Florithrips traegardhi* (Trybom, 1911) — inflorescence  
*Haplothrips ganglabaueri* Schmutz, 1913 — earhead  
*Eleusine* sp.  
*Haplothrips gowdeyi* (Franklin, 1908)  
*Eragrostis* sp.  
*Caprithrips anolis* Faure, 1933  
*Imperata* sp.  
*Baliothrips aureus* (Ananthakrishnan & Jagadish, 1967)  
*Chirothrips capensis* zur Strassen, 1958  
*Oryza sativa*  
*Anaphothrips sudanensis* (Trybom, — leaf sheaths  
*Baliothrips biformis* (Bagnall, 1913) — young seedlings  
*Caliothrips indicus* (Bagnall, 1913) — leaves  
*Chloethrips blandus* zur Strassen, 1975  
*Haplothrips ganglbaueri* Schmutz, 1913 — young ear heads  
*Panicum maximum*  
*Bolacidothrips oryzae* Moulton, 1942  
*Chirothrips maximi* Ananthakrihnan, 1957

*Panicum* sp.*Phibalothrips peringyneyi* (Faure, 1925)*Pennisetum typhoideum**Allelothrips pandyani* (Ramk. & Marg., 1931) — ears*Anaphothrips sudanensis* (Trybom, — leaves*Chirothrips mexicanus* Crawford, 1909*Euphysothrips minozii* Bagnall, 1926 — ears*Florithrips traegardhi* (Trybom, 1911) — ears*Neolimothrips brachycephalus* Schumsher, 1942 — ears*Thrips hawaiiensis* (Morgan, 1913) — inflorescence*Haplothrips ganglbaueri* Schmutz, 1913 — ear head*Pennisetum* sp.*Taeniothrips fulvus* Ananth. & Jagadish, 1969*Saccharum officinarum**Aeolothrips collaris* Priesner, 1919 leaf sheath & leaves*Anaphothrips sudanensis* (Trybom — leaf sheath & young leaves*Baliothrips indicus* (Ramk. & Marg. 1931) — young seedling*Baliothrips minutus* (Van Devanter, 1906) — leaves*Baliothrips serratus* (Kobus, 1892)*Dichromothrips smithi* (Zimmerman, 1900) — leaves*Florithrips traegardhi* (Trybom, 1911) — leaf sheath & young leaves*Neolimothrips binervis* (Kobus, 1906) leaves*Sorghothrips jonnaphilus* (Ramakrishna, 1928) — leaf sheath & leaves*Karnyothrips alpha* Pitkin, 1976*Sorghum vulgare**Caliothrips indicus* (Bagnall, 1913) — leaves*Florithrips traegardhi* (Trybom, 1911) — very young leaves*Sorghothrips jonnaphilus* (Ramakrishna, 1928) — tender leaves*Apterygothrips pellucidus* (Ananthakrishnan, 1968) — tender leaves*Haplothrips ganglbaueri* Schmutz, 1913 — ear head*Triticum aestivum**Exothrips ornus* Bhatti, 1975*Triticum vulgare**Anaphothrips sudanensis* (Trybom) — leaf sheaths & leaves*Caliothrips indicus* (Bagnall, 1913) — leaves*Haplothrips bagrolis* Bhatti, 1973*Haplothrips ganglbaueri* Schmutz, 1913 — young ear heads

*Zea mays*

- Anaphothrips sudanensis* (Trybom) — leaf sheaths & leaves  
*Phibalothrips peringueyi* (Faure, 1925)  
*Sorghothrips jonnaphilus* (Ramakrishna, 1928) — tassels  
*Haplothrips ganglbaueri* Schmutz, 1913 — ear head  
*Haplothrips gowdeyi* (Franklin, 1908) — inflorescence

## POLYGONACEAE

*Antigonum* sp.

- Hydatothrips boerhaaviae* Seshadri & Ananth., 1954

## RANUNCULACEAE

*Clematis* sp.

- Taeniothrips immsi* (Bagnall, 1926)  
*Thrips albipes* Bagnall, 1914

## RHAMNACEAE

*Ventilago madraspatana*

- Schedothrips orientalis* (Ananthakrishnan, 1967) — gall  
*Schedothrips tumidus* Ananthakrishnan, 1969 — gall

*Ziziphus rugosus*

- Dolichothrips ziziphi* (Bagnall, 1923)

*Ziziphus* sp.

- Dendrothrips aspersus* Bhatti, 1971 — flowers  
*Dolicholepta inquilinus* Ananthakrishnan, 1954 — leaf gall  
*Haplothrips tenuipennis* Bagnall, 1918  
*Maxillothrips arorai* (Bhatti & Hattar, 1974) — flowers

## ROSACEAE

*Eriobotrya japonica*

- Taeniothrips immsi* (Bagnall, 1926)  
*Thrips albipes* Bagnall, 1914

*Rosa* sp.

- Aeolothrips collaris* Priesner, 1919  
*Retithrips syriacus* (Mayet, 1890) — leaves  
*Rhipiphorothrips cruentatus* Hood, 1919 — leaves  
*Thrips andrewsi* (Bagnall, 1921)  
*Thrips flavus* Schrank, 1776  
*Thrips hawaiiensis* (Morgan, 1913) — flowers  
*Thrips melaneurus* Bagnall, 1926

## RUBIACEAE

*Canthium didymum**Erythrothrips asiaticus* (Ramk. & Marg., 1931)*Coffea arabica**Heliothrips haemorrhoidalis* Bouche, 1853 — leaves*Lefroyothrips obscurus* (Ananth. & Jagadish, 1966) — leaves*Megalurothrips morosus* (Priesner, 1958) — leaves*Megaphysothrips subramanii* Ramk. & Marg., 1939 — leaf rust of coffee*Scirtothrips bispinosus* (Bagnall, 1924) — tender leaves*Scirtothrips dorsalis* Hood, 1919*Thrips hawaiiensis* (Morgan, 1913) — flowers*Morinda tinctoria**Thrips (Isothrips) orientalis* Bagnall, 1915 — flowers*Morinda* sp.*Liophlaeothrips cecidii* Ananthakrishnan, 1964 — leaf rolls*Liothrips morindae* Ananth. & Muraleedharan, 1974 — leaves*Pavetta hispidula**Liophlaeothrips segnis* Ananth. & Jagadish, 1969 — gall*Pavetta* sp.*Liophlaeothrips pavetae* Ananth. & Jagadish, 1969 — gall*Liophlaeothrips tenebrosus* Ananth. & Jagadish, 1969 — gall*Mesandrothrips inquilinus* (Priesner, 1921) — gall*Teuchothrips longus* (Schmutz, 1913) — leaf rolls*Xylaplothrips inquilinus* (Priesner, 1921) — gall

## RUTACEAE

*Aegle marmelos**Thrips kallarensis* Ananthakrishnan, 1960*Citrus aurantium**Parthenothrips dracaenae* (Heeger, 1852)*Ramaswamihiella subnudula* Karny, 1926 — flowers*Citrus* sp.*Chaetanaphothrips orchidii* (Moulton, 1907) — flowers*Scirtothrips dorsalis* Hood, 1919 — flowers*Thrips hawaiiensis* (Morgan, 1913) — flowers

## SANTALACEAE

*Santalum album**Erythrothrips asiaticus* (Ramk. & Marg. 1931)

- Ramaswamiahiella subnudula* Karny, 1926 — shoots  
*Crotonothrips davidi* Ananthakrishnan, 1972 — gall  
*Mesothrips manii* Ananthakrishnan, 1972 — gall

## SAPINDACEAE

*Nephelium litchi*

- Megalurothrips distalis* (Karny, 1913) — flowers  
*Dolichothrips indicus* (Hood, 1919) — leaves

## SAPOTACEAE

*Aehras sapota*

- Frankliniella schultzei* (Trybom, 1910) — flowers  
*Heliothrips haemorrhoidalalis* Bouche, 1853 — leaves & young fruits  
*Trichinothrips breviceps* Bagnall, 1926 — stem

*Mimusops elengi*

- Androthrips flavipes* Schmutz, 1915 — gall  
*Arrhenothrips ramakrishnae* Hood, 1919 — gall  
*Liophlaeothrips vichitavarna* (Ramakrishna, 1928)

*Mimusops* sp.

- Arrhenothrips acuminatus* Ananthakrishnan, 1969 — gall

## SIMARUBACEAE

*Ailanthus* sp.

- Rhamphothrips jasminae neritus* Bhatti, 1977  
*Rhamphothrips parviceps* Hood, 1919 — shoots  
*Thrips himalayanus* (Pelikan, 1970)  
*Dolichothrips indicus* (Hood, 1919)

## SOLANACEAE

*Capsicum fruetiscens*

- Scirtothrips dorsalis* Hood, 1919 — leaves

*Nicotiana tabacum*

- Thrips palmi* Karny, 1925 — flowers

*Lycopersicon lycopersicum*

- Caliothrips indicus* (Bagnall, 1913) — tender leaves  
*Frankliniella schultzei* (Trybom, 1910) — flowers  
*Scirtothrips dorsalis* Hood, 1919 — flowers  
*Tusothrips sumatrensis* (Karny, 1925)

*Solanum melongena*

- Caliothrips indicus* (Bagnall, 1913) — leaves  
*Frankliniella schultzei* (Trybom, 1910) — flowers

*Ceratothripoides claratris* (Shumsher, 1945) — flowers

*Sericothrips solanifolii* (Schumsher, 1944) — leaves

*Thrips apicatus* Priesner, 1934 — flowers

*Tusothrips sumatrensis* (Karny, 1925) — flowers

*Solanum tuberosum*

*Caliothrips indicus* (Bagnall, 1913) — leaves

*Solanum* sp.

*Parthenothrips dracaenae* (Heeger, 1852)

*Haplothrips gowdeyi* (Franklin, 1908)

### SCROPHULARIACEAE

*Striga* sp.

*Baliothrips aureus* (Ananth. & Jagadish, 1967)

### THEOCEAE

*Camellia thea*

*Aptinothrips rufus* (Gmelin, 1790)

*Lefroythrips lefroyi* (Bagnall, 1913) — flowers

*Mycterothrips setiventris* (Bagnall, 1918)

*Scirtothrips bisponiosus* (Bagnall, 1924)

*Scirtothrips dorsalis* Hood, 1919 — flowers

*Thrips flavus* Schrank, 1776

*Thrips hawaiiensis* (Morgan, 1913) — flowers

### TILIACEAE

*Corchorus capsularis*

*Ayyaria chaetophora* Karny, 1926

### URTICACEAE

*Liophlaeothrips ablusus* Ananthakrishnan, 1971 — gall

*Artocarpus heterophyllus*

*Pseudodendrothrips dwivarna* (Ramk. & Marg., 1931)

### VERBENACEAE

*Lantana* sp.

*Astrothrips lantana* Bhatti, 1967 — leaves

*Astrothrips stannardi* Bhatti, 1967

*Diarthrothrips lantana* Bhatti, 1967 — leaves

*Diarthrothrips nimbus* (Ananthakrishnan, 1965)

*Mycterothrips acaciae* Priesner, 1932

*Noathrips prakashii* Bhatti, 1967

*Thrips minutus* Van Devanter, 1906  
*Thrips palmi* Karny, 1925 — flowers  
*Apterygothrips rubiginosus* (Ananth. & Jagadish, 1971)  
*Dolicothrips montanus* Ananthakrishnan, 1964  
*Haplothrips ganglbaueri* Schmutz, 1913  
*Haplothrips gowdeyi* (Franklin, 1908)  
*Stictothrips fimbriata* (Ananthakrishnan, 1953) — flowers  
*Xylaplothrips micans* Ananth. & Jagadish, 1971 — twigs

*Tectona grandis*

*Diarthrothrips coffeae* Williams, 1915 — leaves  
*Dolicothrips indicus* (Hood, 1919) — tender leaves

*Vitex negundo*

*Dendrothrips minutus* (Ananthakrishnan, 1961) — leaves

#### VITACEAE

*Vitis quadrangularis*

*Rhynchothrips perandaphagus* (Ramakrishna, 1928)

*Vitis vinifera*

*Mymarothrips garuda* Ramk. & Marg., 1931

*Retithrips syriacus* (Mayet, 1890)

*Rhiphiphorothrips cruentatus* Hood, 1919

*Scirtothrips dorsalis* Hood, 1919 — leaves

*Vitis* sp.

*Eothrips coimbatorensis* Ramakrishna, 1928

*Liothrips viticola* (Karny, 1913)

*Phorinothrips levis* Ananth. & Varadarasan, 1978 — gall

#### ZINGIBERACEAE

*Curcuma longa*

*Mymarothrips garuda* Ramk. & Marg., 1931

*Anaphothrips sudanensis* Trybom — leaves

*Asprothrips indicus* (Bagnall, 1919) — leaves

*Panchaetothrips indicus* Bagnall, 1912 — leaves

#### ACKNOWLEDGEMENTS

The authors express their thanks to Shri Arun Ghosh, Artist for preparation of diagrams and to Dr. N. Muraleedharan, Zoologist for his help in various ways in finalising the paper.

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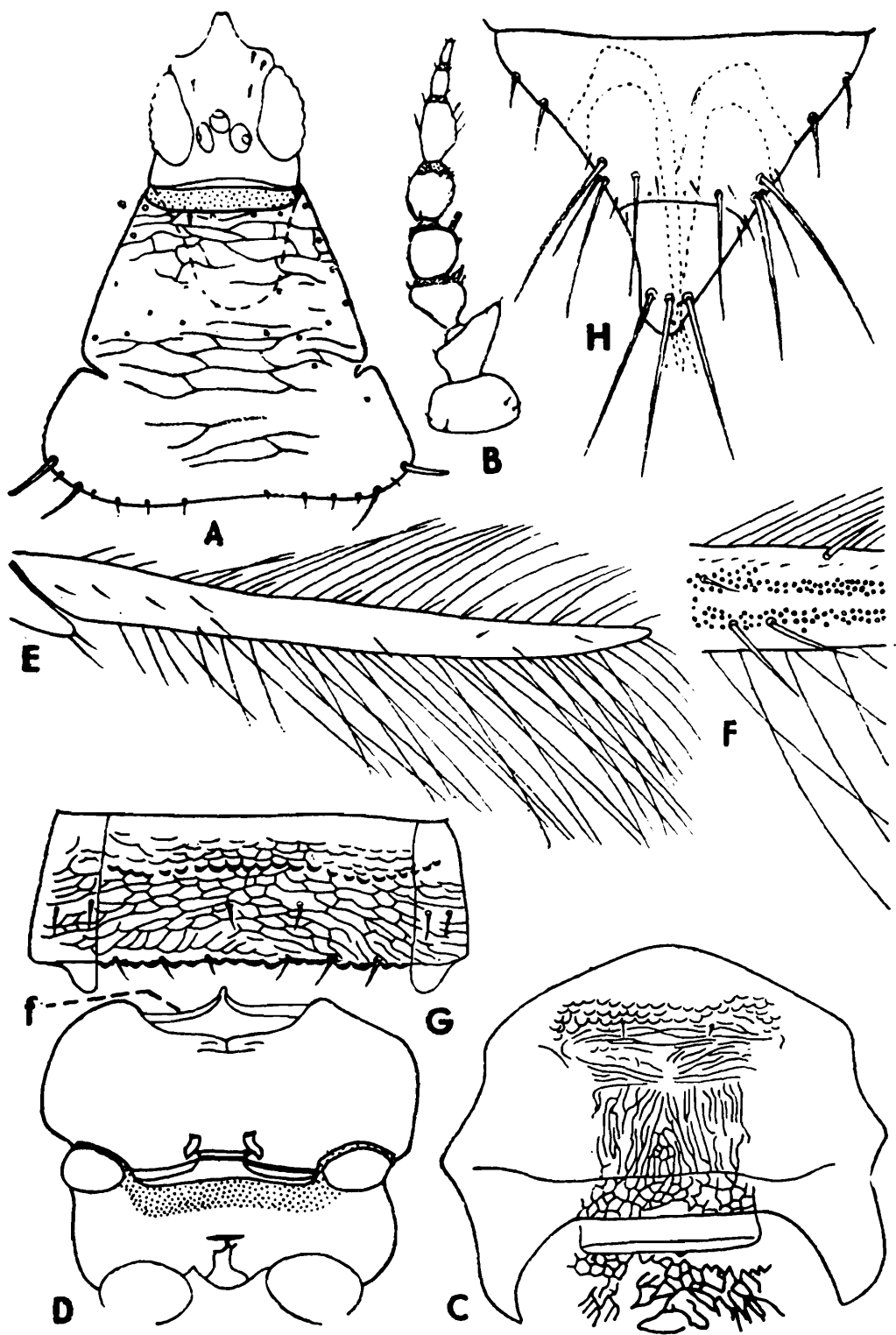
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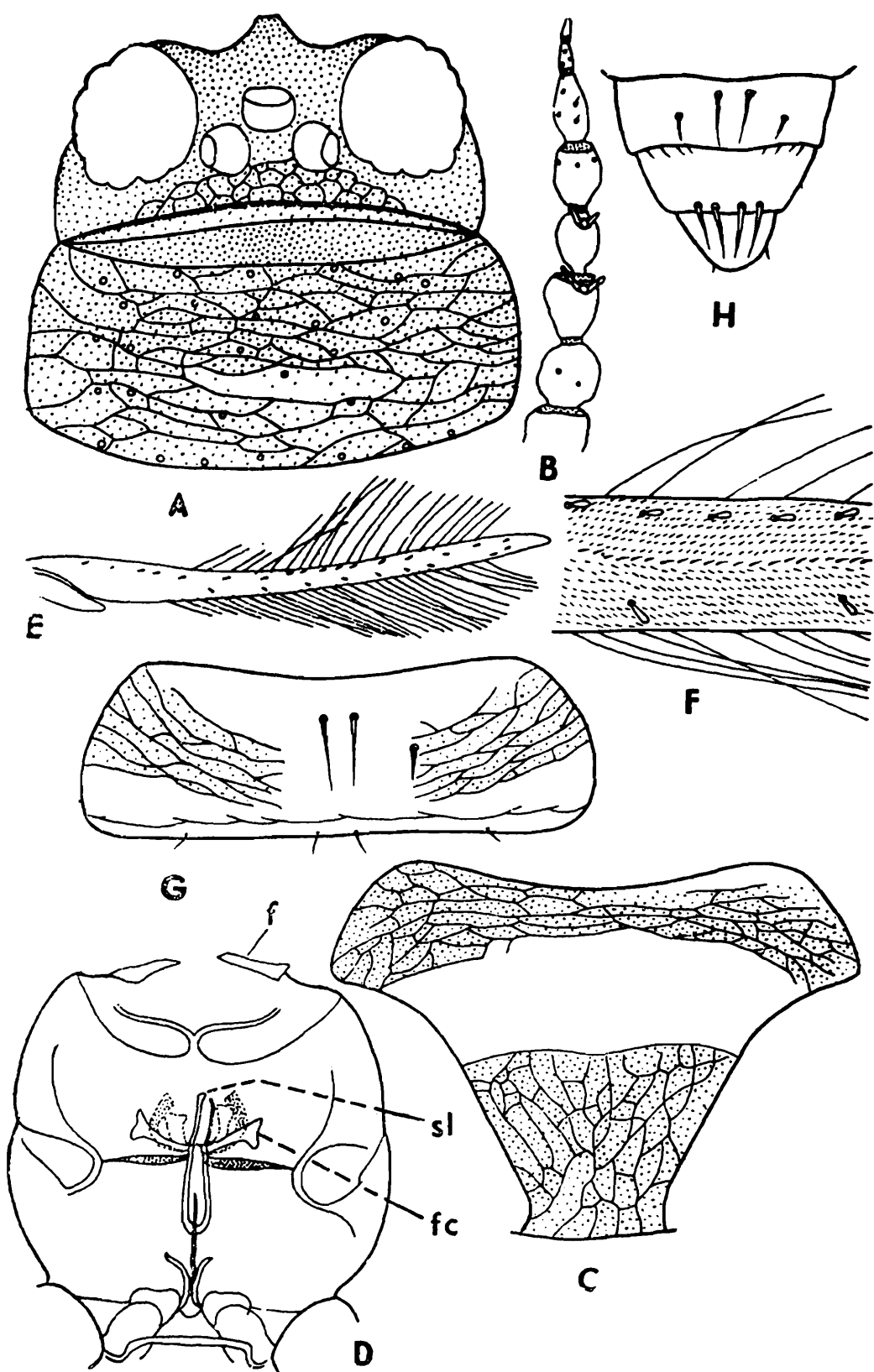
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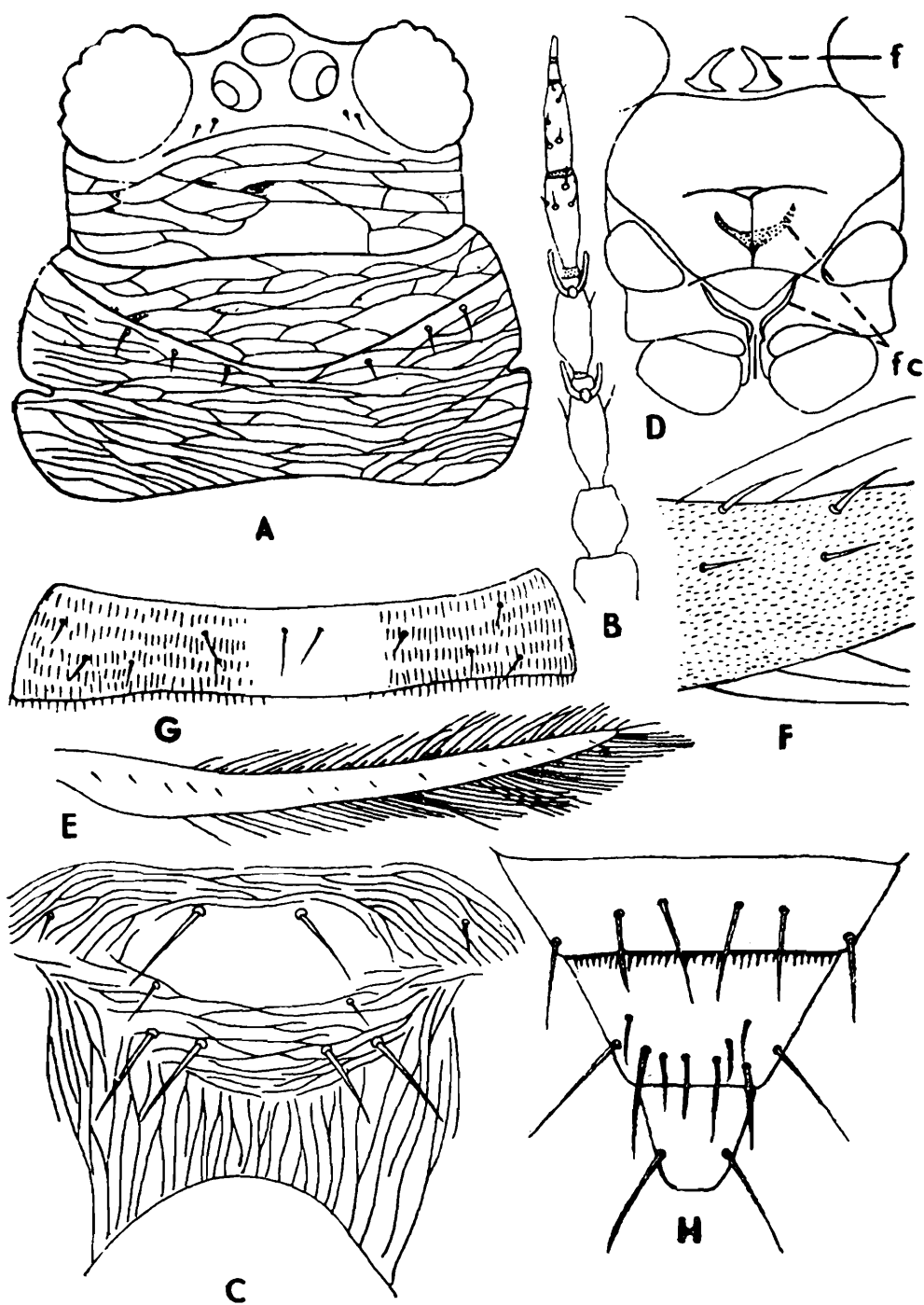
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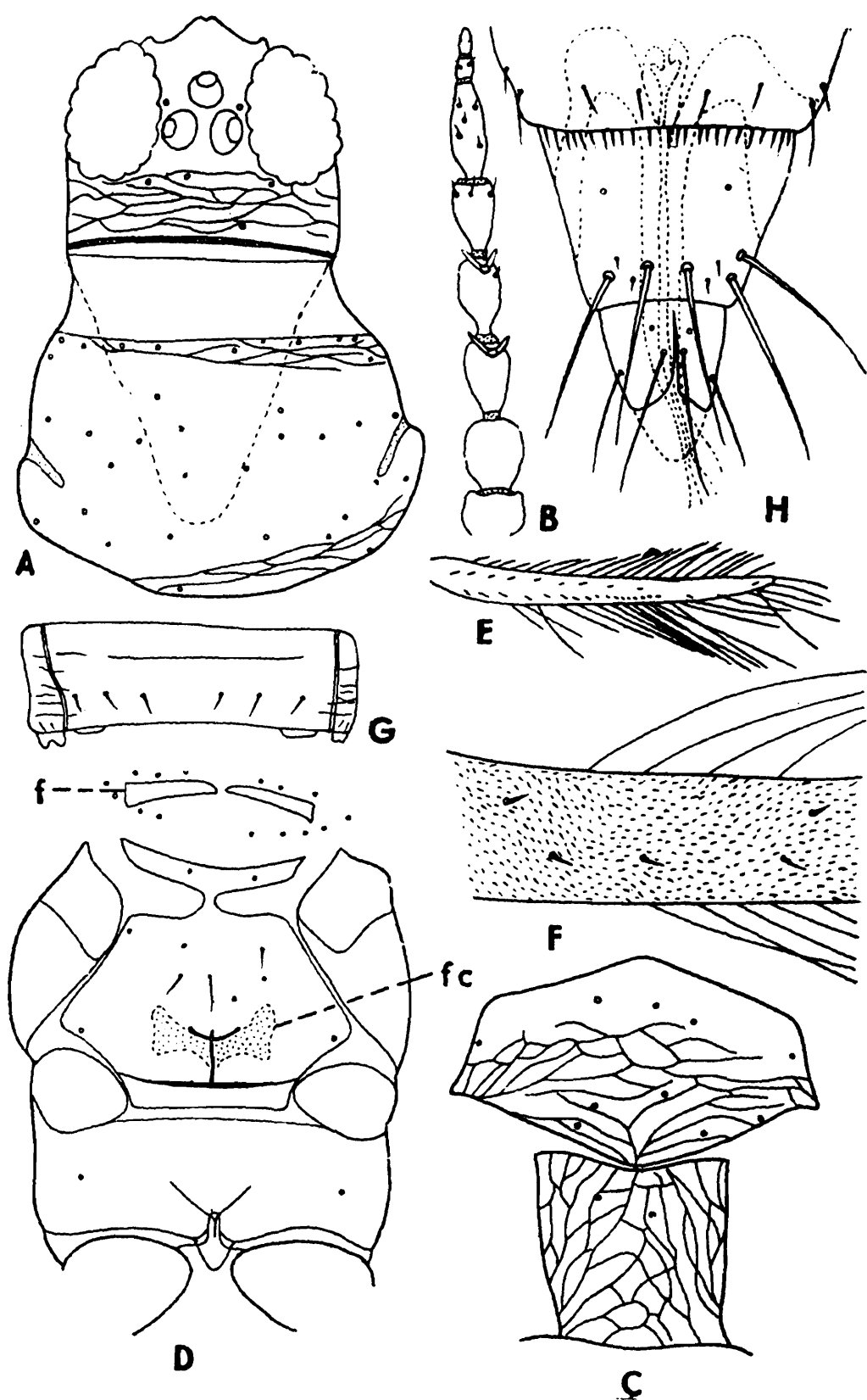
*Text-fig. 12. Chirothrips sp. (Tribe Chirothripini) depicting different characters as adopted in the key. A. head & pronotum, B. antenna. C. meso and metanotal sculpture. D. meso and metasternum. E. forewing F. portion of forewing enlarged. G. abdominal segment VI, H. terminal abdominal segments.*



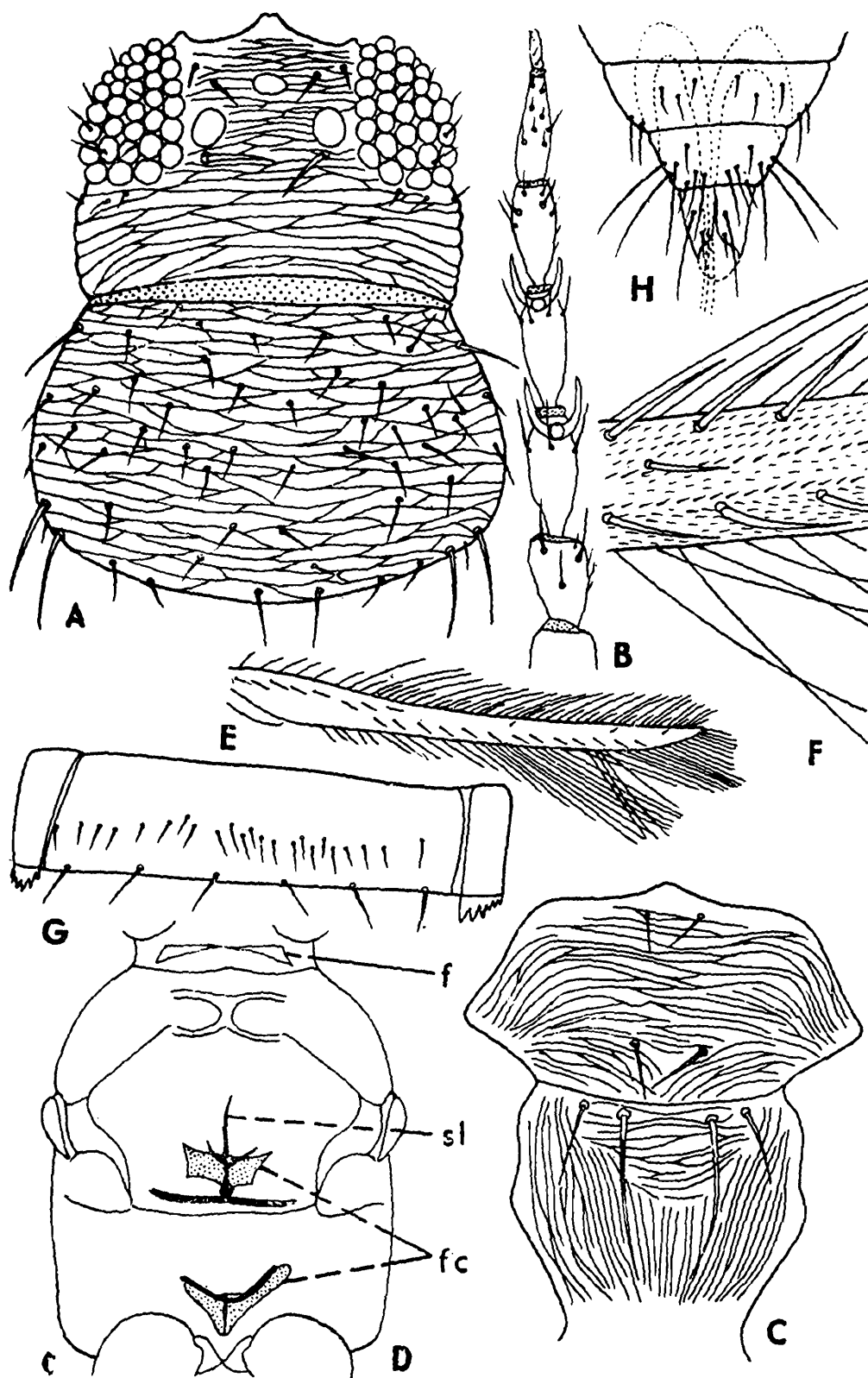
Text-fig. 13. *Dendrothrips sexmaculatus* (Tribe Dendrothripini). A. head & pronotum, B. antenna. C. meso & metanotal sculpture. D. meso & metasternum. E. forewing. F. portion of forewing enlarged. G. abdominal segment III. H. terminal abdominal segments. *f.*-frena *fc.*-furca, *sl.*-spinula.



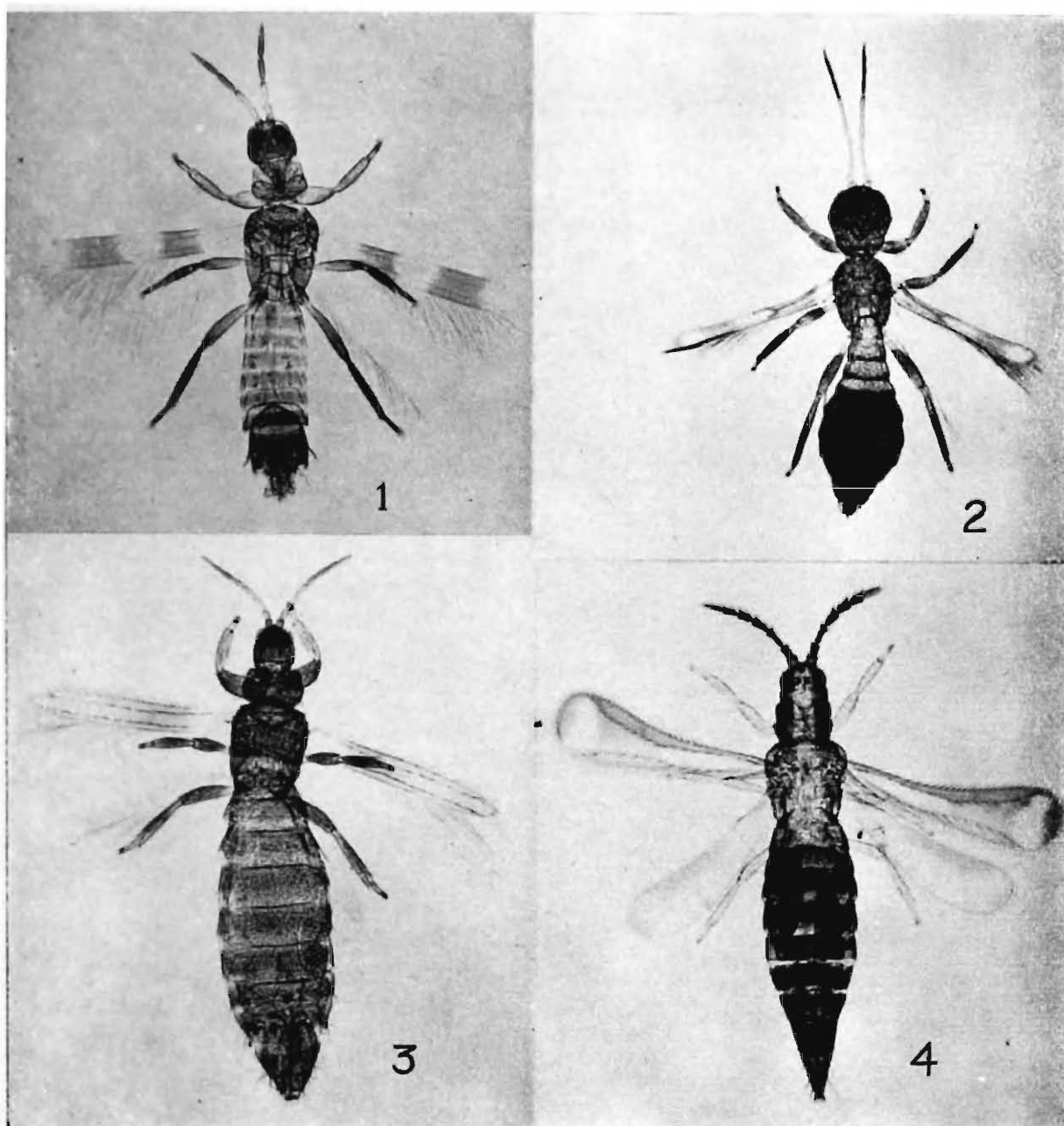
Text-fig. 14. *Hydatothrips boerhaaviae* (Tribe Sericothripini) A. head & pronotum. B. antenna. C. meso & metanotal sculpture. D. meso & metasternum. E. forewing, F. portion of forewing enlarged. G. abdominal segment V. H. terminal abdominal segments. f.-fema, fc.-furca.



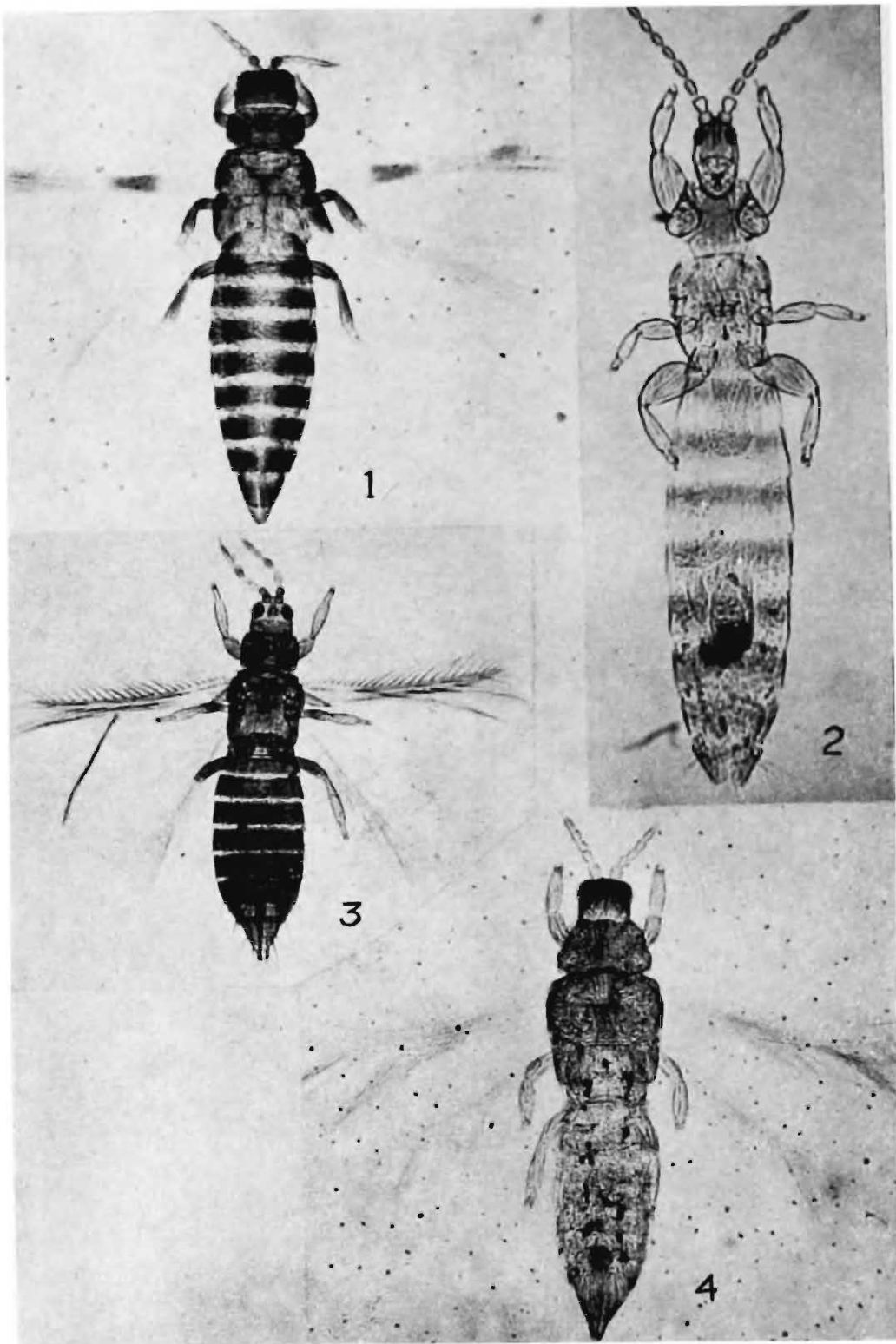
Text-fig. 15. *Anaphothrips sudanensis* (Tribe Anaphothripini) A. head & pronotum B. antenna. C. meso & metanotal sculpture. D. meso & metasternum, E. forewing. F. portion of forewing enlarged. G. abdominal segment VI. H. terminal abdominal segments *f.*-*ferna*, *fc.*-*furca*.



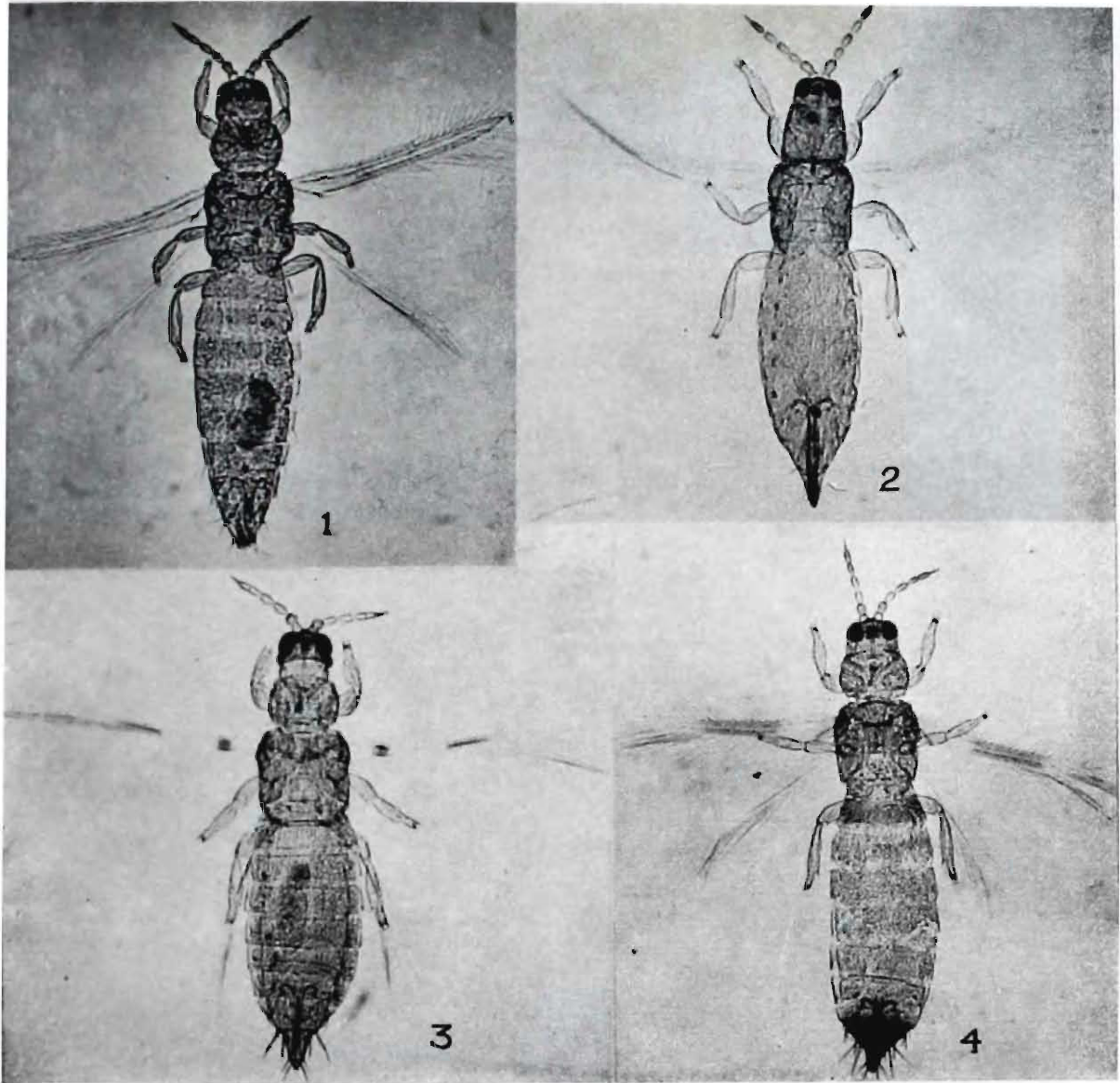
Text-fig. 16. *Thrips hawaiiensis* (Tribe Thripini). A. head & pronotum. B. antenna. C. meso and metanotal sculpture. D. meso & metasternum. E. forewing. F. portion of forewing enlarged. G. abdominal segment. H. terminal abdominal segments *f.*-frena, *fc.*-ferca, *sl.*-spinula.



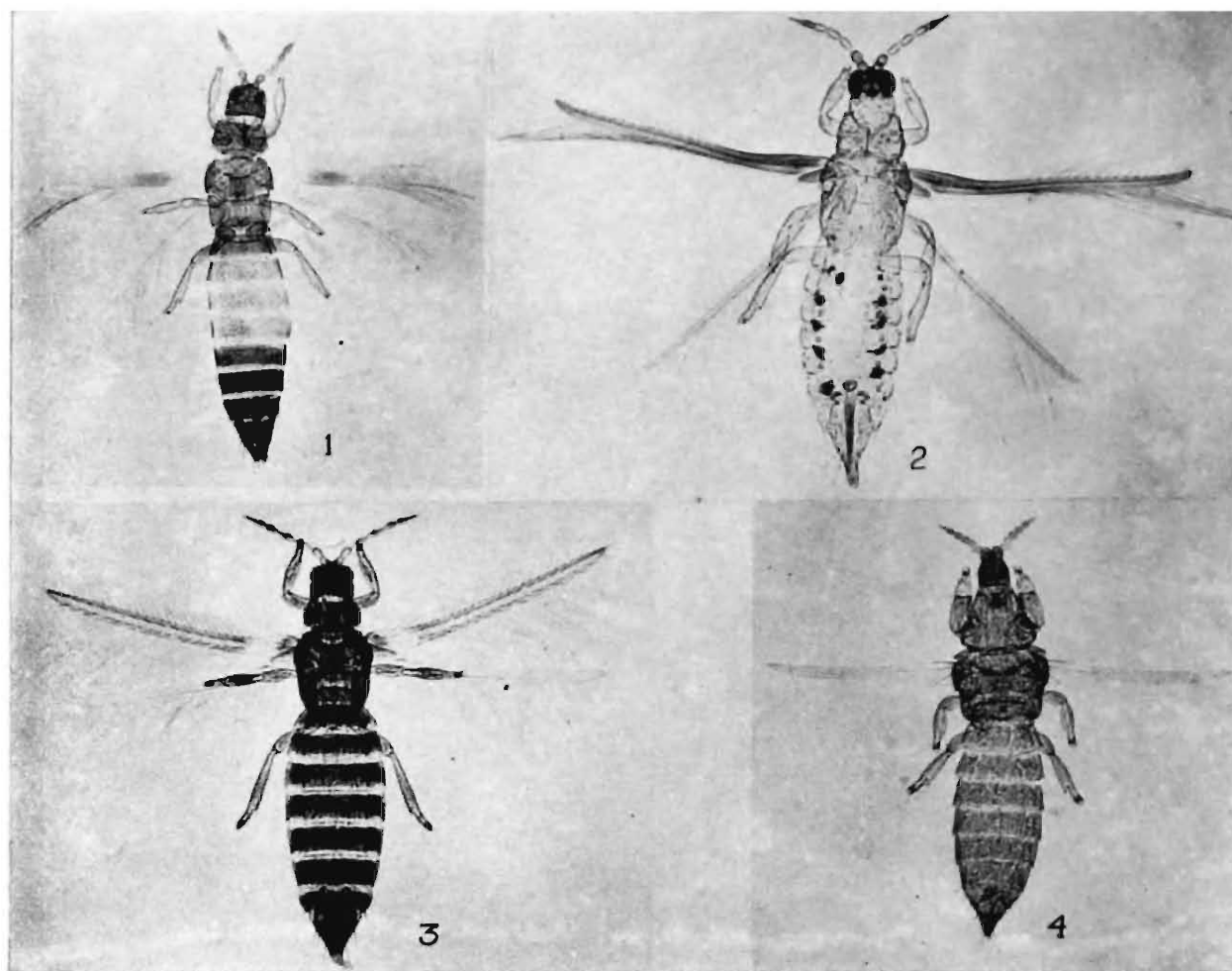
1. *Aeolothrips collaris* Priesner
2. *Franklinothrips megalops* (Trybom)
3. *Melanthrips affluens* Ananthakrishnan
4. *Mymarothrips garuda* Ramk. & Marg.



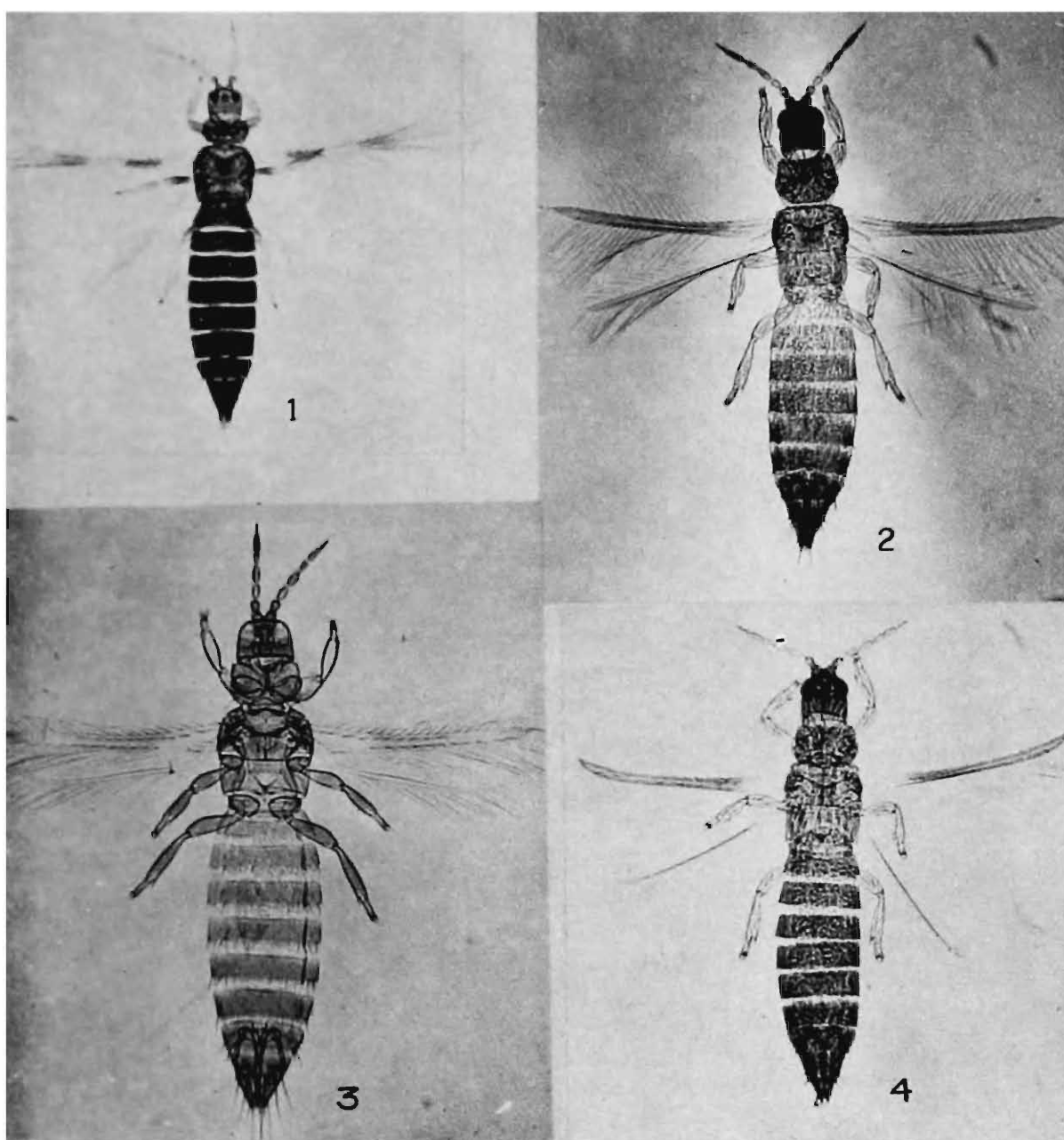
1. *Asprothrips indicus* (Bagnall)
2. *Merothrips indicus* Bhatti & Ananth.
3. *Bathrips melanicornis* (Shumsher)
4. *Aneurothrips priesneri* Bhatti



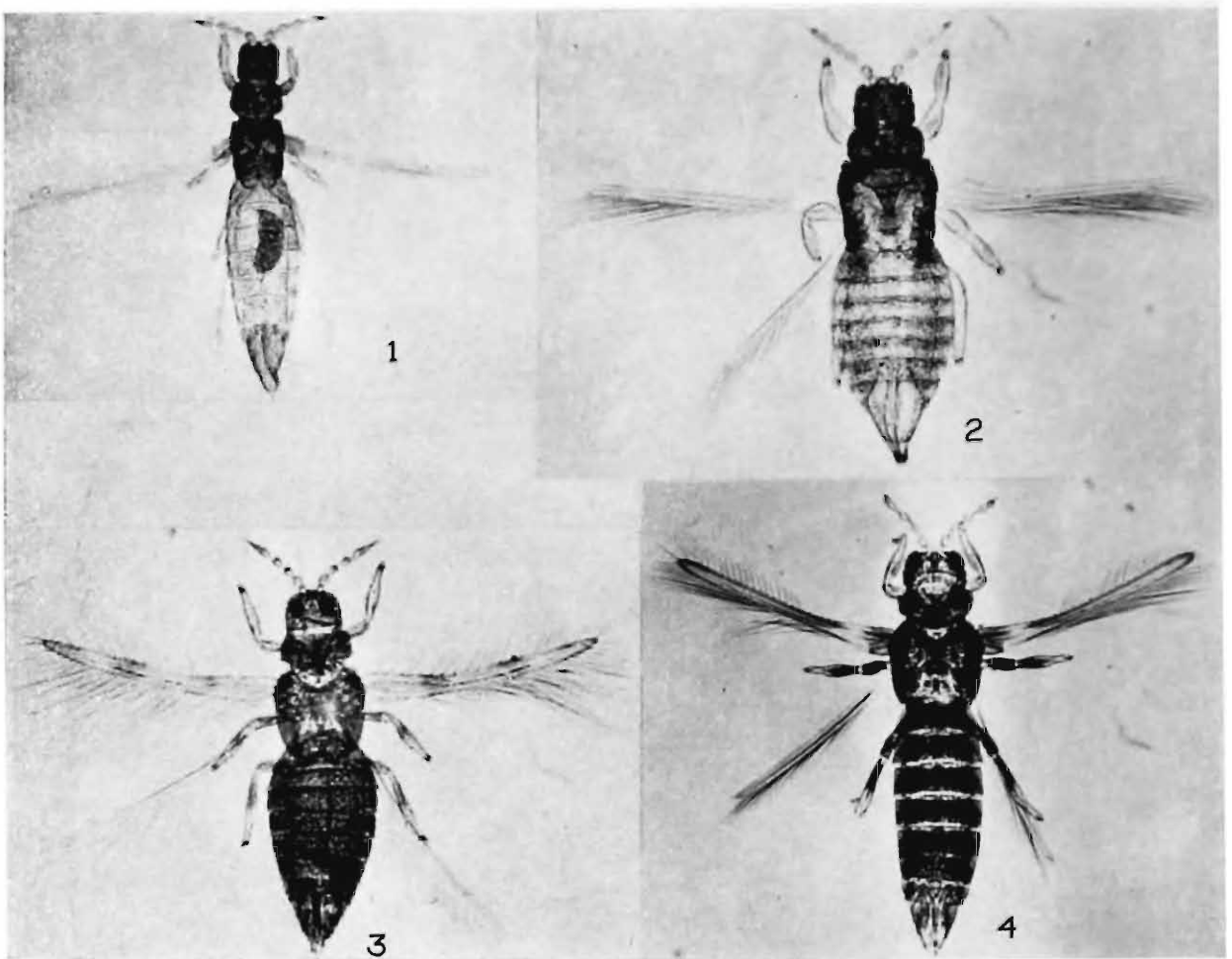
1. *Thrips tabaci* Lindemann
2. *Rhamphothrips parviceps* (Hood)
3. *Dendrothripoides innoxius* (Karny)
4. *Amphithrips argutus* Ananthakrishnan



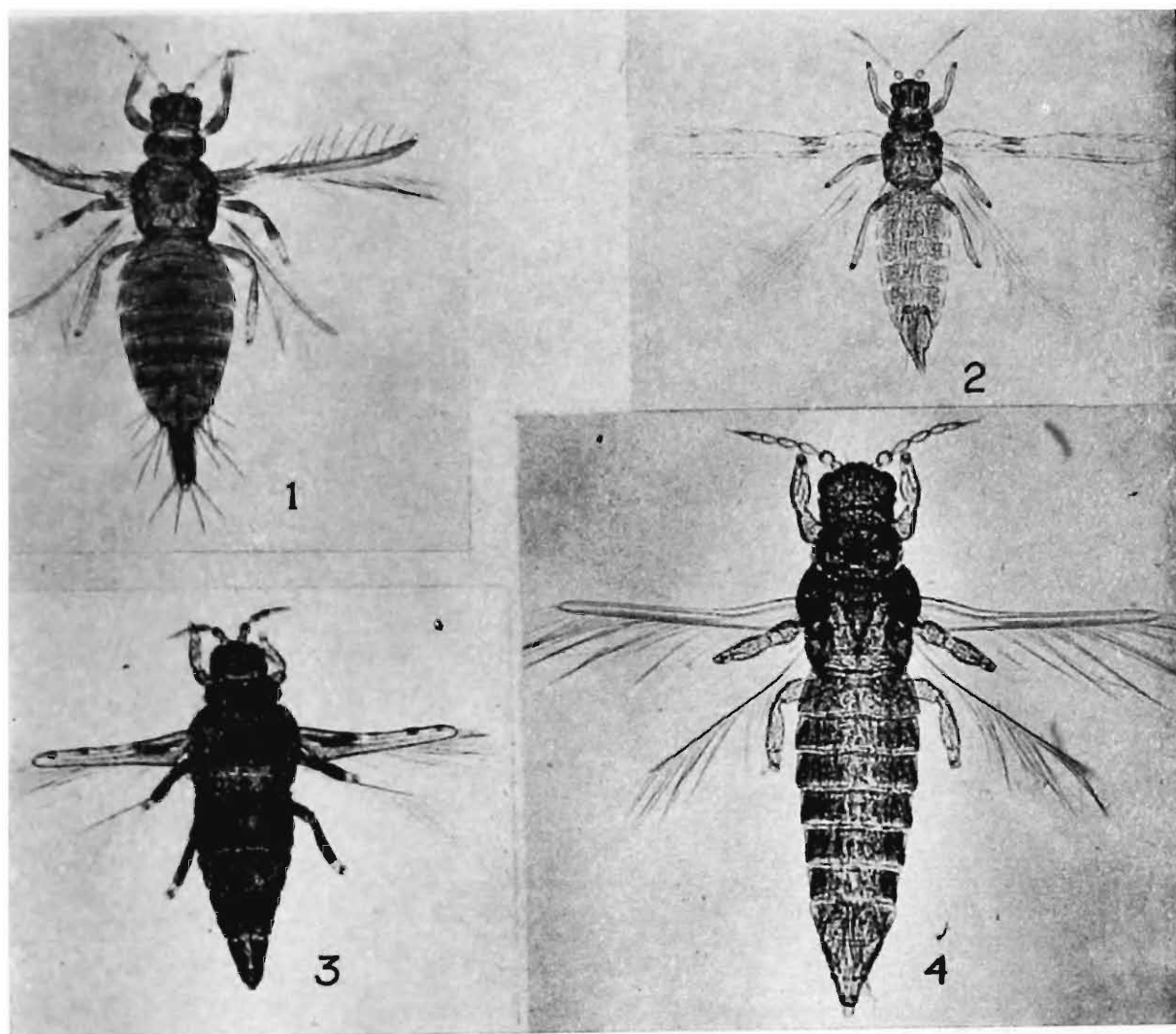
1. *Anaphothrips sudanensis* Trybom
2. *Indusiothrips seshadrii* Priesner
3. *Taeniothrips ochripes*
4. *Chirothrips mexicanus* Crawford



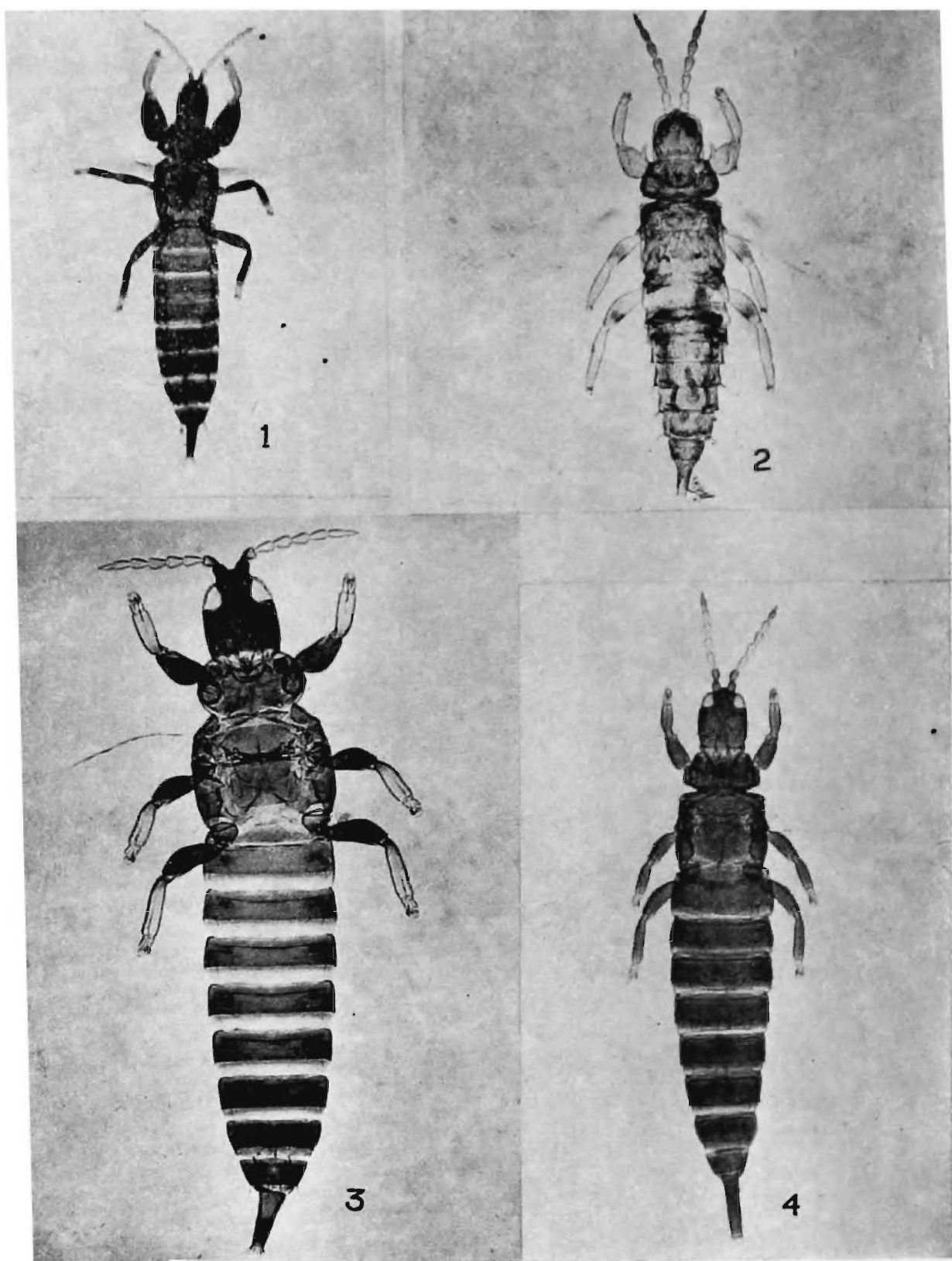
1. *Ayyaria chaetophora* Karny
2. *Sorghothrips jonnaphilus* (Ramakrishna)
3. *Megalurothrips distalis* (Karny)
4. *Sciothrips cardamomi* (Ramakrishna)



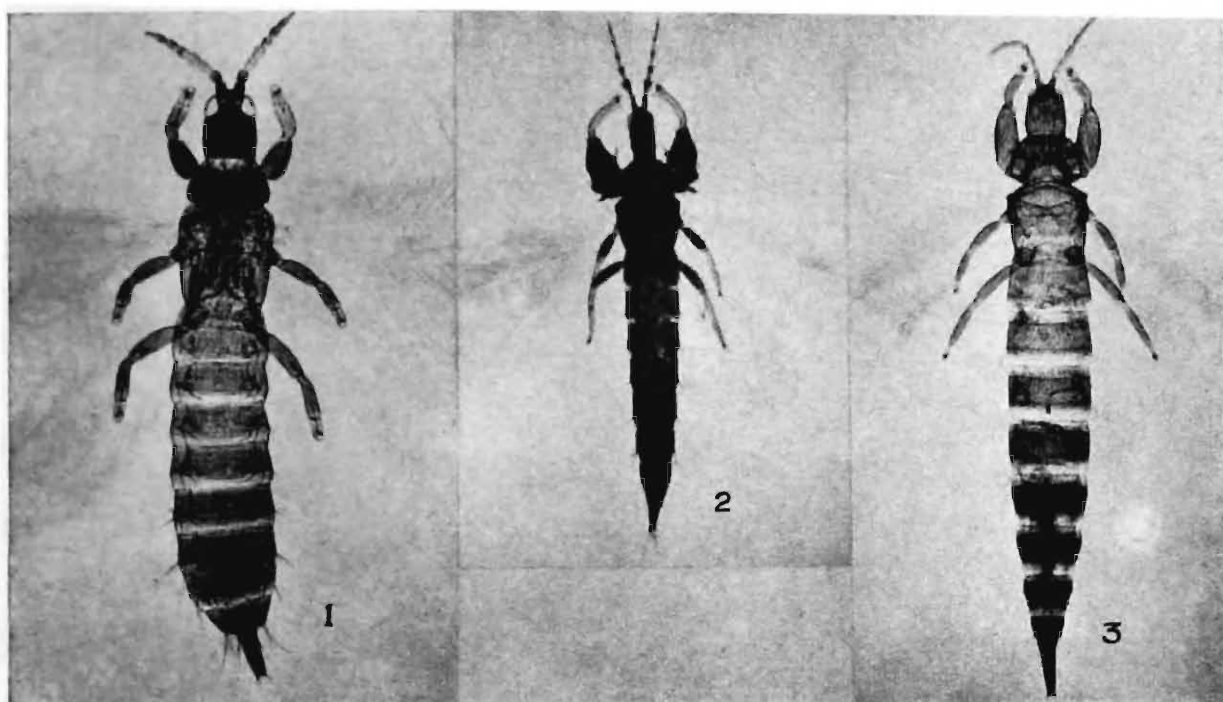
1. *Phibalothrips peringuei* (Faure)
2. *Heliothrips hoemarrhoidalis* Bouche
3. *Caliothrips indicus* (Bagnall)
4. *Helionothrips kadalophilus* (Ramk. & Marg.)



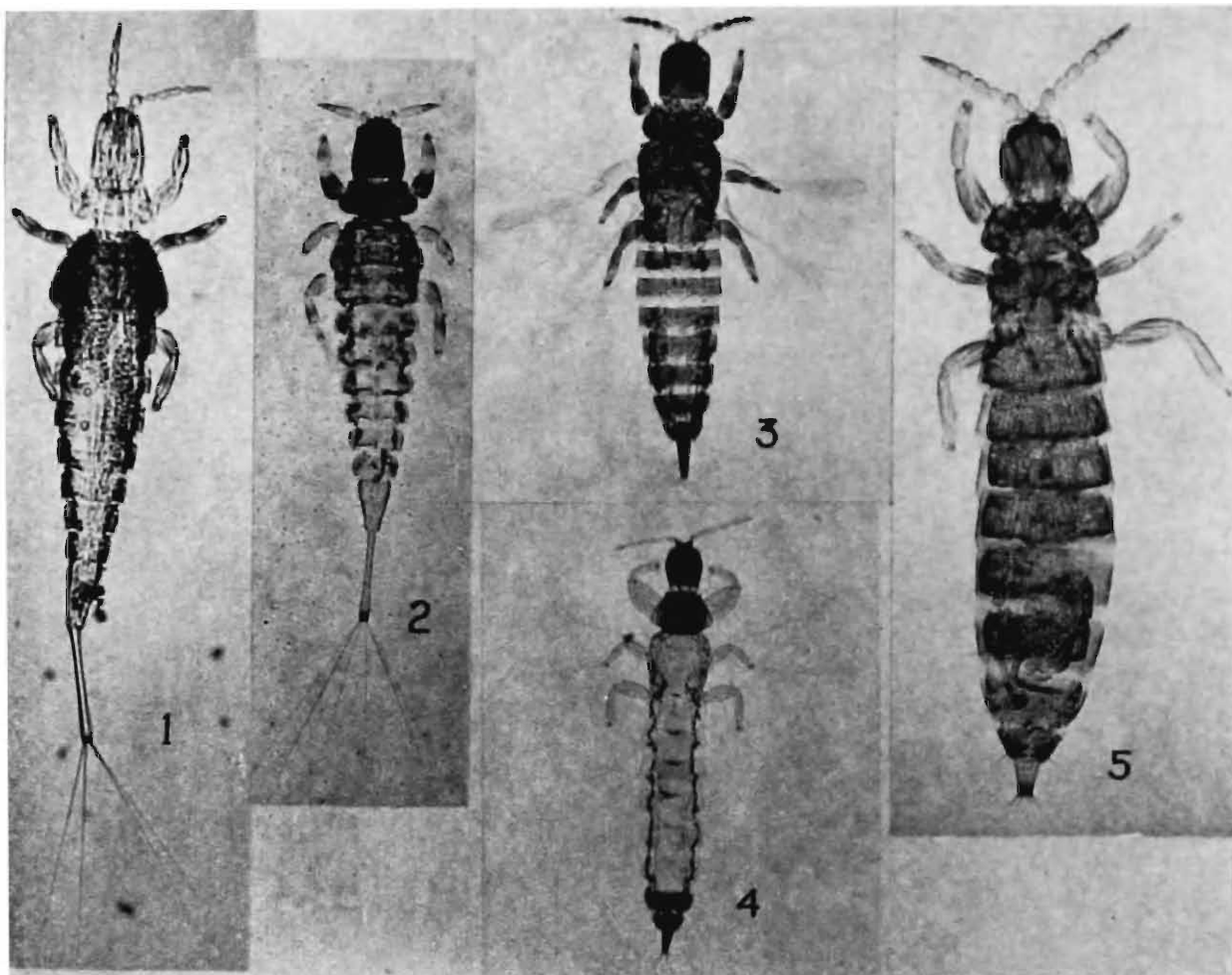
1. *Panchaetothrips indicus* Bagnall
2. *Parthenothrips dracaenae* (Heeger)
3. *Retithrips syriacus* (Mayet)
4. *Rhipiphorothrips cruentatus* Hood



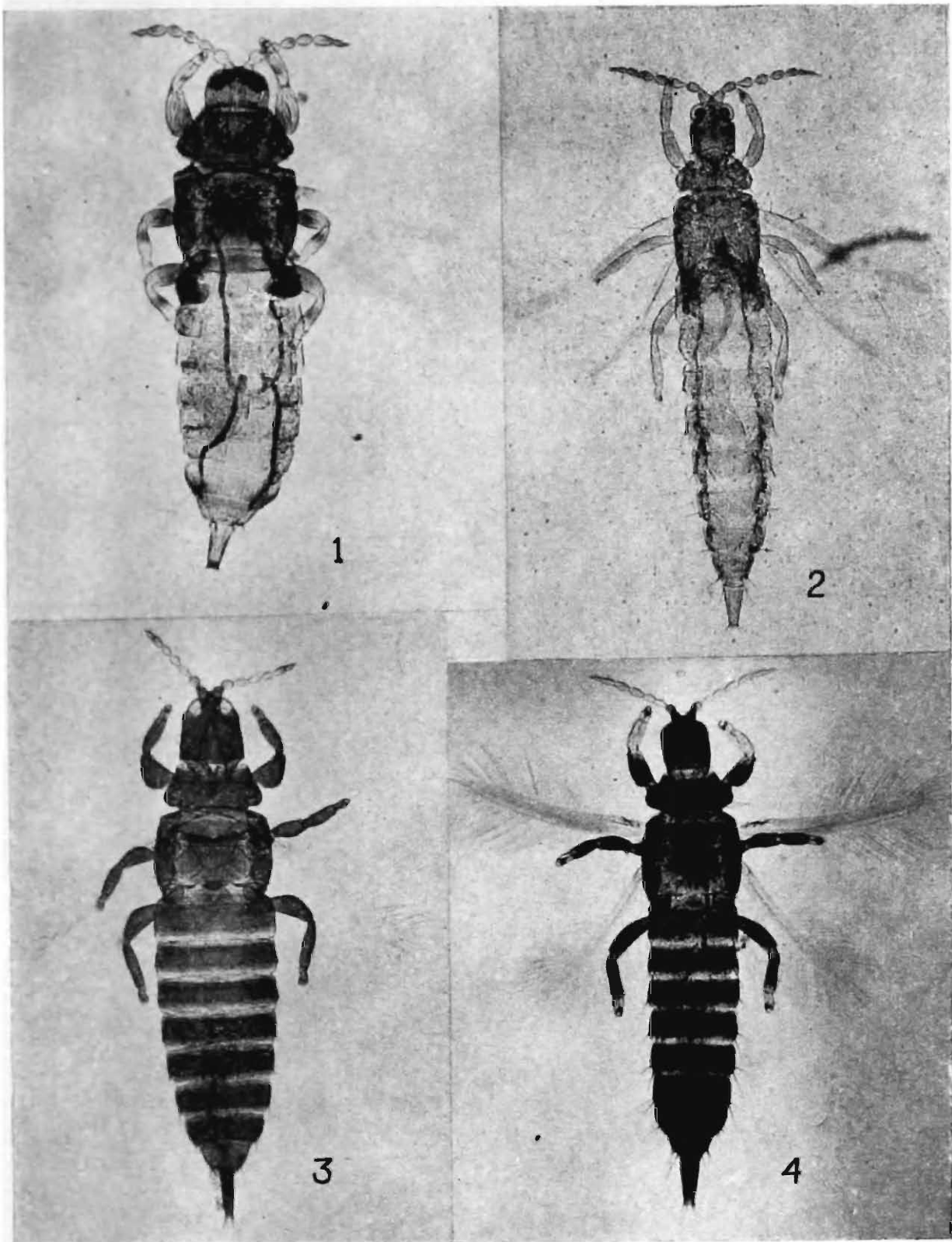
1. *Mallothrips indicus* Ramakrishna
2. *Aleurodothrips fasciapennis* (Franklin)
3. *Carissothrips nigrescens* Ananthakrishnan—macropterous
4. *Pyknothrips reticulatus* Ananthakrishnan



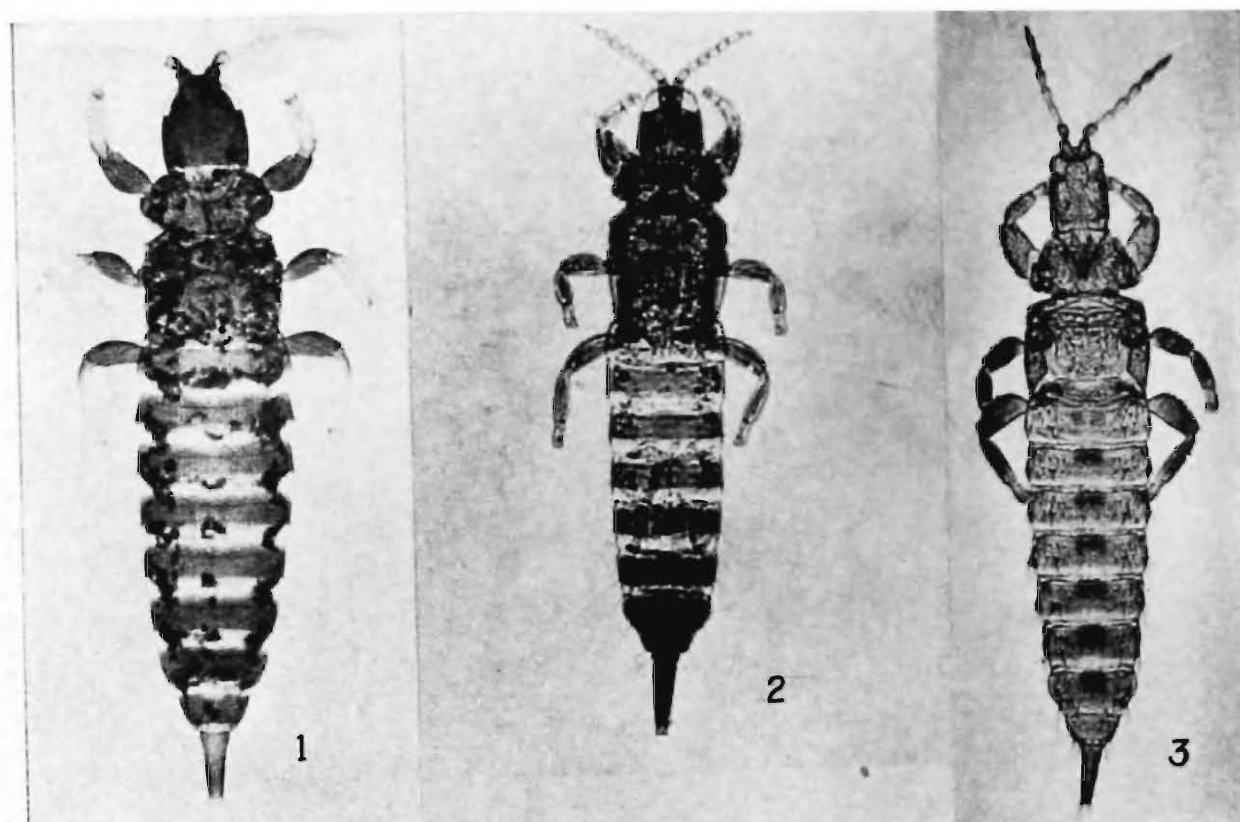
1. *Ayyarothrips abstrusus* Ananthakrishnan
2. *Ecacanthothrips tibialis* (Ashmead)
3. *Diaphorothrips unguipes* Karny



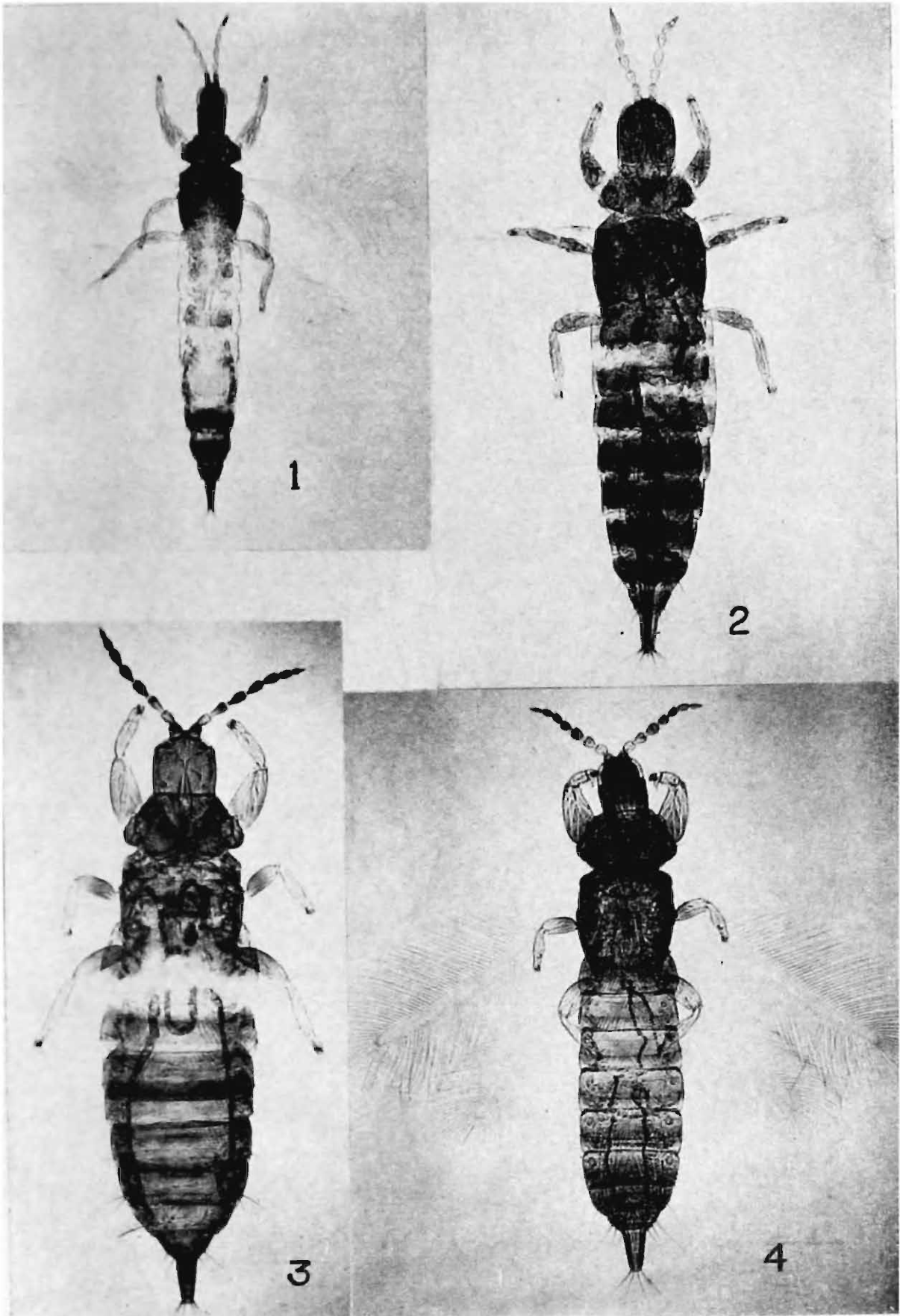
1. *Leeuwenia vorax* Ananthakrishnan
2. *Stephanothrips occidentalis* Hood & Williams
3. *Hoplandrothrips corticis* Ananthakrishnan
4. *Podothrips bicolor* Seshadri & Ananth.
5. *Apterygothrips pini* Ananthakrishnan



1. *Eothrips coimbatorensis* Ramakrishna
2. *Mystrothrips dammermani* (Priesner)
3. *Stannardothrips variegata* Ananthakrishnan
4. *Tetradothrips foliperda* (Karny)

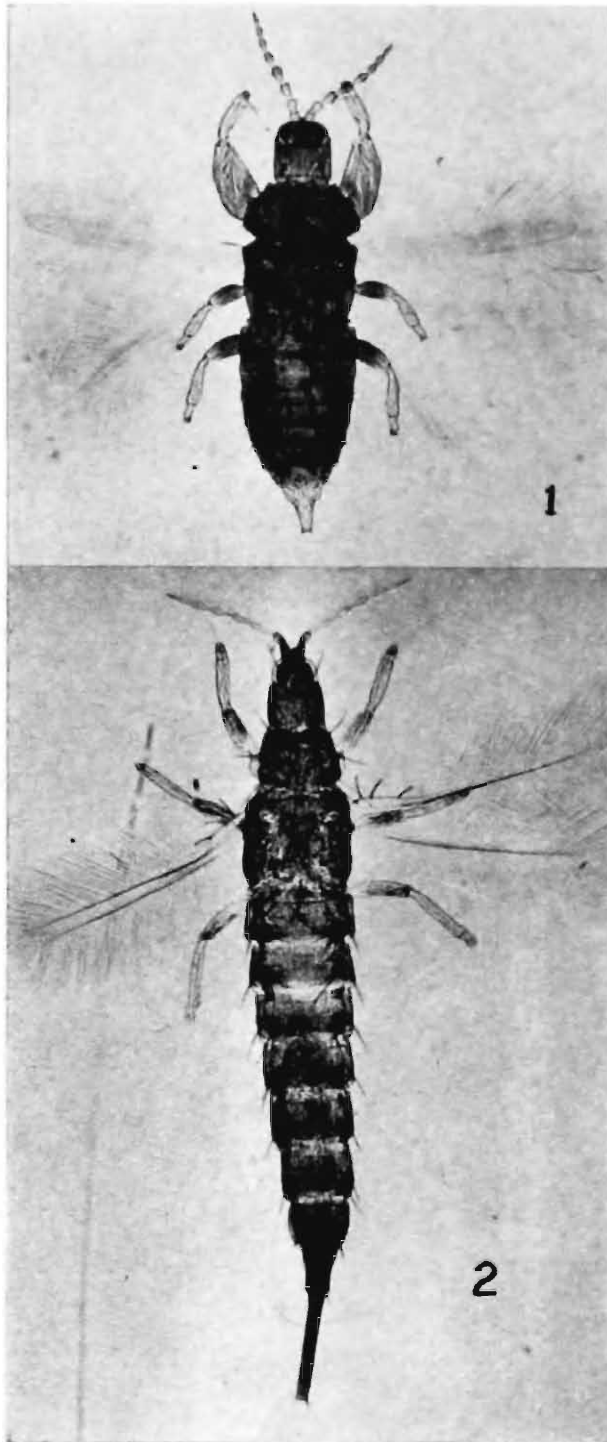


1. *Carissothrips nigrescens* Ananthakrishnan-apterous
2. *Dixothrips onerosus* Ananthakrishnan
3. *Thilakothrips babuli* Ramakrishna

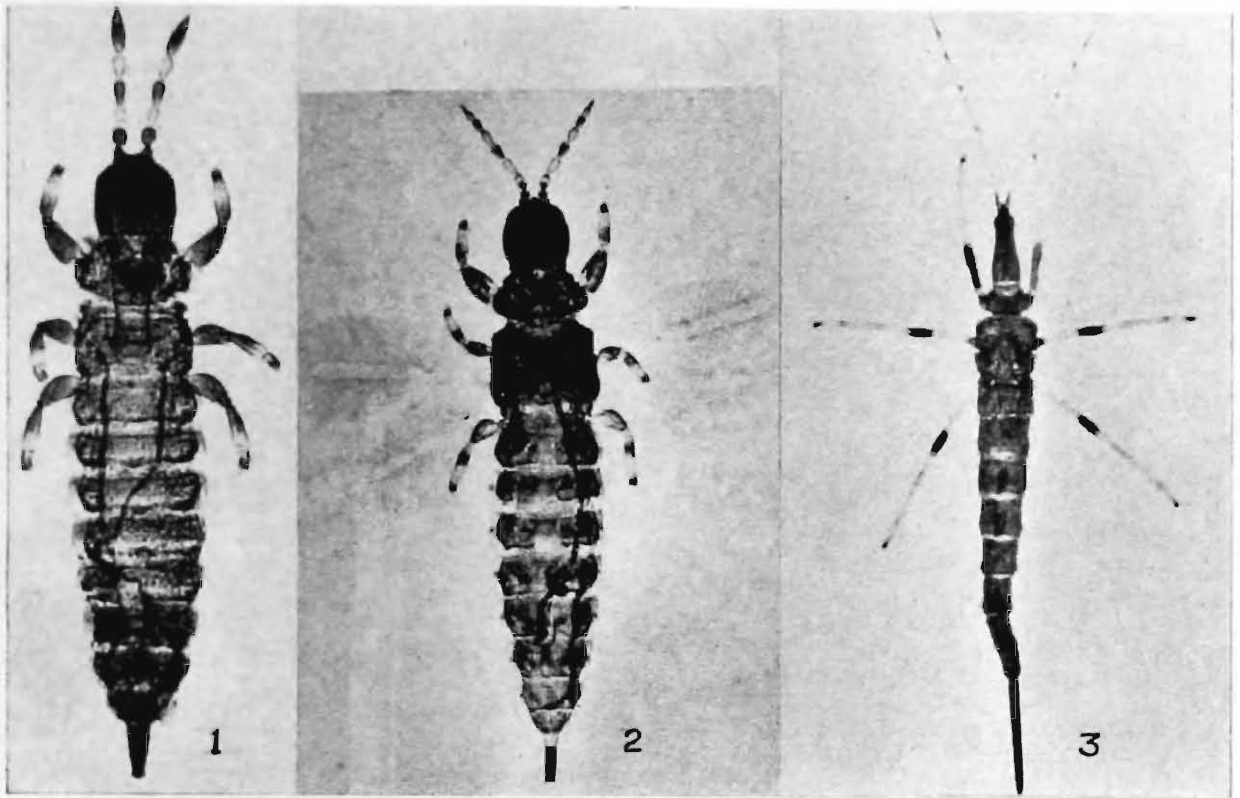


1. *Bamboosiella bicoloripes* Ananthakrishnan
2. *Alloiothrips nigrisetis* Ananthakrishnan
3. *Hoplothrips transvaalensis* (Hood)
4. *Plectrothrips pallipes* Hood

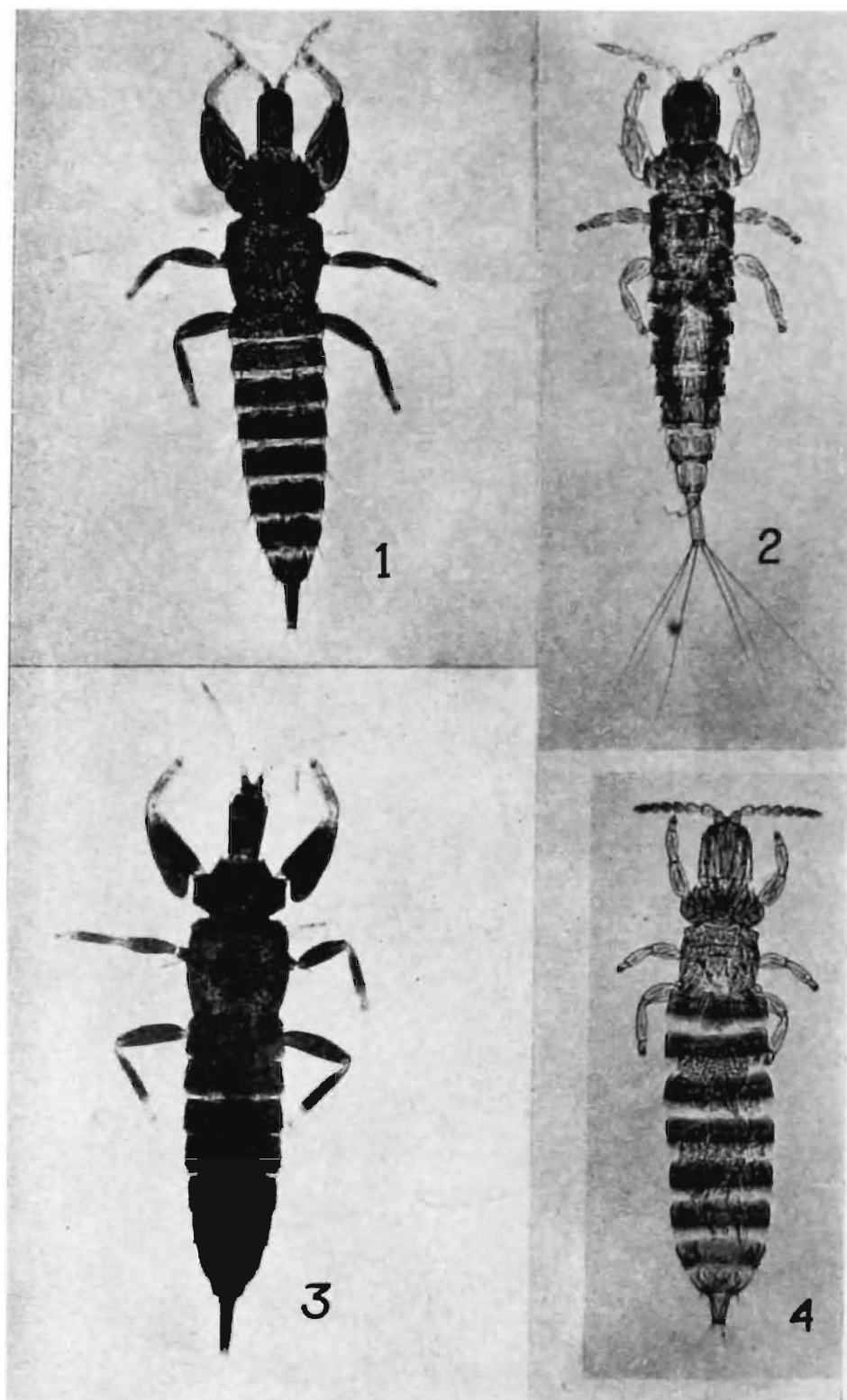
**Plate XIV**



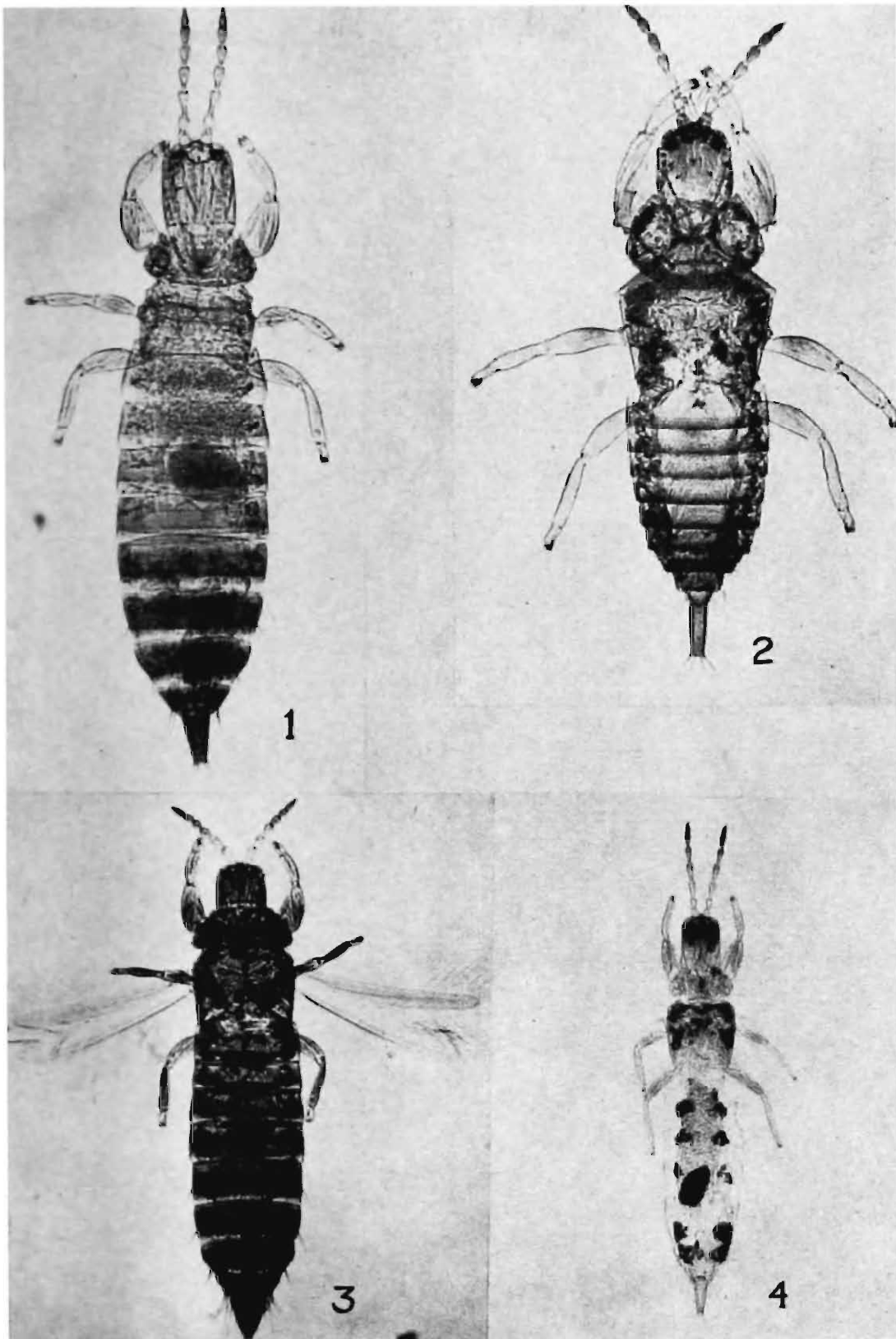
1. *Hoplothrips fungosus* Moulton
2. *Kochummania excelsa* Ananthakrishnan



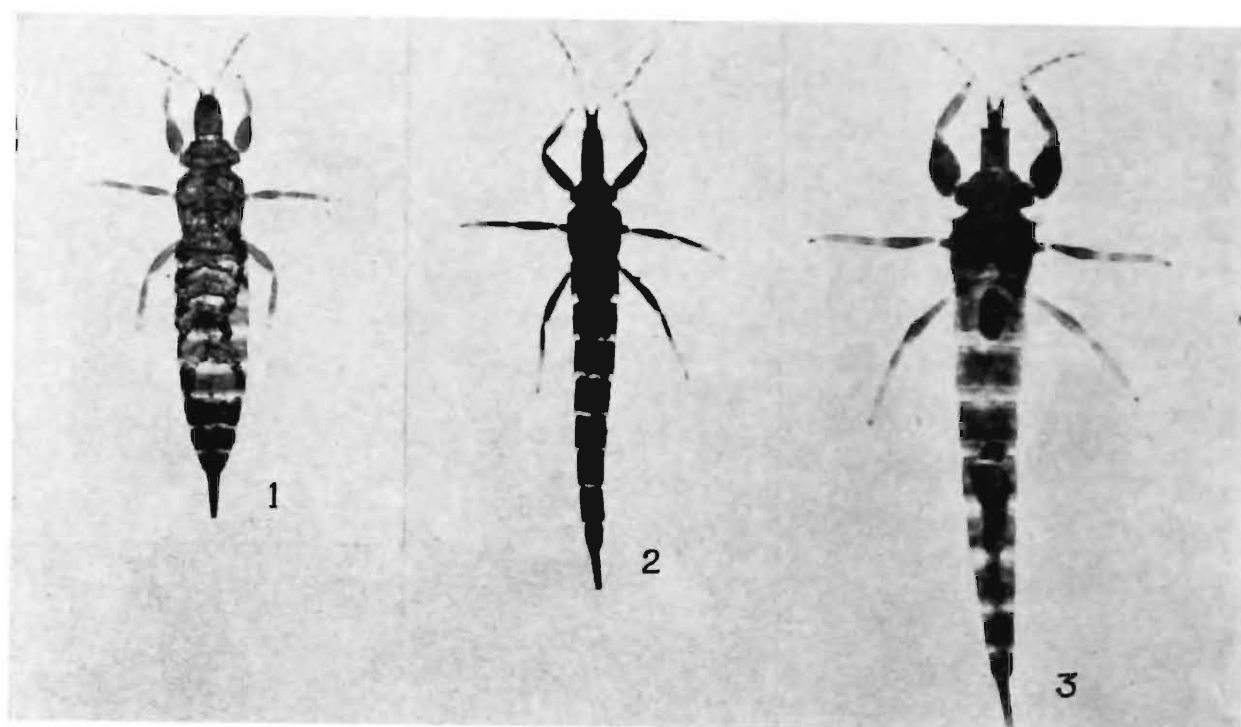
1. *Idiothrips ficus* Bhatti
2. *Stictothrips fimbriata* (Ananthakrishnan)
3. *Meiothrips menoni* Ananthakrishnan



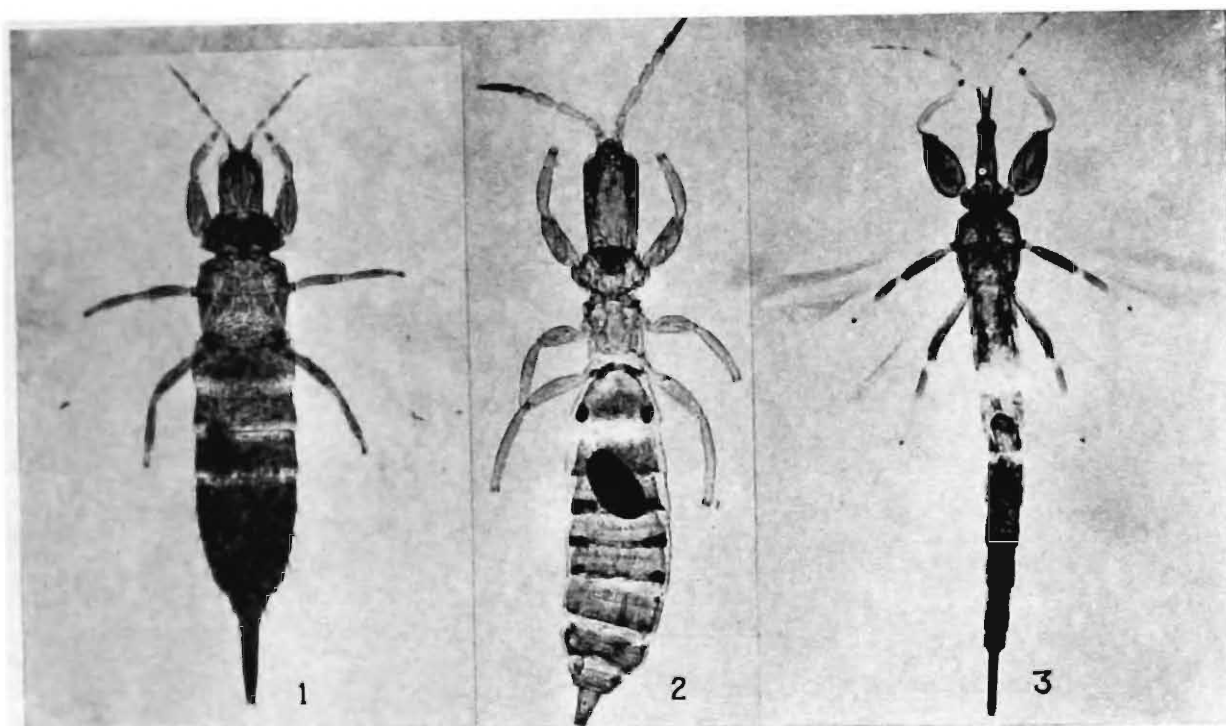
1. *Arrhenothrips ramakrishnae* Hood
2. *Neurothrips indicus* Ananthakrishnan
3. *Scelothrips menoni* (Ananthakrishnan)
4. *Allothrips pillichellus bicolor* Ananth.



1. *Priesneriana kobandha* (Ramk.)
2. *Neosmerinthothrips robustus* (Ananth.)
3. *Pygothrips amplus* Faure
4. *Polyphemothrips cracens* Ananth.



1. *Machatothrips silvaticus* Ananth.
2. *Elaphrothrips denticollis* (Bagnall)
3. *Dinothrips sumatrensis* Bagnall



1. *Decothrips anacardii* Ananth.
2. *Oedaleothrips ramamurthi* Ananth.
3. *Mecynothrips simplex* Bagnall