Introduction

Oriental Aphididae here is understood to represent aphid fauna of Afghanistan, Bangladesh, Bhutan, China, India, Nepal, Pakistan, Sri Lanka, Taiwan, Thailand & Vietnam (Eastop & Van Emden 1972) (Fig. 1). Geographically, Oriental Region forms part of Asia with its western side fringed by middle East, northern periphery capped by Mongolia and U. S. S. R., eastern part separated by sea straits of Far East and south extremities terminating in the Great oceans. Geologically, the region is predominantly part of erstwhile Lauresia landmass with peninsular India owing its origin to Gondwanaland. In spite of changing face of the earth due to rift, tectonic and orogenic movements, the Oriental Region is largely an intact landmass with Great Himalaya forming the axis. Climatologically, the region is chiefly tropical, but large belts of subtropical to temperate and alpine areas on the northern extremities, dry desert belt on western extremeties and rainfed areas on eastern side make this zoogeographical realm quite diversified. Phytogeographically, the region is vastly diversified (Table 1). This is mainly due to vastness of the area and also because of immigration and colonisation of plant species of widely different areas of earth. Among these Malayan elements and quite large African elements are dominant on the southern part of the region, northern part, more particularly the Himalaya is intruded upon by Tibetan—Siberian elements and the eastern area is dominated by Chinese-Japanese elements. In the western side Mediterranian influence is quite evident. Besides these, native flora of the region is widespread and some of the primitive group of plants as Betulaceae, Magnoliaceae, Dipterocarpaceae, Theaceae and Fagaceae are better represented in terms of endemic genera in Oriental Region. In this background of biogeography and physiography, the aphid fauna is nonetheless quite rich and diversified. Although palaeontological evidences are very poor because of the morphological characteristics of this group of insect, if present day distribution of aphids in Oriental Region is any indication of the past then it can be easily contended that phylogenetic heritage of this Zoogeographical realm is no less rich in comparison to temperate areas where aphids are said to have originated (Eastop, 1973). This is particularly evident in the distribution of greenideine and hormaphidine aphids (Table 2) which, in fact, are more abundant in this region than anywhere else.

Aphids belonging to Aphidinae, Chaitophorinae, Drepanosiphinae, Lachninae and Pemphiginae are not only more concentrated in palaearctic part of the northern hemisphere but have immensely radiated to every suitable ecological niche under the influence of prolonged cold climate and have established synchronisation with floristic pattern. In the colder

TABLE 1. *Broad classification of flora of Oriental Region* :

Rain forest area	Dry area	Upper plain area	Estuarine area	High altitude area
1. Deciduous Monsoon Forest	1. Thorn Forest	1. Moist Deciduous Forest	1. Tidal Forest	1. Subtropical Dry Evergreen Forest
2. Semigreen Forest	2. Dry Evergreen Forest	2. Mixed Vegetation		2. Subtropical Wet Evergreen Forest
3. Tropical Wet Evergreen Forest		3. Cultivated crops		3. Wet Temperate Forest
				4. Dry Temperate Forest
				5. Moist & Dry Alpine scrubs

TABLE 2. Number of aphid genera and species under different subfamilies of Aphididae and Adelgidae from Oriental Region.

Aphid subfamilies	*Genera*	*Species*
APHIDIDAE		
Anoeciinae	3	18
Aphidinae	118	511
Chaitophorinae	5	32
Drepanosiphinae	44	96
Greenideinae	11	108
Hormaphidinae	32	99
Lachninae	15	62
Mindarinae	2	2
Pemphiginae	22	86
Phloemyzinae	1	1
Total :	253	1015
ADELGIDAE		
Adelginae	4	5
Pinenae	1	3
Total :	5	8
Grand Total (Aphididae+Adelgidae) :	258	1023

part of Oriental Region, too, aphids are much better represented and show large faunal similarities with their counterparts on east and west palaearctic regions. This is particularly evident between aphid fauna of eastern part of Oriental Region and Japan. Similar but somewhat lesser faunal affinity exists between southern parts of Oriental region and Malayan region. Among the countries of oriental region, Burma and Bangladesh remains to be explored for aphid fauna. From Burma, in particular, there is no published account of any aphid. Besides, countries like Nepal, Pakistan, Vietnam, Sri Lanka and Afghanistan have only occassionally been surveyed for aphids and known by poor faunastics. These countries deserve better exploration over large areas, most of which are yet to be visited by any Aphidologist. Even in India, large tracts of eastern and western ghats in south are yet to be encroached for any aphid exploration. Given the adequate attention in search of aphids form these unexplored areas, there is every likeliness that total number of aphid genera and species would be much higher than known today and there shall be better information on such groups like Adelgidae, Minderinae, Phloemyzinae and Phylloxeridae (not known from this region so far) which are, at present, very poorly in this region.

This work presents a synoptic list of 1015 aphid species spread over 253 genera under 10 subfamilies of Aphididae and 8 species belonging to 5 genera under 2 subfamilies of Adelgidae known till June, 1983 (table 2). This list exclude aphid names which were incompletely identified or vaugely named to avoid confusion in respect of their taxonomic validity. Taxonomic nomenclature of the listed aphid genera and species have mostly been adopted from Eastop and Hille Ris Lambers, 1976 but in some cases authors have utilized their choice from their continuous work on those taxa. The original identity of taxa which were described in post-1976 period from the region have mostly been retained without any change although some of these taxa may deserve synonimisation. Detail account in this respect is deliberately avoided in view of the forthcoming fauna volumes of aphids prepared by one of the author (AG) from India and similar attempts being made in other countries of the region.

This work further contributes in presenting running taxonomic keys at subfamily, tribe, subtribe and generic levels represented in the region. The taxonomic keys presented here are essentialy for the identification of Oriental Aphididae and it may not work for aphids not represented in this region. Necessary illustrations have been provided as an aid to the identification of aphids and these have been suitably referred.

In the synoptic list of aphids, each species has been suffixed by the abbreviated names of the countries of their distribution.

In the preparation this work while every attempt was made to cover available publications on aphids from this region, any omission is not challenged. The authors would welcome, if any such ommission or error in this work is brought to their notice promptly. Not all the taxa included in the text were accessable to the authors for their original examination, although a majority of them have been viewed by us during past years. In its scope this work may appear preliminary, nonetheless it could be considered as groundwork for more arduous work to follow in future.

Following references form the major literature source of this work ; however, a large number of other references for the region available in these works, have been utilized in preparation of the paper :

Afghanistan	:	Ghullamullah (1941) ; Takahashi (1966)
Bangladesh	:	Mondal (1981) ; Stary & Van Harten (1982)
Bhutan	:	Ghosh, A. K. *et al.* (1982) ; Ghosh, L. K. (1972) ; Dutta and Raychaudhuri (1977) ; Agarwala & Raychaudhuri (1981)
China & adjacent territories	:	Takahashi (1928, 1930a, 1930b, 1930e, 1934, 1936a, 1936b, 1936c, 1936d, 1937a, 1937b, 1938a, 1938b, 1939, 1941) ; Tao (1961, 1962a, 1962b, 1963a, 1963b, 1964a, 1964b, 1964c, 1965, 1966a, 1966b, 1968, 1969, 1970a, 1970b) ; Zhang & Zhong (1979a, 1979b, 1980a, 1980b, 1980c, 1980d, 1981a, 1981b, 1982a, 1982b) ; Zhang (1981)
India	:	Verma (1971), David *et. al.* (1972) ; Singh & Raychaudhuri (1975) ; Chakrabarti (1978) ; Raychaudhuri (1980) ; Ghosh, A. K. (1980, 1982) ; Bhagat (1982) ; Chakrabarti & Maity (1982) ; Chakrabarti & Bhattacharya (1982) ; Agarwala & Raychaudhuri, D. (1982) ; Agarwala *et. al.* (1982) ; Maity *et. al.* (1982) ; Basu & Raychaudhuri, D. (1983) ; Bhattacharya *et. al.* (1983) ; Agarwala & Ghosh, A. K. (1983) ; Ghosh, A. K. (1984)
Nepal	:	Sharma (1968) ; Chakrabarti & Raychaudhuri (1972) ; Ghosh, A. K. *et. al.* (1973) ; Quednau (1973) ; Das & Raychaudhuri (1976, 1977) ; Miyazaki (1977) ; Stroyan (1981)
Pakistan	:	Hille Ris Lambers (1966, 1973) ; Hamid & Ghani (1970) ; Habib (1973) ; Hamid *et. al.* (1974) ; Ghosh, A. K. (1974, 1977)
Sri Lanka	:	Ghosh, A. K. (1974)

Taiwan : Takahashi (1931, 1932, 1933, 1934, 1935, 1937, 1939, 1940)

Thailand : Robinson (1972) ; Banziger (1980, 1981)

Vietnam : Szelegiewicz (1968)

Only those references are indexed in this paper which are not available in Smith's Bibliography of World Aphididae (1972).

List of abbreviations used in the text :

A	— Afghanistan
alata	— Alate vivipary female
aptera	— Apterous viviparous female
B	— Bhutan
BD	— Bangladesh
BU	— Burma
b. d. III	— Basal diameter of antennal segment III
C	— China
F. T. C.	— First tarsal chaetotaxy
h. t. 2	— Second segment of hindtarsus
I	— India
K	— Kampuchea
L	— Laos
M	— Medial vein in forewing
N	— Nepal
NK	— North Korea
P	— Pakistan
p. t.	— Processus terminalis
SK	— South Korea
SL	— Sri Lanka
T	— Thailand
TA	— Taiwan
U. R. S.	— Ultimate rostral segment
V	— Vietnam

1. Key to the families of Aphidoidea

1. Antennae of apterae usually 4-6 segmented, of alatae 5-6 segmented and in all morphs bearing two primary rhinaria ; p. t. longer to shorter than base of last antennal segment ; eyes of apterae usually multi-faceted ; siphunculus (Figs. 2-29) usually present, cauda often developed (Figs. 31-56) ; forewings with distinct radial sector vein (Figs. 57-67). ... **Aphidinae**

Antennae 2-5 segmented with 1-3 primary rhinaria ; p. t. always much shorter than base of last antennal segment ; eyes of apterae always 3-faceted ; siphunculus absent ; cauda not discernible ; forewings without radial sector vein (Fig. 68). ... **Adelgidae**

2. Key to the subfamilies of Adelgidae

1. Abdomen with 5 pairs of spiracles, those on segment 1 without sclerotic plate (Fig. 69) ; hindwings with indistinct oblique vein in alatae. ... Pinenae

Abdomen with 6 pairs of spiracles (Fig. 70) ; those on segment 1 without sclerotic plate ; hindwings with distinct oblique vein in alatae. ... **Adelginae**

2.1. Key to the tribes of Adelginae

1. Nymphs (overwintering) with wax glands producing fine waxy threads. ... Dreyfusini

Wax glands in first instar nymph producing wax tubules, in exules usually arranged in 6 separate rows or may be absent on abdominal tergites 1-4 (Fig. 110). ... **Adelgini**

2.1.1. Key to the genera of Dreyfusini

1. Nymphs (1st instar) always with normal hairs on head and thorax ; sclerotic plate on prothosax never fused in exule's nymph. ... *Dreyfusia*

Nymphs always without hair, with porecanals which are hardly visible ; median and premarginal sclerotic plates on head and prothorax fused. ... *Aphrastasia*

2.1.2. Key to the genera of Adelgini

1. Adults with separate sclerites on head and thorax ; dorsal wax glands absent in nymphs. ... *Adelges*

Adults with sclerites on head and thorax more or less fused ; first instar nymph on Spruce with 8-30 glands on each sclerite, on *Pseudotsuga*, glands appear contiguous. ... *Gilletteella*

3. Key to the subfamilies of Aphididae

1.	First tarsal segments with 9 or more ventral hairs (Fig. 71) and sometimes with a pair of dorsal hairs....	*Lachninae*	
	First tarsal segments with at most 7 ventral hairs (Figs. 72-74). ...	...	2
2.	Siphunculus usually elongated and densely hairy, if short and truncate then without any hair but with a pair of dorsal processi arising from abdominal tergite 7 and eyes in apterae 3-faceted. ...	*Greenideinae*	
	Siphunculus of various shapes, if elongate than usually without hairs. ...	...	3
3.	Subanal plate never indented or bilobed (Fig. 76); head and pronotum usually separate; empodial hair always fine. ...	...	4
	Subanal plate usually indented or bilobed (Figs. 77-79), if entire then body usually with wax gland plates; head and pronotum sometimes also entire, thorax and some abdominal tergites fused or free; empodial hair flattened or fine. ...	...	7
4.	Siphunculus usually elongate and without any hair; cauda most usually longer than broad; p. t. usually longer than base of last antennal segment. ...	*Aphidinae*	
	Siphunculus cone-shaped, with or without hairs; cauda broader than long; p. t. always shorter than base of last antennal segment. ...	...	5
5.	Siphunculus with many hairs. ...	*Anoeciinae*	
	Siphunculus without hair. ...	...	6
6.	Cauda subtraingular (Fig. 80). ...	*Mindarinae*	
	Cauda broadly rounded (Fig. 81). ...	*Phloemyzinae*	
7.	Eyes in all morphs large (if 3-faceted than head fused with pronotum); siphunculus truncate, elongate or clavate, variably imbricated or reticulated; wax gland plate usually absent. ...	...	8
	Eyes in apterae 3-faceted; siphunculus never as above; wax gland plate usually present (Figs. 82-88). ...	...	9
8.	Body and appandages usually with conspicuous dorsal hairs; wax gland plate absent; eyes of all forms large; secondary rhinaria in alatae round or oval; siphunculus usually reticulated. ...	Chaitophorinae	
	Body and appandages without conspicuous dorsal hairs; wax gland plate present or absent; eyes in apterae sometimes 3-faceted; siphunculus usually not-reticulated. ...	Drepanosiphinae	

9. Head and pronotum fused in apterae ; apterae often aleyrodiform and usually bear a pair of frontal horns (Figs. 89-92) ; antennae 2-5 segmented, secondary rhinaria absent in apterae, annular in alatae ; first tarsal segments usually with less than 5 hairs and second tarsal segments with dorsoapical capitate hairs ; cauda weakly to distinctly knobbed or rounded. ... Hormaphididnae

Head and pronotum separate ; apterae never aleyrodiform ; frontal processi absent ; antennae 5-6 segmented, secondary rhinaria in alatae round or oval or annual ; first tarsal segments with 2-7 hairs ; dorsoapical hairs of second tarsal segments fine ; cauda rounded. ... Pemphiginae

4. Key to the tribes of Anoeciinae

1. Eyes many-faceted (Fig. 93) ; dorsum of abdomen strongly scterotized ; lateral abdominal tubercles present ; M of forewings once-branched (Fig. 94). ... Anoeciini

Eyes 3-faceted ; dorsum of abdomen pale ; lateral abdominal tubercles absent ; M of forewings twice-branched. ... Aiceonini

4.1. Key to the genera of Aiceonini

1. Sternite 8 with one stout, short, spine-like hair ; base of antennal segment III in alatae feebly reticulated (Fig. 95) ; u. r. s. not stilletto-shaped. ... *Subaiceona*

Sternite 8 with only normal hairs ; base of antennal segment III in alatae not as above ; u. r. s. stilletto-shaped. ... *Aiceona*

5. Key to the tribes of Aphidinae

1. Lateral abdominal tubercles usually absent from segments 1 and 7 but variably present on segments 2-5 or completely absent ; spiracles of abdominal segments 1 and 2 usually placed close together ; antennal tubercles often well-developed (Figs. 96-101) Macrosiphini

Lateral abdominal tubercles present on segments 1 and 7 but often very small to be confused with hair bases ; spiracles of abdominal segments 1 and 2 placed far apart ; antennal tubercles usually not well-developed (Fig. 102) 2

2. Antennae and body densely covered with hairs (Fig. 103) ; secondary rhinaria sometimes present in apterae ... Pterocommatini

Antennae and body not densely covered with hairs ; secondary rhinaria absent in apterae ... Aphidini

5.1. Key to the subtribes of Aphidini

1. Lateral abdominal tubercles on segments 1 and 7 placed posteroventrally to the spiracles of those segments (Fig. 104) ... Aphidina

   Lateral abdominal tubercles on segments 1 and 7 placed posterodorsally to the spiracles of those segments (Fig. 105). ... Rhopalosiphina

5.1.1. Key to the genera of Aphidina

1. Siphunculus ring like or poriform ; u. r. s. stilletto-spahed (Fig. 108). ... *Cryptosiphum*

   Siphunculus at least as long as wide ; u. r. s. blunt or obtuse. 2

2. Lateral abdominal tubercles absent from first and seventh segments ; F. T. C. 3, 3, 3. ... *Indiaphis*

   Lateral abdominal tubercles present on first and usually on seventh segments ; F. T. C. 2, 2, 2 or 3, 3, 2. 3

3. Stridulatory mechanism present (Figs. 106-107) ; F.T.C. 3, 3, 2 ... *Toxoptera*

   Stridulatory mechanism absent 4

4. Lateral abdominal tubercles present only on first segment ; F. T. C. 2, 2, 2 ... *Casimira*

   Lateral abdominal tubercles present on both first and seventh segments 5

5. Siphunculus shorter than cauda ; F. T. C. 2. 2, 2 6

   Siphunculus longer than cauda ; F. T. C. 2, 2, 2, or 3, 3, 3 7

6. Processus terminalis 0.5-0.7 × as long as base of segment VI ; cauda pale, bearing 6-11 hairs ... *Brachyunguis*

   Processus terminalis 0.9-1.5 × as base of segment VI ; cauda dark, bearing 15-17 hairs ... *Aphis* (*Protaphis*)

7. Ultimate rostral segment rostrate (Fig. 109) ; F. T. C. 3, 3, 3 ; p. t. 1.7-1.9 × as long as base of segment VI... *Ephedraphis*

   Ultimate rostal segment normal ; F. T. C. 2, 2. 2 or 3, 3, 3 8

8. Ultimate rostral segment bearing about 7 secondary hairs ; F. T. C. 2, 2, 2 ; eight abdominal tergite bearing 2 hairs ... *Aleurosiphon*

   Ultimate rostral segment bearing usually 2 secondary hairs, sometimes 3 or 4 hairs ; F. T. C. usually 3, 3, 3 ; eight abdominal tergite bearing usually 2-6 hairs ... *Aphis S. str.*

5.1.2. Key to the Genera of Rhopalosiphina

1.	Siphunculus short, about 0.06× as long as body ...	*Hyalopterus*
	Siphunculus rather long, more than 0.07× as long as body	2
2.	Dorsum of abdomen with spinules arranged in polygons, each polygon enclosing a few spinules ...	*Rhopalosiphum*
	Dorsum of abdomen without spinules, if present never form polygon	3
3.	Secondary rhinaria in alatae protuberant ; siphunculus short and thick ...	*Melanaphis*
	Secondary rhinaria in alatae normal ; siphunculus rather long.	4
4.	Alatae with M in forewings once-branched, hindwings with 2 oblique veins (Fig. 63) ; siphunculus and cauda dark or pale. ...	*Schizaphis*
	Alatae with M in forewings twice-branched ; hindwings with 1 oblique vein (Fig. 62) ; siphunculus and cauda pale. ...	*Hysteroneura*

5.2. Key to the Generic groups of Macrosiphini

1.	Siphunculus reticulated at least on 0.20 apical portion (Figs. 14, 25, 26). ...	Group I
	Siphunculus not reticulated, if reticulated then never like as above (Figs. 8, 9, 11, 12, 16-18, 20-24).	2
2.	Cauda semicircular, subpentagonal or rounded, short to as long as basal width (Fig. 11). ...	Group II
	Cauda elongated, conical, pentagonal, longer than width at base (Figs. 12-17, 19-22).	3
3.	Prothorax with 4 dorso-spinal hairs. ...	Group III
	Prothorax with 2 dorso-spinal hairs.	4
4.	Median frontal prominence well-developed, usually as long as or longer than first antennal segment (Fig. 111). ...	Group IV
	Median frontal prominence never as above.	5
5.	Antennae without secondary rhinaria on 3rd segment. ...	Group V
	Antennae with secondary rhinaria on 3rd segment (Figs. 114-118). ...	Group VI

5.2.1. Key to the genera of Group I

1.	First tarsal chaetotaxy usually 5, 5, 5.	2
	First tarsal chaetotaxy variable, never 5, 5, 5.	3

2.	Ultimate rostral segment 1.80-2.0 × h. t. 2, extending upto the second abdominal segment, bearing 7-12 short secondary hairs. ...	*Paczoskia*	
	Ultimate rostral segment 0.50-1.60 × h. t. 2, extending upto at most hind coxae, bearing usually 8 secondary hairs of moderate length. ...	*Uroleucon*	
3.	Siphunculus swollen. ...	...	4
	Siphunculus cylindrical. ...	...	5
4.	Spiracular sclerites of thorax strongly produced with openings very large and round ; siphunculus slender apically and swollen on distal 2/3 portion. ...	*Delphiniobium*	
	Spiracular sclerites of thorax not strongly produced, with openings of normal size ; siphunculus stout, barrel-shaped or strongly attenuated apically. ...	*Indomegoura*	
5.	Head granulated ; antennal tubercles converging at inner sides. ...	*Myzosiphon*	
	Head smooth or spinulated ; antennal tubercles coverging at inner sides. ...	...	6
6.	Dorsum of head and body densely spinulose ; antennae without secondary rhinaria. ...	*Macromyzus*	
	Dorsum of head and body smooth or very sparsely spinulose ; antennae with secondary rhinaria. ...	...	7
7.	Secondary rhinaria protuberant ; u. r. s. stilletto-shaped. ...	*Macrosiphoniella*	
	Secondary rhinaria non-protuberant ; u. r. s. not stilletto-shaped ...	...	8
8.	Dorsal body hairs extremely long, fine, placed on strong sockets ; cauda short, tongue-shaped ...	*Hillerislambersia*	
	Dorsal body hair short or long, of various apices, not placed on sockets ; cauda long	*Microsiphum*	

5.2.2. Key to the genera of Group II

1.	Antennae with rhinaria on 3rd segment ...		2
	Antennae without rhinaria on 3rd segment ...		4
2.	Secondary rhinaria protuberant, distributed over 0.50-0.75 portion of 3rd segment	*Amphicercidus*	
	Secondary rhinaria non-protuberant ...	...	3
3.	Siphunculus smooth	*Radisectaphis*	
	Siphunculus striated with faint reticulations at apex	*Obtusicaudaphis*	
4.	Ultimate rostral segment acute ; siphunculus without a flange ...	*Cryptaphis*	
	Ultimate rostral segment not acute ; siphunculus with a flange ...	...	5

5.	Hindtibiae possessing sensoria ...		*Ceruraphis*
	Hindtibiae without sensoria ...	...	6
6.	Siphunculus smooth ; abdominal tergum sclerotized ...		*Brachycaudus*
	Siphunculus variably imbricated ; abdominal tergum membranous or sclerotised ...	...	7
7.	Siphunculus with closely set transverse rows of blunt spinules ; abdominal tergum with spinal tubercles on all segments ...		*Anuraphis*
	Siphunculus with irregular imbrications but not as above ; abdominal tergum with spinal tubercles present on segments 6-8 ...		*Sappaphis*

5.2.3. Key to the genera of Group III

1.	Abdominal tergite 8 with a median tubercle. ...	...	2
	Abdominal tergite 8 without a median tubercle. ...	...	3
2.	Abdominal tergite 8 with 4 hair ; head with sparse spinules ventrally. ...		*Tricaudatus*
	Abdominal tergite 8 with 2 hairs ; head without spinules ventrally. ...		*Cavariella*
3.	Dorsal body hairs funnel-shaped. ...		*Coloradoa*
	Dorsal body hairs pointed, capitate or incrassate. ...	...	4
4.	Antennal tubercles high, with a long finger-like projection ; spiracular pores of 6th and 7th tergites larger than those on 1-5th tergites. ...		*Akkaia*
	Antennal tubercles without a finger-like projection ; spiracular pores normal. ...	...	5
5.	Siphunculus warty. ...	...	6
	Siphunculus not warty. ...	...	7
6.	Siphunculus tapering to a point at apex and with a oblique pore situated much basad of the apex. ...		*Acutosiphon*
	Siphunculus slightly narrow at apex with apical pore. ...		*Vesiculaphis*
7.	Ultimate rostral segment stittetto-shaped ; dorsal body hair capitate. ...		*Capitophorus*
	Ultimate rostral segment variable never as above	....	8
8.	Siphunculus strongly swollen. ...		*Liosomaphis*
	Siphunculus cylindrical or clavate. ...	...	9
9.	Tarsi with normal inbrications. ...	...	10
	Tarsi usually with spinular imbrications. ...	...	11
10.	Head strongly spinulose on both the surfaces (Fig. 121). ...		*Matsumuraja*
	Head largely smooth. ...		*Ericolophium*

11.	Siphunculus clavate ; antennae longer than body. ...	*Himalayaphis*	
	Siphunculus cylindrical ; antennae shorter than body. ...	...	12
12.	First tarsal segments usually and second tarsal segments always with spinular imbrications throughout. ...	*Neoacyrthosiphon*	
	First tarsal segments often smooth and second tarsal segments with normal imbrications, sometimes with a few spinules. ...	*Elatobium*	

5.2.4. Key to the genera of Group IV

1.	First tarsal chaetotaxy 5, 5, 5. ...	...	2
	First tarsal chaetotaxy 3, 3, 3 or 3, 3, 2. ...	...	4
2.	Siphunculus shorter than cauda ; abdominal tergum smooth ; u. r. s. shorter than h. t. 2. ...	*Longicaudus*	
	Siphunculus longer than cauda ; abdominal tergum papillated ; u. r. s. as long as to longer than h. t. 2. ...	...	3
3.	Dorsal body hairs minute with spatulate apices ; median frontal tubercles developed into a rectangular process. ...	*Myzaphis*	
	Dorsal body hairs long with capitate apices ; median frontal tubercle round or widely rectangular. ...	*Chaetosiphon*	
4.	Abdominal tergite 8 with a supracaudal process ; antennae 5 or 6 segmented. ...	*Eoessigia*	
	Abdominal tergite 8 without a supracaudal process. ...	...	5
5.	Head with 3 projections on front ; antennae 4 or 5 segmented ; siphunculus spoon-shaped, without a pore. ...	*Aspidophorodon*	
	Head without projections on front ; antennae 6-segmented ; siphunculus variously shaped, with a pore. ...	...	6
6.	Siphunculus much longer than cauda. ...	...	7
	Siphunculus shorter than cauda. ...	...	8
7.	Abdominal tergum sclerotized and papillated ; head weakly W-shaped at front ; siphunculus pale. ...	*Micraphis*	
	Abdominal tergum membraneous and smooth ; head distinctly W-shaped at front ; siphunculus dark. ...	*Lipaphis*	
8.	Siphunculus without a distinct flange. ...	...	9
	Siphunculus with a distinct flange. ...	...	10

9. Cauda elongate and round at apex, with a distinct constriction ; siphunculus shorter than wide at base. ***Brachysiphoniella***

   Cauda shortly conical, without distinct constriction ; siphunculus as long as or longer than wide at base. ... ***Semiaphis***

10. Abdominal tergum with sclerotic transverse bands ; cauda shortly conical. ... ***Brevicoryne***

    Abdominal tergum without sclerotic bands ; cauda elongate, round at apex. 11

11. Abdominal tergum without central pigmented patch in alatae. ... ***Hayhurstia***

    Abdominal tergum with a central pigmented patch in alatae. ... ***Longicaudinus***

5.2.5. Key to the genera of Group V

1. Tarsi atrophied (Fig. 123), claws absent ; F. T. C. 1, 0, 0. ... ***Shinjia***

   Tarsi normal, claws present ; F. T. C. never 1, 0, 0. 2

2. Siphunculus bearing some hairs. 3

   Siphunculus without hairs. 4

3. Abdominal dorsum aerolated ; dorsal hairs pointed, as long as or longer than 0.5 × b. d. III. ... ***Tuberocephalus***

   Abdominal dorsum corrugated, not aerolated ; dorsal hairs blunt and minute. ... ***Trichosiphonaphis***

4. Antennal tubercles with a finger-like projection, much longer than wide ; abdomen with a large sclerite on the dorsum. ... ***Phorodon***

   Antennal tubercles rounded or with a projection as long as wide. 5

5. Siphunculus narrowest at middle, without flange. 6

   Siphunculus of various shapes, with flange. 7

6. Antennal tubercles converging on the innersides ; dorsum of head in alatae with spinules. ... ***Jacksonia***

   Antennal tubercles parallel ; dorsum of head in alatae smooth. ... ***Xenosiphonaphis***

7. Dorsum of head spinulose. 8

   Dorsum of head smooth. 26

8. First tarsal chaetotaxy 5, 5, 5. ... ***Neomasonaphis***

   First tarsal chaetotaxy variable, never 5, 5, 5. 9

9.	First segment of all tarsi with 2 sense page and 2 lateral setae. ...	*Micromyzus*	
	First segment of all tarsi with 0 or 1 sense-peg and 2 lateral setae. ...	...	10
10.	Dorsal hairs on abdominal tergum longer than b. d. III. ...	...	11
	Dorsal hairs on abdominal tergum shorter than b. d. III. ...	...	15
11.	Siphunculus short, at most about 5.0 x as long as wide at middle, antennae shorter than body. ...	...	12
	Siphunculus long, over 7.0 x as long as wide at middle ; antennae about as long as or longer than body. ...	...	13
12.	Cauda triangular having a distinctly narrow tube-like apical end. ...	*Tubicauda* (Fig. 124)	
	Cauda conical with acute to blunt apex, never as above. ...	*Eumyzus*	
13.	Antennae much longer than body, hairs on 3rd segment shorter than b. d. III. ...	*Micromyzodium*	
	Antennae about as long as body, hairs on 3rd segment as long as or longer than b. d. III. ...	...	14
14.	Cauda elongate, conical ; siphunculus cylindrical. ...	*Eomyzus*	
	Cauda short, conical or tounge-shaped ; siphunculus slightly dilated apically. ...	*Hydronaphis*	
15.	Dorsal body hairs short, stout and dilated at the tip ; siphunculus puffed near apex, densly spinulose. ...	*Pentalonia*	
	Dorsal body hairs offen minute, rather thin, pointed or inverted bottle-shaped ; siphunculus tapering or gardually swollen, imbricated. ...	...	16
16.	Siphunculus stout, swollen at middle, about 4.50 × as long as wide at middle. ...	*Neoryopalomyzus*	
	Siphunculus cylindrical, never swollen at middle, may be clavate. ...	...	17
17.	Antennal tubercles roundly diverging at innersides, each with a forwardly protruding tubercle at inner apex. ...	...	18
	Antennal tubercles diverging, parallel or converging at inner sides, without a projection at inner apex. ...	...	19
18.	Primary rhinaria non-ciliated ; alatae without a developed sclerite on abdominal dorsum. ...	*Ovatus*	
	Primary rhinaria strongly ciliated ; alatae with a developed sclerite on abdominal dorsum. ...	*Phorodon*	

19.	Dorsal body hairs minute and blunt. ...	...	20
	Dorsal body hairs often long, sometimes short, of various apices ...	...	25
20.	Antennal tubercles parallel or slightly diverging at innersides ; abdominal dorsum pigmented. ...		*Kaochiaoja*
	Antennal tubercles often conspicuously converging at innersides, rarely roundly diverging ; abdominal dorsum pale or pigmented. ...	...	21
21.	Spiracular pores larger on 6th and 7th abdominal tergites ; caudal apex reticulated. ...		*Myzakkaia*
	Spiracular pores normal ; caudal apex not reticulated	...	22
22.	Antennal tubercles very poorly developed ; head sparsely spinulose ; post-siphuncular sclerites present.		*Scleromyzus*
	Antennal tubercles well-developed. ...	...	23
23.	Siphunculus swollen ; F. T. C. 3, 3, 3 ; alatae with dorsum of abdomen pale. ...		*Hyalomyzus*
	Siphunculus cylindrical if swollen than F. T. C. 3, 3, 2 ; alatae with dorsum of abdomen often sclerotic ...	...	24
24.	In alatae wings with veins strongly bordered black.		*Neotoxoptera*
	In alatae wings with veins not or only faintly bordered black. ...		*Myzus*
25.	Dorsal body hairs with capitate apices ; siphunculus short, somewhat constricted in the middle, little longer than cauda (Fig. 143). ...		*Linaphis*
	Dorsal body hairs with acuminate, fan-shaped or swollen apices ; siphunculus cylindrical, more than one-half the length of cauda. ...		*Indoidiopterus*
26.	Numerous body processi present on dorsum of thorax and abdomen ; body hairs short with incrassate apices. ...		*Tuberoaphis*
	Body processi absent. ...	...	27
27.	Dorsal body hairs long, with capitate apices except on tergite 8 which with fine apices ; siphunculus swollen on distal half. ...		*Subovatomyzus*
	Dorsal body hairs not as above. ...	...	28
28.	Mammiform processi present on mesosternum in apterae ; siphunculus cylindrical, sometimes swollen on distal portion. ...		*Aphidura*
	Mammiform processi absent. ...	...	29
29.	Cauda traingular, chitinized, pointed apically and bent laterally. ...		*Nudisiphon* (Fig. 125)
	Cauda pale, subpentagonal, not as above. ...		*Brachymyzus*

5.2.6. Key to the genera of Group VI

1.	Siphunculus bagpipe-like (Fig. 144). ...	...	2
	Siphunculus cylindrical, subcylindrical or clavate. ...	...	3
2.	Dorsum of head smooth ; secondary rhinaria on 3rd antennal segment protuberant ; dorsal body hairs short with incrassate apics. ...		*Rhopalosiphoninus*
	Dorsum of head spinulose ; secondary rhinaria on 3rd antennal segment non-protuberant ; dorsal body hairs long with acute or incrassate apices, placed on sockets. ...		*Neorhopalosiphoninus*
3.	Secondary rhinaria on 3rd antennal segment swollen or protuberant. ...	...	4
	Secondary rhinaria on 3rd antennal segment flat, rounded or subcircular. ...	...	12
4.	First tarsal chaetotaxy 6, 6, 6 ; secondary rhinaria on 3rd antennal segment numerous and distributed throughout (Fig. 148). ...		*Senisetotarsaphis*
	First tarsal chaetotaxy variable, never 6, 6, 6 ; secondary rhinaria never so numerous. ...	...	5
5.	Dorsum of head warty ; siphunculus short, subcylindrical ; dorsal hair long, blunt, placed on sockets. ...		*Indomyzus*
	Dorsum of head smooth or slightly corrugated ; siphunculus rather long, clavate or distally swollen ; dorsal hairs short or long with blunt, incrassate or capitate apices. ...	...	6
6.	Dorsal body hairs with spatulate or capitate apices. ...	...	7
	Dorsal body hairs with blunt or incrassate apices. ...	...	9
7.	Ultimate rostral segment elongate, parallel sides, bearing 19-24 secondary hairs (Fig. 145). ...		*Pilorostris*
	Ultimate rostral segment obtuse, bearing less than 15 secondary hairs. ...	...	8
8.	Dorsal body hairs thick with spatulate to capitate apices, arising from strong tuberculate bases. ...		*Cryptomyzus*
	Dorsal body hairs rather thin with inconspicuous capitate apices, not arising from strong tuberculate bases. ...		*Kakimia*
9.	Dorsum of abdomen with sclerotic pattern in both apterae and alatae (Fig. 146) ; p. t. usually more than 5×as long as basal part of antennal segment VI. ...		*Nasonovia*
	Dorsum of abdomen pale, membranous or pigmented, if sclerotic, than p. t. less than 5×as long as basal part of segment VI. ...	...	10

10.	Siphunculus distinctly swollen ; secondary rhinaria on 3rd antennal segment scattered along the whole length. ...	*Hyperomyzus*	
	Siphunculus cylindrical, tapering or slightly swollen at middle ; secondary rhinaria on 3rd antennal segment restricted to the basal region. ...	...	11
11.	Head smooth dorsally and spinulose ventrally ; antennal tubercles welldeveloped and diverging. ...	*Sinomegoura*	
	Head usually corrugated dorsally and scabrous or spinulose ventrally (Fig. 147) ; antennal tubercles low, gibbous, not converging at innersides. ...	*Juncomyzus*	
12.	First tarsal chaetotaxy 4, 4, 4 (Fig. 154) ...	*Anaulaeorthum*	
	First tarsal chaetotaxy 3, 3, 3. ...	...	13
13.	Siphunculus conspicuously clavate. ...	*Amphorophora*	
	Siphunculus cylindrical or only gently clavate. ...	...	14
14.	Abdomen with developed antesiphuncular sclerites ; head smooth. ...	...	15
	Abdomen without developed antesiphuncular sclerites ; head smooth, spinulose or scabrous. ...	...	16
15.	Median frontal prominence absent. ...	*Megoura*	
	Median frontal prominence present. ...	*Neomegouropsis*	
16.	Dorsum of head spinulose or granulated. ...	...	17
	Dorsum pf head smooth or weakly spinulose. ...	...	19
17.	Siphunculus swollen on dfstal half ; abdominal dorsum sclerotic and corrugated ; head granulated....	*Utamphorophora*	
	Siphunculus slender, only slightly swollen ; abdominal dorsum pale or pigmented. ...	...	18
18.	Secondary rhinaria on 3rd antennal segment numerous ; nymphs with hindtibiae spinulose. ...	*Ipuka*	
	Secondary rhinaria on 3rd antennal segment only a few near the base ; nymphs usually with hindtibiae smooth. ...	*Aulacorthum*	
19.	Dorsal body hairs numerous, funnel-shaped apically, u. r. s. acute, concave, laterally. ...	*Pleotrichophorus*	
	Dorsal body hairs rather sparse, not funnel-shaped ; u. r. s. obtuse, straight. ...	...	20
20.	Abdominal tergum uniformly sclerotized and pigmented ; head smooth. ...	*Impatientinum*	
	Abdominal tergum membranous or sclerotized, not pigmented. ...	...	21

21. Dorsal cephalic hairs short to long, on high sockets and with blunt, incrassate or somewhat spatulate apices ; abdominal tergum scletotic, pale or slightly pigmented. ... *Metopolophium*

Dorsal cephalic hairs short, not on sockets, with blunt or incrassate apices ; abdominal tergum pale or sclerotic. 22

22. Frontal sinus V-shaped ; abdominal tergum pale and smooth. ... *Acyrthosiphon*

Frontal sinus not V-shaped ; abdominal tergum pale, smooth or sclerotic. 23

23. Processus terminalis shorter than basal part of antennal segment VI ; u. r. s. shorter than h. t. 2 ; abdominal tergum sclerotic. ... *Rhodobium*

Processus terminalis longer than basal part of segment VI ; u. r. s. subequal to longer than h. t. 2 ; abdominal tergum smooth or papillated. ... *Wahlgreniella*

6. Key to the genera of Chaitophorinae

1. Siphunculus reticulated ; cauda rounded or knobbed ; head and pronotum never fused. 2

Siphunculus not reticulated, may be with a few striae ; cauda distinctly knobbed or wider than long with distinct constriction ; head and pronotum may or may not be fused. 3

2. Cauda broadly rounded ; dorsum of head and pronotum smooth ; empodial hair flattened. ... *Periphyllus* (Fig. 135)

Cauda knobbed or broadly rounded ; dorsum of head and pronotum with distinct sculpturing or spicules or nodules ; empodial hairs usually fine. ... *Chaitophorus* (Fig. 134)

3. Head and pronotum not fused ; antennae always 5-segmented ; subanal plate entire. ... *Sipha* (Fig. 133)

Head and pronotum fused ; antennae 5-or 6-segmented ; subanal plate entire or bilobed. 4

4. Processus terminalis shorter than base of antennal segment VI ; longest flagellar hair longer than b. d. III ; subanal plate bilobed ; antennae always 6-segmented. ... *Sinochaitophorus*

Processus terminalis longer than base of segment VI ; longest flagellar hair shorter than b. d. III ; subanal plate entire ; antennae 5-or 6-segmented. ... *Trichaitophorus*

7. Key to the genera of Drepanosiphinae

1.	Cauda globular, basal part membranous. ...	*Globulicaudaphis* (Fig. 126)	
	Cauda not as above. ...	...	2
2.	Siphunculus reticulated. ...	*Yamatocallis*	
	Siphunculus not reticulated. ...	...	3
3.	Siphunculus about 0.20 × body or longer, cylinderical or slightly swollen (Fig. 153). ...	*Drepanosiphum*	
	Siphunculus shorter than 0.20 × body. ...	...	4
4.	Forecoxae enlarged, more than 1.55 × as broad as middlecoxae. ...	...	5
	Forecoxae not more than 1.10 × as broad as middlecoxae. ...	...	6
5.	Forecoxae about 1.75-3.0 × as broad as middlecoaxae....	*Therioaphis* (Fig. 136)	
	Forecoxae not so much enlarged. ...	*Sinotherioaphis* (Fig. 127)	
6.	Spinal and pleural tubercles restricted to the post-siphuncular tergites. ...	*Paracallipterus*	
	Tubercles when present without such arrangement. ...	...	7
7.	Rostrum 4-segmented ; p. t. longer than base of antennal segment VI ; rudimentary gonypophyis 2. ...	*Paoliella*	
	Rostrum 5-segmented ; p. t. usually shorter than base of antennal segment VI ; rudimentary gonopophyses 1-3. ...	...	8
8.	Abdominal segment VIII bilobate ; body hairs umbrella-shaped. ...	*Saltusaphis*	
	Abdominal segment VIII not bilobate : body hair variously shaped. ...	...	9
9.	Dorsal body hairs on strongly tuberclulate bases bearing minute spinules on their surface ; frons distinctly protruded. ...	*Sarratocallis*	
	Dorsal body hairs never as above, if bearing spinules then frons never protruded. ...	...	10
10.	Apical tibial hairs not differentiated from other tibial hairs ; rudimentary gonapophyses 3 or 4 ; u.r.s. without secondary hair ; head of apterae fused with prothorax. ...	*Neophyllaphis*	
	Apical tibial hairs distinctly differentiated from other tibial hairs ; rudimentary gonapophyses 1 or 2 ; u. r. s. with or without secondary hairs. ...	...	11

11.	Second antennal segment shorter than 1st ; wax plates usually absent, if present then first tarsal segments bearing dorsal hairs ; p. t. 0.50-7.0 × as leng as base of antennal segment VI. ...	...	12
	Second antennal segment longer than 1st ; wax plate present ; first tarsal segments without dorsal hairs ; p. t. 0.10-0.50 × as long as base of antennal segment VI. ...	...	41
12.	Head never with V-shaped suture ; p. t. 0.10-2.0 × as long as base of antennal segment VI ; first tarsal segments always with a dorsal hair. ...	...	13
	Head mostly with V-shaped suture ; p. t. 0.60-7.0 × as long as base of antennal segment VI ; first tarsal segments alwas with a pair of dorsal hairs. ...	...	35
13.	Marginal abdominal hairs single on all segments ...	...	14
	Marginal abdominal hairs at least double on anterior segments. ...	...	26
14.	Clypeus bearing a finger-like process anteriorly. ...	...	15
	Clypeus normally rounded anteriorly. ...	...	16
15.	Spinal hairs on abdominal tergite V shifted laterally ; marginal hairs on tergites 5-7 short. ...		*Takecallis*
	Spinal hairs on abdominal tergite V not shifted laterally ; marginal hairs on tergites 5-7 comparatively long ...		*Subtakecallis*
16.	Only dorsum of abdomen with tubercles. ...		*Chucallis*
	Dorsum of head and abdomen or thorax and abdomen with tubercles. ...	...	17
17.	Abdomen with finger-like tubercles ; spinal hairs on abdominal tergites III, V, and VII considerably shifted apart. ...	...	18
	Abdomen without finger-like tubercles ; spinal hairs on abdominal tergites in parallel rows. ...	...	20
18.	Media of forwings once-branched. ...		*Sappocallis*
	Media of forewings twice-branched. ...	...	19
19.	Mesonotum without spinal tubercles, spinal tubercles on abdominal tergite II longer than 2nd antennal segment. ...		*Saruoallis*
	Mesonotum with spinal tubercles ; spinal tubercles on abdominal tergite II may or may not be longer than 2nd antennal segment. ...		*Tinocallis*
20.	Head with a longitudinal suture, antennae 6-segmented in apterae ; flageller hairs rare. ...		*Chunansicallis*
	Head without a longitudinal suture. ...	...	21

21.	Wax plate or wax pores present. ...	...	22
	Wax plate or wax pores absent ...	...	25
22.	Body with wax plates. ...	...	23
	Body with wax pores ...	...	24
23.	Processus terminalis about 0.20×as long as base of antennal segment VI ; siphunculus short, ring like....		*Shivaphis*
	Processus terminalis about 0.60×as long as base of antennal segment VI (Fig. 128) ; siphunculus truncate. ...		*Sinishivaphis*
24.	Siphunculus truncate with an hair appended to its base ...		*Tinocalloides*
	Siphunculus on elevated cone, without any hair appended to its base. ...		*Cranaphis*
25.	Dorsal body hairs rather long, at least 1.50×as long as b. d. III ; anal plate deeply bilobed. ...		*Tiliaphis* (Fig. 129)
	Dorsal body hairs rather short, at most 0.80×as long as b. d. III ; anal plate not deeply bilobed. ...		*Mesocallis*
26.	Marginal sclerites bearing 7-16 hairs atleast on anterior abdominal tergites 1—V. ...	...	27
	Marginal sclerites bearing at most 7 hairs on anterior abdomen tergites I-V. ...	...	28
27.	Cauda bearing 22-25 hairs (Fig. 152 A) ; abdomen without broad dark cross bars. ...		*Chromocallis*
	Cauda bearing 30-45 hairs (Fig. 151) ; abdomen with broad dark cross bars. ...		*Callaphis*
28.	Abdomen with finger-like tubercles present. ...	...	29
	Abdomen without finger-like tubercles. ...	...	30
29.	Spinal tubercles with 3-4 hairs. ...		*Tuberculatus*
	Spinal tubercles with 2 hairs. ...		*Castanocallis* (Fig. 130)
30.	Processus terminalis distinctly longer than base of antennal segment VI. ...	...	31
	Processus terminalis shorter to at most as long as than base of antennal segment VI. ...	...	32
31.	Spinal and pleural hairs on abdominal tergites in paired groups of 2-6. ...		*Myzocallis*
	Spinal and pleural hairs on abdominal tergites in cluster, numerous (Fig. 131). ...		*Hoplocallis*
32.	Head with strongly produced median protuberances ; head black. ...		*Pseudochromaphis*
	Head with median prominence never as above. ...	...	33

33.	Processus terminalis less than half as long as base of antennal segment VI (Fig. 149) ; anterior abdominal tergites without protruberances. ...		*Chromaphis*
	Processus terminalis at least half as long as base of antennal segment VI (Fig. 150) ; anterior abdominal tergites with inconspicuous median protuberances. ...	...	34
34.	First tarsal segments bearing 5 ventral hairs ; radial-sector of forewings obsolete. ...		*Pterocallis*
	First tarsal segments bearing 3-4 ventral hairs ; radialsector of forewings not obsolete. ...		*Taiwanaphis*
35.	Anal plate entire ; p. t. shorter than base of antennal segment VI ; first tarsal segments bearing 7 ventral hairs. ...	...	36
	Anal plate divided ; p. t. usually longer than base of antennal segment VI ; first tarsal segments bearing 5 or 6 ventral hairs. ...	...	39
36.	Cauda rounded ; antennal segment VI with more than 6 hairs ; wax plate absent. ...		*Symydobius*
	Cauda knobbod ; antennal segment VI with 1 or 2 hairs ; wax plates present or absent. ...	...	37
37.	Marginal sclerites bearing 12-24 hairs ; longest flagellar hairs about 1.50-2.0 × as long as b. d. III (Fig. 156). ...		*Clethrobius*
	Marginal sclerites bearing 2-6 hairs ; longest flagellar hairs about 0.50 × as long as b. d. III. ...	...	38
38.	Cribriform wax plate absent on dorsum of abdomen. ...		*Taoia*
	Cribriform wax plate present on dorsum of abdomen....		*Euceraphis*
39.	Cauda crescent-shaped or elongated. ...	...	40
	Cauda knobbed ; head with a broad band on venter. ...		*Betacallis*
40.	Cauda crescent-shaped ; abdomen without tubercle. ...		*Betulaphis*
	Cauda elongated ; abdomen with small tubercles, each bearing a long capitate hair (Fig. 132). ...		*Neobetulaphis*
41.	Empodial hair long, pointed ; abdominal tergite VIII with 4 hairs. ...		*Machilaphis*
	Empodial hair flattened ; abdominal tergite VIII with 6-8 hairs. ...	...	42
42.	Anal plate deeply bilobed ; eyes without ocular tubercles. ...		*Phyllaphoides*
	Anal plate slightly indented (Fig. 152 B) ; eyes with ocular tubercles. ...		*Phyllaphis*

8. Key to the tribes of Greenideinae

1. Apterae with processi ; eyes usually 3-faceted, when multifaceted, eyes reduced ; siphunculus bearing only a few hairs. ... **Cervaphidini**

   Apterae without processi ; eyes always multiaceted ; siphunculus bearing many hairs. ... **Greenideini**

8.1. Key to the genera of Cervaphidini

1. First tarsal chaetotaxy 3, 3, 3 ; body with one or two pairs of processi on posterior region. 2

   First tarsal chaetotaxy 5, 5, 5 ; body with many processi. 3

2. Cauda transversely oval, with a median stylus ; body with one pair of processi each on abdominal tergites 7 and 8 (Fig. 137). ... *Anomalosiphum*

   Cauda transversely oval, without a median stylus ; body with only one pair of processi on abdominal tergite 7. ... *Schoutedenia*

3. Body processi branched ; siphunculus about 0.22-0.45 × as long as body ; dorsal body hairs swollen or dagger-shaped (Fig. 138). ... *Cervaphis*

   Body processi undranched ; siphunculus about 0.12× as long as body ; dorsal body hairs swollen or blunt (Fig. 139). ... *Sumatraphis*

8.2. Key to the genera of Greenideini

1. First tarsal chaetotaxy 3, 3, 3 ; triommatidia as large as compound eyes (Fig. 140). ... *Tritrichosiphum*

   First tarsal chaetotaxy 5, 5, 5 or 7, 7, 7 ; triommatidia normal. 2

2. Cauda transversely oval with a median stylus ; siphunculus reticulated near the base or over the entire length. ... *Greenidea*

   Cauda transversely oval but never with a median stylus ; siphunculus never reticulated as above. 3

3. Rostrum with blunt apex, segments 4 and 5 of u. r. s. indistinctly divided ; hind tibiae with or without stridulatory ridges. ... *Greenideoida*

   Rostrum with pointed apex, segments 4 and 5 of u. r. s. distinctly divided. 4

4. Siphunculus barrel-shaped (Fig. 141), small, dorsal abdominal hairs minute to moderately long with blunt or slightly expended apices. ... *Brevitrichosiphon*

   Siphunculus elongated ; dorsal abdominal hairs relatively longer. 5

5. Dorsal body hairs stiff, usually with capitate apices ; antennae 5-or 6-segmented. ... *Allotrichosiphum*

Dorsal body hairs never as above. 6

6. Hindtibiae with stridulatory ridges in the form of transverse cuts. ... *Mollitrichosiphum*

Hindtibiae without stridulatory ridges. ... *Eutrichosiphum*

9. Key to the genera of Hormaphidinae

1. Frons in apterae usually with frontal processi, seldom absent (in some forms of *Cerataphis* and *Doraphis*) ; in alatae these processi reduced. 2

Frons in both apterae and alatae without any such processi. 13

2. Subanal plate entire ; frontal processi on head in both apterae and alatae long and mutually placed far apart (fig. 89) ; apterae with numerous wax pores ; M in forewings once-branched. ... *Ceratoglyphina*

Subanal plate slightly indented to distinctly bilobed. 3

3. Marginal wax cells in apterae usually present between eyes and antennae (Fig. 92). 4

Marginal wax cells in apterae absent between eyes and antennae. 5

4. M in forewings once-branched, hindwings with 2 oblidue veins ; antennae 4-5 segmented in apterae and 5-segmented in alatae ; siphunculus poriform (Fig. 188). ... *Cerataphis*

M in forewings simple, hindwings without cubitus ; antennae 2-segmented in apterae and 4-segmented in alatae ; siphunculus absent. ... *Doraphis*

5. Head with a median and 2 laterally placed frontal processi, looking like short blunt tubercles. 6

Head with frontal processi looking like horns. 7

6. Pre-siphuncular abdominal segments in apterae fused, post-siphuncular segments somewhat discernible, segment 8 with wax pores. ... *Tuberaphis*

Abdominal segments distinct, segment 8 without wax pores. ... *Neotuberaphis*

7. Two dorso-apical hairs on 2nd tarsal segments in apterae with swollen apices. 8

One dorso-apical hairs on 2nd-tarsal segments in apterae with swollen apices and other shorter with normal apices. 12

8.	Aggregated wax gland cells present on tergite 8 and on margin of abdomen in apterae. ...	...	9
	Aggregated wax gland cells absent, instead scattered wax pores present on entire body. ...	...	11
9.	Marginal wax gland cells on abdomen transversely oval and arranged in a row (Fig. 142). ...		*Astegopteryx*
	Marginal wax gland cells on abdomen rounded or irregularly shaped (Fig. 155); cephalothorax in apterae smooth, with or without wax gland cells. ...		*Ceratovacuna*
11.	Body pale brown with no apparent wax pores; frontal horns in nymphs short, thick and conical. ...		*Pseudoastegopteryx*
	Body dark brown with scattered wax pores; frontal horns in nymphs short with rounded apices (Fig. 157). ...		*Chaitoregma*
12.	Distinct wax gland cell groups present on tergite 8 (Fig. 158). ...		*Paraoregma*
	Irregularly scattered wax pores present on tergite 8....		*Pseudoregma*
13.	Body in apterae aleurodiform with a row of marginal wax cells encircling entire body. ...		*Aleurodaphis*
	Body in apterae never as above. ...	...	14
14.	Head in apterae fused with only prothorax; siphunculus on elevated cones. ...	...	15
	Head in apterae fused with the thoracic segments which also usually fused; siphunculus, when present, ring-like. ...	...	16
15.	Cauda and subanal plate entire (Figs. 159, 160); siphunculus with hairs appended to it. ...		*Kurisakia*
	Cauda knobbed; subanal plate bilobed; siphunculus without any hair appended to it. ...		*Glyphinaphis*
16.	Siphunculus present. ...	...	17
	Siphunculus absent. ...	...	24
17.	Abdominal tergite 8 with 2 hairs; dorsal pustules on prosoma appear double rimmed; antennae reduced (Fig. 161). ...		*Metanipponaphis*
	Abdominal tergite 8 with 4-6 hairs; if 2 hairs than dorsal pustules on prosoma never double rimmed. ...	...	18
18.	Cauda globular, as long as maximum width (Fig. 162); antennae smooth; prosoma nearly smooth (Fig. 163); dorsal hairs short. ...		*Xenothoracaphis*
	Cauda somewhat semioval, broader than long. ...	...	19

19. Abdominal segments (2-7) seperated from prosoma and with numerous short to long fine hairs (Fig. 164) besides submarginal hairs ; dorsum of prosoma with indistinct mosaic-like sculpture or pustules ; tergite 8 with 2-4 hairs. ... *Euthoracaphis*

Abdominal segments (2-7) sometimes only laterally separated from prosoma or consolidated and without any fine hair. 20

20. Prosoma consolidated with abdominal segments (2-7) ; dorsum of body with traingular hairs ; tergite 8 with 2 hairs ; integument smooth. ... *Sinonipponaphis*

Prosoma usually laterally separated from abdominal segments (2-7) ; dorsal hairs never traingular. 21

21. Dorsum of prosoma with distinct spinal and lateral finger-like tubercles besides low pustules ; tergite 8 with 4 hairs (Fig. 165). ... *Indonipponaphis*

Prosoma without any finger-like tubercle. 22

22. Hairs on the dorsum of prosoma and on submarginal region long, thick, hollow or solid and arise from conspicuous bases ; prosoma without any pustules and posteromesial hairs at the hind ends. ... *Schizoneuraphis*

Hairs on the dorsum of prosoma fine, if thick and stout then never as above ; prosoma variably pustulate dorsally, with or without posteromesial hairs at the hind ends. 23

23. Abdominal segments (2-7) with 6 pairs of submarginal hairs but without any posteromesial hairs at the hind end ; tergite 8 with 2-4 hairs ; prosoma and abdominal segments (2-7) indistinctly separated or will-defined (Fig. 166). ... *Thoracaphis*

Abdominal segments (2-7) always with a pair of posteromesial hairs at the hind end besides 6 pairs of submarginal hairs ; tergite 8 with 4-8 hairs ; prosoma and abdominal segments (2-7) usually faintly to distinctly defined (Fig. 167). ... *Nipponaphis*

24. Prosoma consolidated with abdominal segments (2-7) (Fig. 168), dorsum reticulated ; submarginal hairs thick and spine like ; tarsi 2-segmented with rudimentary claws. ... *Parathoracaphis*

Prosoma never consolidated with abdominal segments (2-7). 25

25. Legs without tarsi ; antennae 3-segmented ; dorsum of body covered with hemispherical nodules throughout ; posterior margin of abdomen with a black covering. ... *Hemipodaphis*

Legs with normal or variably developed tarsal segments and these may or may not bear claws. 26

26.	Legs with normal tarsi of 2 segments and claws. ...	...	27
	Either all legs with rudimentary tarsi or only hind legs with such tarsi and other legs without tarsi. ...	...	28
27.	Prosoma with short, blunt submarginal hairs. ...		*Allothoracaphis*
	Prosoma with long rather fine submarginal hairs. ...		*Pseudothoracaphis*
28.	Fore- and midlegs without tarsi, hindlegs with rudimentary tarsi ; abdomen without any submarginal hairs. ...		*Neothoracaphis*
	All legs with rudimentary tarsi (1-segmented). ...	...	29
29.	Abdominal segments (2-7) without any submarginal hairs ; mid-dorsal area of prosoma with long hairs and with irregular mosaic-like sculptures (Fig. 169) ; antennae 3-segmented. ...		*Dermaphis*
	Abdominal segments (2-7) with 6 pairs of submarginal hairs, long or minute. ...	...	30
30.	Prosoma reticulated on dorsum but lacking papillae ; mid-dorsal region of prosoma with minute hairs discernible by pits ; tergite 8 with 2-4 hairs (Fig. 170). ...		*Reticulaphis*
	Prosoma with large subcircular or polygonal papillae on dorsum ; middorsal region of prosoma with stout and prominent hairs ; tergite 8 with 2 hairs (Fig. 171). ...		*Quernaphis*

10. Key to the tribes of Lachninae

1.	Second segment of hind tarsi greatly elongate, 0.50-0.95× as long as hindtibiae, first segment reduced ; eyes of true apterae only 3-faceted. ...		Tramini
	First and second segments of tarsi normal, never as above ; eyes of all forms usually many-faceted. ...	...	2
2.	Ultimate rostral segment usually acuminate, segments 4 and 5 distinctly divided (Fig. 173), forewing usually hyaline, radius of forewings straight. ...		*Cinarini*
	Ultimate rostral segment always blunt, segment 5 reduced ; forewings often with pigmentation, radius of forewings curved. ...		Lachnini

10.1. Key to the subtribes of Cinarini

1.	Body rounded ; u. r. s. pointed, distinctly divided into segments 4 and 5 ; siphunculus on small to large sclerotic cones bearing many hairs (Fig. 174) ; first tarsal segments never with dorsal hairs. ...		Cinarina
	Body elongate or elongate oval ; u. r. s. shert or blunt (Fig. 175), segment 4 indistinctly separated from segment 5 ; siphunculus hardly elevated ; with or without any surrounding hairs ; first tarsal segments sometimes with a pair of dorsal hair. ...		Eulachnina

10.1.1. Key to the genera of Cinarina

1. Body usually covered with fine hairs ; eyes with ocular tubercles : dorsal hairs usually long and fine, never arising from strong bases ; first tarsal segments with 9 or more ventral hairs but without any peg-like setae. ... *Cinara*

   Body covered with thick hairs ; eyes without ocular tubercles ; dorsal hairs thick, arising from papillate sclerotic bases and may be acuminate or furcated at apices ; first tarsal segments with 10-11 ventral hairs and one short peg. ... *Indocinara*

10.1.2. Key to the genera of Eulachnina

1. Antennae 5-segmented (Fig. 176); first tarsal segments of hindlegs with 5 ventral hairs, without any dorsal hairs ; eyes without distinct triommatidia (Fig. 177) ; body very elongated. ... *Pseudoessigella*

   Antennae 6-segmented ; first tarsal segments of hindlegs with or without dorsal hairs ; eyes with ocular tubercles ; body elongated, spindle-shaped or egg-shaped. 2

2. Body elongated or spindle-shaped ; first tarsal segments of hindlegs with dorsal hairs ; primary rhinarium without chitinized rim ; p. t. with 3 subapical hairs. .... *Eulachnus*

   Body egg-shaped ; first tarsal segments of hindlegs without any dorsal hairs (Fig. 178) ; primary rhinarium with chitinized rim ; p. t. with 2 subapical hairs. .... *Schizolachnus*

10.2. Key to the genera of Lachnini

1. Abdominal dorsum with a large spinal tubercle on tergite 4 (Fig. 179). .... *Tuberolachnus*

   Abdominal dorsum without tubercle on tergite 4. 2

2. Rostrum twice as long as body when extended. .... *Stomaphis*

   Rostrum shorter than body. 3

3. Forewings with pterostigma elongate, many times as long as its maximum width, almost straight upto the tip ; radial sector little curved or straight ; wings immaculate. 4

   Forewings with pterostigma rather short and blunt ; radial sector usually curved ; wings often variably pigmented or with a dark blotch or pale (Fig. 181). 6

4. Eyes in adults without ocular tubercles ; M in forewings of alatae much paler and thinner than other veins, may be simple, once-or-twice branched. .... *Nippolachnus*

   Eyes in adult with distinct ocular tubercles ; M in forewings twice branched, paler than or as dark as other veins. 5

5. Forewings with pterostigma curved over the tip of the wings (Fig. 180) ; hairs on flagellum and dorsum of abdomen fine, always longer than b. d. III ; abdominal dorsum with large marginal sclerites, at least on anterior tergites. .... *Longistigma*

   Forewings with pterostigma never reaching the tip of the wings ; hairs on flagellum and dorsum of abdomen fine or thick, those on flagellum shorter or longer than b. d. III ; abdominal dorsum may be distinctly reticulated or not, and may bear scattered sclerites but without large marginal sclerites. .... *Pyrolachnus*

6. M in forewings once-branched ; antennae and legs in apterae pale, in alatae black or blackish. .... *Sinolachnus*

   M in forewings twice-branched ; antennae and legs in both apterae and alatae similar. 7

7. Abdomen with double rows of lage dorsal spinal tubercles (Fig. 182). .... *Pterochlorides*

   Abdomen without dorsal tubercles. 8

8. Forewings with one blotch at the base of M (Fig. 183) ; legs not elongated ; post-siphuncular tergites with a smaller or greater number of sclerites at the base of hairs. .... *Maculolachnus*

   Forewings strongly variegated ; hindlegs much elongated ; no sclerites at the base of hairs. .... *Lachnus*

11. Key to the genera of Mindarinae

1. Pterostigma not reaching the tip of forewings ; radial-sector curved in an S-shape (Fig. 184) ; hindwings with 1st cubitus branched occasionally. .... *Sigmacallis*

   Pterostigma reaching the tip of forewings radialsector not as above (Fig. 199) ; hindwings with 1st cubitus unbranched. .... *Mindarus*

12. Key to the tribes of Pemphiginae

1. Siphunculus present as cones or as rings (Figs. 2-3), surrounded by a few hairs (except in *Byrsocryptoides*) ; wax glands present, composed of a row of cells surrounding a central space ; secondary rhinaria in alatae annular (Fig. 186) ; M in forewings simple or once-branched, hindwings with 1-2 oblique veins ; tarsi in apterae 1-2 segmented. ... Eriosomatini

Siphunculus absent or very feebly indicated ; without any hair ; wax glands present or absent, if present then without anv central space ; secondary rhinaria in alatae oval, elongate or sub-annular ; M in forewings usually simple ; tarsi usually 2-segmented. 2

2. Wax gland groups in apterae each bearing a hair, long or inconspicuous ; u. r. s. with a few or without secondary hairs ; secondary rhinaria in alatae strongly transverse and narrow (Fig. 187) or reticulated (in *Formosaphis*) ; cauda may be fused with anal plate forming a tube-like anocaudal process or normal and bearing a few hairs ; apterae usually with trochanters and femora separated. .... *Pemphigini*

Wax glands absent or inconspicuous, in apterae never with hair, if present then restricted on tergite 8 ; u. r. s. with few (2) to many secondary hairs (upto 20) ; secondary rhinaria in alatae round, oval or transversely oval (Fig. 189) ; cauda never forms anocaudal process as above ; apterae may have fused trochanter and femora. .... Fordini

12.1. Key to the genera of Eriosomatini

1. Hindtarsi 2-segmented. 2

Hindtarsi 1-segmented. 5

2. Abdominal tergites with spinular, pleural and marginal wax gland groups ; M in forewings usually simple. 3

Abdominal tergites with spinal and marginal wax gland groups, pleural glands absent ; M in forewings branched. 4

3. Wax gland groups composed of even-sized cells, without any central space or hair ; siphunculus absent in apterae ; primary rhinaria on antennal segment V with an elongated horn-shaped plaque directed apicad ; wax gland absent on abdominal tergite 8. .... *Byrsocryptoides*

Wax glands usually with an irregular or large central space ; siphunculus present in both apterae and alatae ; primary rhinaria never as above ; wax gland present on abdominal tergite 8 (Fig. 190). .... *Kaltenbachiella*

4. Siphunculus absent in apterous exules and empodial hairs hardly discernible in embryos and exules. .... *Schizoneurella*

Siphunculus present in exules and empodial hairs distinct in embryos and exules. .... *Eriosoma*

5. Anal plate bearing long hairs. .... *Teteraneura*

Anal plate not bearing long hair. .... *Colopha*

12.2. Key to the genera of Fordini

1.	Forewings with pterostigma short, truncate on the distal end ; antennae in alatae 5-segmented ; secondary rhinaria not reticulated.		*Nurudea*
	Forewings with pterostigma usually elongated, extending some distance or may be short ; antennae in alatae 5-or-6-segmented ; secondary rhinaria reticulated or not rcticulated or variously shaped.	....	2
2.	Secondary rhinaria large, ovoid, one on each segment (III-VI) and with island-shaped setigerous plates.		*Kaburagia*
	Secondary rhinaria never as above.	....	3
3.	Primary and secondary rhinaria non-ciliated ; marginal wax glands on abdominal tergites 1-5 absent in alatae.	....	4
	Primary and secondary rhinaria variably ciliated ; marginal wax glands on abdominal tergites 1-5 present in alatae.	....	5
4.	Antennae 5-or-6-segmented in apterae, 6-segmented in alatae ; rhinaria with sclerotized rim (Figs. 191-193) ; F. T. C. 5, 5, 4.		*Smynthurodes*
	Antennae 5-segmented in both apterae and alatae (Fig. 194) ; rhinaria without scterotized rim ; F. T. C. 6, 6, 6.		*Forda*
5.	Head often reticulated in apterae ; u. r. s. with 2-12 secondary hairs ; F. T. C. in alate 3, 3, 3 or 5, 5, 5.	....	6
	Head not reticulated in apterae ; u. r. s. with 0-4 secondary hairs ; F. T. C. in alatae 4, 4, 4 or 5, 5, 5. ...	....	7
6.	Hairs on dorsum of head in apterae broadcned at apices, in alatae blunt ; F. T. C. 3, 3, 3 (sometimes 3, 3, 2) ; secondary rhinaria in alalae non-ciliated.		*Geoica*
	Hairs on dorsum of head never as above ; first tarsal segments with 2 long fine hairs and 2-3 short sensory spines ; secondary rhinaria in alatae ciliated.		*Chaetogeoica*
7.	Cauda and anal plate completely united and form a ring ; apterae with 4 rows of abdominal wax gland cells (Fig. 195).		*Baizongia*
	Cauda and anal plate never united as above and with a median depression ; abdominal wax glands variably developed (Fig. 196).		*Asiphoniella*

12.3. Key to the genera of Pemphigini

1.	Secondary rhinaria reticulated.		*Formosaphis*
	Secondary rhinaria not reticulated.	....	2

2.	Antennal segment III may be with a denticle near the base; mesonotum with paired median wax glands; secondary rhinaria ciliated.	....	3
	Antennal segment III never with a denticle; mesonotum with distinct or indistinct wax glands or absent; secondary rhinaria ciliated or nonciliated.	....	5
3.	Frons with a pair of prominent protuberances.	*Ceratopemphigus*	
	Frons never as above.	....	4
4.	Antennal segments only III and IV with secondary rhinaria in alatae.	*Ceratopemphigelia*	
	Antennal segments III-VI with secondary rhinaria in alatae (Fig. 198).	*Prociphilus*	
5.	Fundatrix without wax glands; empodial hairs in the fundatrix and adult fundatrigeniae short.	*Epipemphigus*	
	Fundatrix with wax glands; empodial hairs in the fundatrix adult fundatrigeniae long.	....	6
6.	Ultimate rostral segment in apterae without secondary hair; wax pores present on head of apterae. ...	....	7
	Ultimate rostral segment in apterae with 4-6 secondary hairs; wax gland plates present on head of apterae (Fig. 197).	*Thecabius*	
7.	Secondary rhinaria in alatae usually subannular, rarely transversely oval; p. t. normal; wax gland plates normally evident.	*Pemphigus*	
	Secondary rhinaria in alatae always transversely oval; p. t. swollen, clavate (Fig. 185); wax gland plates strongly developed.	*Sanpupemphigus*	

SYNOPTIC LIST OF SPECIES

Family : ADELGIDAE

Subfamily : ADELGINAE

Tribe : ADELGINI

Adelges Vallot, 1836

laricis potaninilaricis Zhang, 1980 (C)

Gilletteela Borner, 1930

glandulae Zhang, 1980 (C)

Tribe : DREYFUSIINI

Aphrastasia Borner, 1909

funitecta (Dreyfus, 1888) (P, T)

Dreyfusia Borner, 1908

joshii (Schneider-Orelli & Scheinder, 1959) (I, P)

knucheli (Schneider-Orelli & Scheinder, 1959) (I, P)

Subfamily : PINENIAE

Pineus Shimer, 1869

hosoyai Inouya, 1953 (C)

laevis (Maskell, 1885) (N, P)

sichunanus Zhang 1980 (C)

Family : APHIDIDAE

Subfamily : ANOECIINAE

Tribe : AICEONINI

Aiceona Takahashi, 1921

actinodaphis Takahashi, 1921 (C, T)

himalaica Miyazaki, 1977 (N)

osugii Takahashi, 1924 (T)

pallida Ghosh, A. K. & Raychaudhuri, 1973 (I)

paraosugii Ghosh, A. K., Ghosh, M. R. & Raychaudhuri, 1971 (I)

parvicornis Miyazaki, 1977 (N)

pseudosugii David, Sekhon & Bindra, 1970 (I)

retipennis David, Rajasingh & Bindra, 1970 (I)

robustiseta Ghosh, M. R. & Raychaudhuri, 1973 (I)

siamensis Takahashi, 1941 (Th)

titabarensis (Raychaudhuri & Ghosh, A. K. 1964) (I)

Subaiceona Singh & Raychaudhuri, 1975

manipurensis Singh & Raychaudhuri, 1975 (I)

Tribe : ANOECINI

Anoecia Koch, 1857

corni (Fab., 1775) (C, I, T)

furcata (Theobald, 1915) (I)

himalayensis Chakrabarti & Maity, 1978 (I)

neomoralis Borner, 1950 (I)

radiciphaga Pal & Raychaudhuri, 1977 (I)

vagans (Koch, 1856) (I)

Subfamily : APHIDINAE

Tribe : APHIDINI

Aleurosiphon Takahashi, 1966

smilacifoliae (Takahashi, 1921) (C, T)

Aphis L., 1758

achyranthi Theobald, 1929 (I)

affinis del Guercio, 1911 (I)

asclepiadis Fitch, 1851 (I)

astragali Ossiannilsson, 1959 (I)

atrata Zhang, 1981 (C)

citricola v. d. Goot, 1917 (B, C, I, N, P, S, T, Th, V)

clematidis simlaensis Kumar & Burkhardt, 1970 (I)

craccivora Koch, 1854 (B, C, I, N, P, S, T, Th, V)

craccivora usuana Zhang, 1981 (C)

cytisorum Hartig, 1841 (A, C, T)

droserae Takahashi, 1921 (C, T)

eugeniae v. d. Goot, 1917 (I, N, Th)

euphorbiae Kaltenbach, 1843 (I, N)

fabae Scopoli, 1963 Complex (B, C, I, N, P, S, T, Th, V)

farinosa Gmelin, 1740 (I, T, Th)

fukii Shinji, 1922 (C, T)

glycines Matsumura, 1917 (C, I, N, T, Th)

gossypii Glover, 1877 Complex (B, C, I, N, P, S, T, Th, V)

hederae Kaltenbach, 1843 (I)

humuli (Tseng & Tao, 1936) (C)

ichigocola Shinji, 1924 (C)

kurosawai Takahashi, 1921 (B, C, I, N, T)

lhasaensis Zhang, 1981 (C)

phasartemisiae Zhang, 1981 (C)

leptorhyncha David, Sekhon & Bindra, 1970 (I)

longisetosa Basu, A. N. (1969 (I, Th)

longituba Hille Ris Lambers, 1966 (P)

nasturtii Kaltenbach, 1843 (I, N, P)

nerii Boyer, 1841 (B, C, I, N, P, T, Th)

paraverbasci Chakrabarti 1976 (I)

polygonaceae Matsumura, 1917 (I)

pomi de Geer, 1773 (C, I, T)

punicae Passerini, 1863 (I, P)

raji (Kumar & Burkhardt, 1970) (I)

rhamniphila David, Narayanan & Rajasingh, 1971 (I)

rhoicola Hille Ris Lambers, 1956 (I)

robiniae canavaliae Zhang, 1981 (C)

rubifolii (Thomas, 1879) (I, N)

rumicis L., 1758 (C, T)

sophoricola Zhang, 1981 (C)

stranvaesiae Takahashi, 1931 (C, T)

umbrella (Borner, 1950) (I)

verbasci Schrank, 1801 (I)

verbenae Macchaiti, 1884 (I)

yangbajaingana Zhang, 1981

Protaphis Borner, 1952

(P) *carthamii* (Das, 1918) (I, P)

(P) *formosanus* (Takahashi, (1927) (C, T)

Brachyunguis Das, 1918

calotropicus Menon & Pawar, 1958 (I)

hermalae Das, 1918 (I, P)

letsoniae Dass, 1918 (I, P)

Casimira Eastop, 1966

bhutanensis Ghosh, A. K., Basu, R. C. & Raychaudhuri, 1971 (B)

Cryptosiphum Buckton, 1879

artemisiae Buckton, 1879 (I)

artemisiae unanensis Zhang, 1980 (C)

Ephedraphis Hille Ris Lambers, 1959

ephedrae (Nevsky, 1929) (I)

Hyalopterus Koch, 1854

pruni (Geofroy, 1962) (C, I, P, T, Th)

Hysteroneura Davis, 1919

setariae (Thomas, 1977) (B, C, I, N, P, T, Th, V)

Indiaphis Basu, A. N., 1969

crassicornis Basu, A. N. 1969 (I)
rostrata Ghosh, A. K. & Raychaudhuri, 1972 (I)
setosa (Hille Ris lambers & Basu, A. N., 1966) (I)

Melanaphis van der Goot, 1917

arundinariae (Takahashi, 1937) (C, I, T)
bambusae (Fullaway, 1910) (C, I, T)
donacis (Passerini, 1862) (I, N, P)
meghalayensis bengalensis Raychaudhury & Banerjee, 1974
meghalayensis meghalayensis Raychaudhuri & Banerjee, 1974
pahanensis (Takahashi, 1950) (I)
sacchari (Zehntner, 1897) (B, C, I. T, Th, V)

Rhopalosiphum Koch, 1854

esculentum Raychaudhuri & Raychaudhuri, D, 1978 (I)
maidis (Fitch, 1856) (B, C, N, P, S, Th, V)
nymphaeae (L., 1761) (C, I, N, P, T, Th)
padi (L., 1758) (B, C, I, N, P, T, Th, V)
rufiabdominalis (Sasaki, 1899) (B, C, I, N, P, S, Th)
yoksumi Ghosh, A. K., Banerjee & Raychaudhuri, 1971 (I)

Schizaphis Borner, 1931

graminum (Rondani, 1847) (C, I, N, P, S, Th)
hypersiphonata Basu, A. N., 1969 (I, Th)
minuta (v. d. Goot, 1917)
piricola (Matsumura, 1917) (C, I, P, T)
punjabipyri (Das, 1918)
rotundiventris (Signoret, 1860) (C, I, N, P, S, Th)
scirpi (Kittel, 1827) (C, T)

Toxoptera Koch, 1856

aurantii (Boyer, 1841) (B, C, I, N, S, T, Th)
citricidus (Kirkaldy, 1907) (C, I, N, S, T, Th, V)
odinae (v. d. Goot, 1917) (C, I, N, T, Th, V)
schlingeri Tao (1961 (C)

Tribe : MACROSIPHINI

Acutosiphon Basu, Ghosh, A. K. & Raychaudhuri, 1970

obliquoris Basu, Ghosh & Raychaudhuri, 1970 (I, N, P)

Acyrthosiphon Mordvilko, 1914

artibreve Zhang, 1981 (C)

evodiae (Takahashi, 1929) (C, T)

gossypii Mordvilko, 1914 (I)

ignotum Mordvilko, 1914 (I)

kondoi Shinji, 1938 (I)

moltshanovi Mordvilko, 1914 (I)

myriopteroni Zhang, 1980 (C)

parenphorbiae Zhang, 1980 (C)

phaseoli Chakrabarti, Ghosh, A. K. & Raychaudhuri, 1971 (I)

pisivorum Zhang, 1980 (C)

pisum (Harris, 1776) (A, B, C, I, N, P, T)

Akkaia Takahashi, 1919

bengalensis Basu, A. N., 1968 (I)

bhutanica Ghosh, L. K., 1972 (B)

neopolygoni Ghosh, M. R., Ghosh, A. K. & Raychaudhuri, 1971 (I)

polygoni Takahashi, 1919 (C)

sikkimensis Agarwala & Raychaudhuri, 1978 (I)

taiwana Takahashi, 1933 (C)

Amphicercidus Oestlund, 1922

indicus Hille Ris Lambers & Basu, A. N. 1966 (I)

laniger (Takahashi, 1927) (T)

lonicerae Maity & Chakrabarti, 1982 (I)

sinilonioericola Zhang, 1980 (C)

tuberculatus David, Narayan & Rajasingh, 1971 (I)

Amphorophora Buckton, 1876

ampullata Buckton, 1876 (I)

ampullata bengalensis Hille Ris Lambers & Basu, A. N. 1966 (I)

Anaulacorthum Ghosh, A. K. & Raychaudhuri, 1972

fagopyri Ghosh & Raychaudhuri, 1972 (I)

Anuraphis del Guercio, 1907

farfarae (Koch, 1854) (C)

Aphidura Hille Ris Lambers, 1956

bharatia David, Sekhon & Bindra, 1970 (I)

Aspidophorodon Verma, 1966

harvensis Verma, 1966 (I)

sinisalicis Zhang, 1980 (C)

Aulacophoroides Tao, 1963 nomen novum ex. Esatop & Hille Ris Lambers, 1976

formosana (Takahashi, 1923) (C, T)

hoffamani (Takahashi, 1937) (C)

Aulacorthum Mordvilko, 1914

cirsicola (Takahashi, 1923) (C, T)

dasi Ghosh, A. K., Basu, R. C. & Raychaudhuri, 1970 (I)

delphinae Das, Raychaudhuri, D. and Raychaudhuri, 1981 (I)

linderae (Shinji, 1922) (I)

magnoliae (Essig & Kuwana, 1918) (I)

nipponicum (Essig & Kuwana, 1918) (C, I, T, Th)

rhamni Ghosh, M. R., Ghosh, A. K. & Raychaudhuri, 1971 (I)

scirpi v. d. Goot, 1917 (I)

sclerodorsi (Kumar & Burkbardt, 1971) (I)

sensoriatum (David, Rajasingh & Narayanan, 1971) (I)

solani (Kaltenbach, 1843) (C, I, N, T)

spinacaudatum (Kumar & Burkhardt, 1971) (I)

takahashii (Mason, 1925) (C, T)

Subg. *Neomyzus* van der Goot, 1915 & 1917

(*N.*) *circumflexus* (Buckton, 1876) (B, C, I, N, S, Th)

(*N.*) *dendrobii* Basu, A. N., 1969 (I)

(*N.*) *dicentrae* Basu, A. N., 1968 (I)

(*N.*) *primulum* Ghosh, A. K., Banerjee & Raychaudhuri, 1971 (I)

(*N.*) *taiwanum* Takahashi, 1923 (T)

Sub. *Perillaphis* Takahashi, 1965

(*P.*) *perillae* (Shinji, 1924) (C, I, T)

Brachycaudus v. d. Goot, 1913

atuberculatus Zhang, 1981 (C)

helichrysi (Kaltenbach, 1843) (A, B, C, I, N, T, Th)

Subg. *Acaudus* van der Goot, 1913

(*A.*) *cardui* (L., 1758) (A, I, P)

(*A.*) *persicae* (Passerini, 1800) (N)

Subg. *Mordvilkomemor* Shaposhnikov, 1950

(*M.*) *pilosus* (Mordvilko, 1929) (I)

Subg. *Thuleaphis* Hille Ris Lambers, 1960

(*T.*) *amygdalinus* (Schouteden, 1905) (A, I, P)

(*T.*) *rumexicolens* (Patch, 1917) (I)

Brachymyzus Basu, A. N., 1964

jasmini Basu, 1964 (I)

Brachysiphoniella Takahashi, 1921

montana (v. d. Goot, 1917) (C, I, N, T, Th, V)

Brevicoryne v. d. Goot, 1915

barbarae Nevsky, 1929 (I)

brassicae (L., 1758) (B, I, P, T)

Capitophorus v. d. Goot, 1913

archengelskii Nevsky, 1928 (I)

carduinus (Walker, 1850) (I, P)

elaegni (del Guercio, 1894) (C, I, N, T)

evelaegni Zhang, 1980 (C)

formosartemisiae (Takahashi, 1921) (B, C, I,T)

himachali Chakrabarti & Maity, 1980 (I)

himalayensis Ghosh, A. K., Ghosh, M. R. & Raychaudhuri, 1971 (I)

hippophaes (Walker, 1852) (C, I, N, Th)

hippophaes javanicus Hille Ris Lambers, 1953 (I, N, P)

hippophaes mitegoni Eastop, 1956 (B. I)

indicus Ghosh, A. K. & Raychaudhuri, 1968 (I)

meghalayensis Basu, R. C. & Raychaudhuri, 1976 (I)

montanus Takahashi, 1931 (C, T)

polygoni Ghosh, A. K., Ghosh, M. R. & Raychaudhuri, 1976 (I)

takahashii Strand, 1929 (C, T)

tricholepidis Chakrabarti, 1976 (I)

Cavariella del Guercio, 1911

aegopodi (Scopoli, 1763) (C, I, T)

araliae Takahashii, 1921 (C, I, T)

biswasi Ghosh, A. K. Bash, R. C. Raychaudhuri, 1969 (I)

indica Maity & Chakrabarti, 1982

japonica (Essig & Kuwana, 1918) (C, I, T)

konoi Takahashi, 1939 (I)

lhasana Zhang, 1981 (C)

nigra Basu, A. N., 1964 (I)

nodulosa Zhang, 1980 (C)

salicicola (Matsumura, 1917) (C, I, T)

simlaensis Chowdhuri, Basu, R. C. & Raychaudhuri, 1969 (I)

Ceruraphis Borner, 1926

eastopi Hille Ris Lambers, 1966 (I, P)

Chaetomyzus Ghosh, A. K. & Raychaudhuri, 1962

rhododendri Ghosh, A. K. & Raychaudhuri, 1962 (I)

Chaetosiphon Mordvilko, 1914

chaetosiphon (Nevsky, 1928) (I)

gracilicorne David, Rajasingh & Narayanan, 1971 (I)

indicus Chakrabarti & Ghosh, A. K. 1970 (I)

Subg. *Pentatrichopus* Borner, 1930

(*P.*) *fragaefolii* (Cockerell, 1901)

(*P.*) *glabrum* David, Rajasingh & Narayanan, 1971 (I)

(*P.*) *heterotrichum* Chakrabarti, Ghosh, A. K. & Raychaudhuri (1971) (I)

(*P.*) *tetrahodum* (Walker, 1849) (I)

Coloradoa Wilson, 1910

artemisicola Takahashi, 1965 (B, I)

indicus Verma, 1974 (I)

rufomaculata (Wilson, 1908) (C, I, N, P, T)

Cryptaphis Hille Ris Lambers, 1947

garhwalensis Bhattacharya, Mondal & Chakrabarti, 1983 (I)

rostrata Chakrabarti & Raychaudhuri, 1974 (I)

siniperillae Zhang, 1980 (C)

Cryptomyzus Oestlund, 1922

taoi Hille Ris Lambers, 1963 (C, I)

taoi indica Ghosh, A. K. & Raychaudhuri, 1972 (I)

Delphiniobium Mordvilko, 1914

gyamdaense Zhang, 1981 (C)

Dysaphis Borner, 1951

atina Ghosh, A. K., Basu, R. C. & Raychaudhuri, 1969 (I)

emicis (Mimeur, 1935) (I)

foeniculus (Theobald, 1923) (I)

hirsutissima (Borner, 1940) (I)

longipilosa (Mordvilko, 1928) (I)

microsiphon (Nevsky, 1929) (I, N)

montemartinii ghanii Stroyan, 1963 (I, P)

multisetosa (Basu, A. N. 1969) (I)

rhusae (Shinji, 1922) (C)

rumecicola (Hori, 1927) (I)

sharmai Stroyan, 1981 (N)

Subg. *Pomaphis* Borner, 1939

(*P.*) *plantaginaea* (Passerini, 1860) (C, T)

(*P.*) *pyri* (Boyer, 1841) (I, P)

Elatobium Mordvilko, 1914

chomoense Zhang, 1981 (C)

sclerotica Agarwala, Pramanik & Raychoudhuri, 1982 (I)

Eoessigia David, Rajasingh & Narayanan, 1972

(=*Raychaudhuriella* Chakrabarti, 1978)

indica David, Rajasingh & Narayanan, 1972 (I)

Eomyzus Takahashi, 1960

levipes Basu, R. C. & Raychaudhuri, 1974 (I)

Ephedraphis Hille Ris Lambers, 1959

ephedrae (Nevsky, 1929) (I)

Ericolophium Tao, 1963

itoe (Takahashi, 1923) (C)

Eumyzus Shinji, 1929

darjeelingensis Basu, R. C. & Raychaudhuri, 1974 (I)

eastopi Maity & Chakrabarti, 1982

himalaya Agarwala, Pramanik & Raychudhuri, D., 1982 (I)

impatiensae (Shinji, 1924) (I)

Hayhurstia del Guercio, 1917

atriplicis (L., 1761) (C, I, N, P, T)

Hillerislambersia Basu, A. N., 1968

darjeelingi Basu, 1968 (I)

Himalayaphis Ghosh, A. K. & Verma, 1973

anemonos Ghosh & Verma, 1973 (I)

Hyadaphis kirkaldy, 1904

coriandri (Das, 1918) (I, P)

foeniculi (Passerini, 1860) (I, P)

tataricae (Aizenberg, 1935) (P)

Hyalomyzus Richards, 1958

raoi Hille Ris Lambers, 1973 (I)

scabripes David & Narayanan, 1968 (I)

Hydronaphis Shinji, 1922

colocasiae Raychaudhuri, Raha & Raychaudhuri, D, 1977 (I)

Hyperomyzus Borner, 1933

carduellinus (Theobald, 1915) (B, I, N, T)

lactucae (L., 1758) (C, I, P)

sinilactucae Zhang, 1980 (C)

Impatientinum Mordvilko, 1914

asiaticum dalhousiensis Verma, 1969 (I)

impatiens (Shinji, 1922) (I, T)

Subg. *Neoimpatientinum* Agarwala, Mondal & Raychaudhuri, 1982

(*N.*) *smilaceti* Agarwala, Mondal & Raychaudhuri, 1982 (I)

Indoidippterus Chakrabarti, Ghosh, A. K. & Raychaudhuri, 1972

geranii (Chowdhuri, Basu, R. C., Chakrabarti & Raychaudhuri, 1969)

Indomasonaphis Verma, 1972

indica Verma, 1972 (I)

Indomegoura Hille Ris Lambers, 1958

indica (v. d. Goot, 1916) (C, I, T)

nigrotibiae (Tao, 1963) (C)

Indomyzus Ghosh, A. K., Ghosh, M. R. & Raychaudhuri, 1971

sensoriatus Ghosh, Ghosh & Raychaudhuri, 1971 (I)

Ipuka van Harten & Ilharco, 1976

dispersum (v. d. Goot, 1917) (I, S)

Jacksonia Theobald, 1923

campanulata Chakrabarti & Raychaudhuri, 1978 (I)

papilla Theobald, 1923 (I)

sikkimensis Ghosh, A. K., Basu, R. C. & Raychaudhuri, 1977 (I)

Juncomyzus Hille Ris Lambers, 1965

nr. *obscurus* Hille Ris Lambers, 1965 (Th.)

Kakimia Hottes & Frison, 1931

jammuensis (Verma, 1970) (I)

Kaochiaoja Tao, 1963

arthraxonis (Takahashi, 1921) (C, I, T)

Linaphis Zhang, 1981

lini Zhang, 1981 (C)

Liosomaphis Walker, 1968

atra Hille Ris Lambers, 1966 (B, I, P)

berberidis (Kaltenbach, 1843) (I, S)

himalayensis Basu, A. N., 1964 (I. N)

Lipaphis Mordvilko, 1928

erysimi (Kaltenbach, 1843) (B, C, I, N, P, S, T, Th)

unguibrevis Zhang, 1981 (C)

Subg. *Lipaphidiella* Doncaster, 1954

(*L.*) *lepidii* (Nevsky, 1929) (P, S)

Longicaudinus Hille Ris Lambers, 1965

corydalisicola (Tao, 1962) (C)

Longicaudus v. d. Goot, 1913

himalayensis Hille Ris Lambers, 1965 (I)

trihodus (Walker, 1849) (C)

Macromyzus Takahashi, 1960)

indicus David & Narayanan, 1868 (I)

manoji Raha & Raychaudhuri, 1978 (I)

polypodicola (Takahashi, 1921) (C, I, T, Th)

woodwordica (Takahashi, 1921) (C, I, N, T)

Subg. *Anthracosiphoniella* Basu, A. N., 1969

(*A.*) *maculatum* Basu, 1969 (I)

Macrosiphoniella del Guercio, 1911

alatavica (Nevsky, 1928) (I)

artemisiae (Boyer, 1941) (C)

brevisiphona Zhang, 1981 (C)

cayratiae Tseng & Tao, 1936 (C)

eastopi Kulkarni, 1980 (I)

flaviridis Zhang, 1981 (C)

formosartemisiae Takahashi, 1921 (B, C, I, T)

grandicauda Takahashi & Moritsu, 1963 (I)

hikosanensis Moritsu, 1949 (C)

kalimpongensis Basu, R. C. & Raychaudhuri, 1976 (I)

kikungshana Takahashi, 1937 (C, I)

hikosanensis matsumurana Ghosh, A. K., Basu, R. C. & Raychaudhuri, 1973 (I)

huidaensis Zhang, 1980 (C)

oblonga (Mordvilko, 1901) (B)

pseudoartemisiae (Shinji, 1933 (B, C, I, N)

sanborni (Gillette, 1908) (B, C, I, N, T, Th)

sikkimartemisiae Agarwala & Raychaudhuri, 1978 (I)

sinioblonga Zhang, 1980 (C)

spinipes Basu, A. N., 1968 (I, N)

spinipes rhododendri Ghosh, A. K., Basu, R. C. & Raychaudhuri, 1969 (I)

sudhakaris Banerjee, Ghosh, A. K. & Raychaudhuri, 1969 (I)

yomogicola (Matsumura, 1917) (C)

yomogifoliae (Shinji, 1924) (I, N, T)

Subg. *Asterobium* Hille Ris Lambers, 1938

(*A.*) *yangi* Takahashi, 1937 (C)

(*A.*) *yomenae* (Shinji, 1922) (C)

Macrosiphum Passerini, 1860

aulacorthoides David, Narayanan & Rajasingh, 1971 (I)

centranthi Theobald, 1915 (I)

clematofoliae Shinji, 1924 (C, T)

dismilaceti Zhang, 1980 (C)

euphorbiae (Thomas, (1878) (I)

flavum Tao, 1963 (C)

microspinolosum David, Rajasingh & Narayanan, 1972

pachysiphon Hille Ris Lambers, 1966 (I, P, Th)

pseudogeranii Chakrabarti & Raychaudhuri, 1974 (I)

rosae (L., 1758) (A, B, I, N, P, S)

rosacibarae Matsumura, 1917 (T)

rosaevorum Zhang, 1980 (C)

Subg. *Sitobion* Mordvilko, 1914

(*S.*) *akebiae* Shinji, 1935 & 1941 (I)

(*S.*) *alopecuri* Takahashi, 1921 (I)

(*S.*) *aveniae* (Fabricius, 1775) (B, C, I, N, P, T)

(*S.*) *fagopyri* Ghosh, A. K. & Raychaudhuri, 1972 (I)

(*S.*) *fragariae* (Walker, 1848) (N)

(*S.*) *graminis* Takahashi, 1950 (I)

(*S.*) *graveli* v. d. Goot, 1917 (I)

(*S.*) *iberae* Matsumura, 1917 (C)

(*S.*) *indicum* (Basu, A. N., 1964) (I)

(*S.*) *lambersi* David, 1956 (I)

(*S.*) *leelamaniae* David, 1958 (I)

(*S.*) *luteum* (Buckton, 1876) (Th.)

(*S.*) *mimosae* Ghosh, A. K., Basu, R. C. & Raychaudhuri, 1977 (I)

(*S.*) *miscanthi* (Takahashi, 1921) (B, I, N)

(*S.*) *plectranthi* Ghosh, M. R., Ghosh, A. K. & Raychaudhuri, 1971 (I)

(*S.*) *pseudoalopecuri* Chakrabarti, 1976 (I)

(*S.*) *pseudoluteum* (Ghosh, A. K.. 1969) (I)

(*S.*) *raoi* Kulkarni, 1980 (I)

(*S.*) *rosaeiformis* Das, 1918 (B, C, I, N, P, V)

(*S.*) *scabripes* (Ghosh, L. K., 1975) (I)

(*S.*) *smilaceti* (Takahashi, 1924) (C)

(*S.*) *smilacicola* (Takahashi, 1924) (C, T)

(*S.*) *smilacicola sikkimensis* Ghosh, A. K. & Raychaudhuri, 1968 (I)

(*S.*) *smilacifoliae* (Takahashi, 1921) (C)

(*S.*) *takahashii* Eastop, 1959 (Th)

(*S.*) *yongyooti* (Robinson, 1972) (Th)

Matsumuraja Schumacher, 1921

capitophorides Hille Ris Lambers, 1966 (I, N, P)

formosana Takahashi, 1925 (C, T)

nuditerga Hille Ris Lambers, 1965 (I)

rubicola Takahashi, 1927 (C, T)

rubifoliae Takahashi, 1931 (C, T)

urticae Ghosh, A. K., Ghosh, M. R. & Raychaudhuri, 1971 (I)

Megoura Buckton, 1876

crassicauda Mordvilko, 1919 (C)

lespedezae (Essig & Kuwana, 1918) (C, I, T)

Metopolophium Mordvilko, 1914

chandrani (David & Narayanan, 1968) (I)

dirhodum (Walker, 1849) (I)

euryae (Takahashi, 1937) (C, I, T)

graminum Raychaudhuri, Ghosh, L. K. & Das, 1980 (I)

longicaudatum (David & Hameed, 1975) (I)

rubi (Narzikulov, 1957) (I)

simluense (Chakrabarti & Raychaudhuri, 1974) (I)

sonchifoliae Raychaudhuri, Ghosh, L. K. & Das, 1980 (L)

Subg. *Metopolophinum* Ghosh, L. K., 1970

(*M.*) *darjeelingensis* Ghosh, 1970 (I)

Subg. *Microlophium* Mordvilko, 1914

(*M.*) *carnosum* (Buckton, 1876) (C, I)

(*M.*) *darjeelingensis* Raychaudhuri, Ghosh, M. R. & Basu, R. C., 1975 (I)

(*M.*) *darjeelingensis lacheni* Agarwala, Mondal & Raychaudhuri, 1982 (I)

(*M.*) *rubifoliae* Raychaudhuri, Ghosh, M. R. & Basu, R. C. 1975 (I)

(*M.*) *rubiformosanum* (Takahashi, 1927) (C, T)

Subg. *Neometopolophium* Raychaudhuri, Ghosh, M. R. & Basu, R. C., 1975

(*N.*) *davidi* Raychaudhuri, Ghosh & Basu, 1975 (I)

Micraphis Takahashi, 1931

artemisiae (Takahashi, 1923) (C, T)

Micromyzodium David, 1958

desi Verma, 1969 (I)

filicium David, 1958 (I)

strobilanthi Ghosh, L. K., 1971 (I)

Micromyzus v. d. Goot, 1917

brachiariae Ghosh, A. K., 1978 (I)

granotiae Ghosh, A. K. Ghosh, M. R. & Raychaudhuri. 1970 (I)

hangzhonensis Zhang, 1980 (C)

jndenkoi Carver, 1965 (I, S, Th)

kalimpongensis Basu, A. N., 1968 (I)

kaioi (Takahashi, 1925) (C, T)

mawphalangensis Ghosh, A. K., 1974 (I)

niger v. d. Goot, 1917 (I, S)

Myzakkaia Basu, A. N., 1969

kuwanis Ghosh, A. K., Basu, R. C. & Raychaudhuri, 1970 (I)

nittaakaenensis (Takahashi, 1937) (C)

polygonicola Basu, A. N., 1969

verbasci (Chowdhuri, Basu, R. C., Chakrabarti & Raychaudhuri, 1969) (B, I)

Myzaphis v. d. Goot, 1913

rosarum (Kaltenbach, 1843) (C, I, P)

turanica Nevsky, 1929 (I)

variolosa David, Rajasingh & Narayanan, 1970 (I)

Myzosiphon Tao, 1964

zayuense Zhang, 1981 (C)

Myzus Passerini, 1860

boehmeriac (Takahashi, 1923) (C, T)

cerasi (Fabricius, 1775) (I)

cerasi umefoliae (Shinji, 1924) (I)

dycei Carver, 1961 (I)

filicis Basu, A. N., 1969 (I)

formosanus Takahashi, 1923 (C, I, T)

hemerocallidis Takahashi, 1912 (C, T)

indicus Basu, R. C. & Raychaudhuri, 1976 (C, T)

kalimpongensis (Ghosh, M. R., Basu, R. C. & Raychaudhuri, 1976) (I)

lefroyi Basu, R. C. & Raychaudhuri, 1976 (I)

leptotrichus David, Rajasingh & Narayan, 1972 (I)

maculocarpus Basu, R. C. & Raychaudhuri, 1976 (I)

manoji Basu, R. C. & Raychaudhuri, 1976 (I)

meghalayensis Basu, R. C. & Raychaudhuri, 1976 (I)

mumecola (Matsumura, 1917) (I)

mushiensis Takahashi, 1931 (C, T)

obtusirostris David, Narayanan & Rajasingh, 1971 (I)

ornatus Laing, 1932 (I, N, S)

prunisuctus Zhang, 1980 (C)

siegesbackicola Strand, 1929 (C, I, T)

sorbi Bhattacharya & Chakrabarti, 1982

varians Davidson, 1912 (C, I, T)

Subg. *Nectarosiphon* Schouteden, 1901

(*N.*) *ascalonicus* Doncaster, 1946 (I)

(*N.*) *persicae* (Sulzer, 1776) (B, Bd, C, I, N, S, T, Th)

(*N.*) *stellariae* Strand, 1929 (C, T)

Subg. *Sciamyzus* Stroyen, 1954

(*S.*) *cymbalariae* Stroyan, 1954 (I)

Nasonovia Mordvilko, 1914

Subg. *Neokakimia* Doncaster & Stroyan, 1952

(*N.*) *rostrata* David & Hameed, 1974 (I)

Neoacyrthosiphon Tao, 1963

indicum Ghosh, L. K., Verma & Raychaudhuri, 1976 (I)

rhododendroni Ghosh, M. R., Ghosh, A. K. & Raychaudhuri, 1971 (I)

taiheisanum (Takahashi, 1935) (C, T)

taiheisanum ovalifoliae Ghosh, M. R., Ghosh, A. K. & Raychaudhuri, 1971 (I)

Subg. *Pseudoacyrthosiphon* Ghosh, A. K. & Raychaudhuri, 1969

(*P*) *holsti* (Takahashi, 1935) (C, I)

(*P.*) *nepalensis* Ghosh, A. K., Basu, R. C. & Raychaudhuri, 1973 (N)

Neomasonaphis Ghosh, A. K. & Raychaudhuri, 1972

anaphalidis (Basu, A. N., 1964) (B, I)

inulae (Ghosh, A. K. & Raychaudhuri, 1975) (I)

rumicis (Chakrabarti & Raychaudhuri, 1975) (I)

Neomegouropsis Ghosh, A. K., Basu, R. C. & Raychaudhuri, 1977

cajanae (Ghosh, M. R., Ghosh, A. K. & Raychaudhuri, 1971 (B, I)

dooarsis (Ghosh, A. K. & Raychaudhuri, 1969) (1)

Neorhopalomyzus Tao, 1963

lonicericola (Takahashi, 1921) (C)

Neorhopalosiphoninus Ghosh, A. K. & Raychaudhuri, 1968

smilacifoliae Ghosh, & Raychaudhuri, 1968 (I)

Neotoxoptera Theobald, 1315

formosana (Takahashi, 1921) (C, T)

violae (Pergande, 1900) (T)

Obtusicauda Soliman, 1927

Subg. *Artemisaphis* Knowlton & Roberts, 1947

(*A.*) *langicauda* Zhang, 1981 (C)

Oedisiphum v. d. Goot, 1917

soureni Basu, A. N., 1964 (I, N)

Ovatus v. d. Goot, 1913

crataegarius (Walker, 1850) (I, P)

malisuctus (Matsumura, 1918) (T)

menthae (Walker, 1962) (C)

mentharius (v. d. Goot, 1913) (I)

minutus (v. d. Goot, 1917) (I)

Paczoskia Mordvilko, 1914

budhium Banerjee, Ghosh, A. K. & Raychaudhuri, 1969 (I)

Pentalonia Coquerel, 1859

nigronervosa Coquerel, 1859 (B, C, I, N, S, T, Th)

Phorodon Passerini, 1860

humuli (Schrank, 1801) (C, I, T)

humulifoliae Tseng & Tao, 1938 (C)

Subg. *Paraphorodon* Tseng & Tao, 1938

(*p.*) *cannabis* Passerini, 1860 (I, N, P)

Pilorostris Raychaudhuri, Ghosh, L. K. & Das, 1980

simlaensis Raychaudhuri, Ghosh & Das, 1980 (I)

Pleotrichophorus Borner, 1930

anyangense Zhang, 1980 (C)

bilangcnse Zhang, 1981 (C)

chrysanthemi (Theobald, 1920) (I)

glandulosus (Kaltenbach, 1846) (B, C, I)

henanese Zhang, 1980 (C)

neimongolense Zhang, 1980 (C)

Radisectaphis Zhang, 1981

gyirongensis Zhang, 1981

Rhodobium (Sanderson, 1900)

porosum (Sanderson, 1900) (C, I, Th)

Rhopalosiphoninus Baker, 1920

ehretis Bhattacharya & Chakrabarti, 1981 (I)

latysiphon (Davidson, 1912) (I, N)

longisetosus Chakrabarti & Ghosh, A. K., 1974 (I)

sensoriatus Chakrabarti, 1978 (I)

takahashii Tao, 1963 (C)

Sappaphis Matsumura, 1918

piri Matsumura, 1918 (C, I)

pirivora Tao, 1962 (C)

pruni (Shinji, 1922) (C)

sinipiricola Zhang, 1980 (C)

Scleromyzus Basu, R. C., Ghosh, A. K. & Raychaudhuri, 1976

corylopsis (Basu, Ghosh & Raychaudhuri, 1973) (I)

Semiaphis v. d. Goot. 1913

heraclei (Takahashi, 1921) (C, I, T, Th, V)

Senisetotarsaphis Raychaudhuri, Ghosh, L. K. & Das, 1980

jakhuensis Raychaudhuri, Ghosh & Das, 1980 (I)

Shinjia Takahashi, 1938

orientalis (Mordvilko, 1929) (B, I, N)

Sinomgoura Takahashi, 1960

citricola (v. d. Goot, 1917) (C, I, T, Th)

edaeocarpi (Tao, 1963) (C)

photiniae (Takahashi, 1936) (C, I)

pyri Ghosh, A. K. & Raychaudhuri, 1968 (I)

rhododendri (Takahashi, 1937) (C, T)

Subovatomyzus Basu, A. N., 1960

leucosceptri Basu, 1960 (I)

Titanosiphon Nevsky, 1928

bellicosum Nevsky, 1928 (P)

neoartemisiae (Takahashi, 1921) (C, T)

Tricaudatus Narzikulov, 1957

polygoni (Narzikulov, 1957) (B, I)

Trichosiphonaphis Takahashi, 1922

gerberae Ghosh, A. K. & Raychaudhuri, 1972 (I)

loniceriae (Uye. 1923) (I)

polygoniformosanus (Takahashi, 1921) (C, T, Th)

Subg. *Xenomyzus* Aizenberg, 1935

(*X.*) *polygoni* (v. d. Goot, 1917) (C, I)

(*X.*) *scabripes* Basu, R. C., Ghosh, M. R. & Raychaudhuri, 1976 (I)

Tubaphis Hille Ris Lambers, 1947

ranunculina (Walker, 1852) (I)

Tuberoaphis Tseng & Tao, 1938

hydrangeae Tseng & Tao, 1938 (C)

hydrangeae digitata Hille Ris Lambers & Basu, A. N., 1966 (I)

Tuberocephalus Shinji, 1929

momonis (Matsumura, 1917) (C, T)

sasaki (Matsumura, 1917) (B, C, I)

sekurae (Matsumura, 1917) (C)

tianmushaensis Zhang, 1980 (C)

Uroleucon Mordvilko, 1914

achilleae (Koch, 1855) (I)

acutirostre Banziger, 1980 (Th)

debilis (Takahashi, 1923) (C, T)

fagopyri (Chowdhuri, Basu, R. C., Chakrabarti & Raychaudhuri, 1969) (I)

formosanum (Takahashi 1921) (C, I, T, V)

formosanus crepidim Ghosh, A. K., Ghosh, M. R. & Raychaudhuri, 1971 (I)

fuscaudatus Chakrabarti & Raychaudhuri, 1978 (I)

hypochoeridis (Fabricius, 1779) (I)

kashmiricum (Verma, 1966)

kumaoni Banerjee, Ghosh, A. K. & Raychaudhuri, 1969 (I)

longisetosum Chakrabarti & Verma, 1975 (I)

minati Das, Raychaudhuri, D. & Raychaudhuri, 1981 (I)

monticola (Takahashi, 1935) (C, T)

parasonchi (Raychaudhuri, Raha & Raychaudhuri, D. 1977) (I)

pseudotanaceti (Verma, 1969) (I)

simlaense Chakrabarti, Ghosh, A. K. & Raychaudhuri, 1971 (I)

sonchi (L., 1767) (I, N)

tanaceti (L., 1758) (I)

Subg. *Lambersius* Olive, 1956

(*L.*) *helianthi* (Tao, 1963) (C)

Subg. *Uromelan* Mordvilko, 1914

(*U.*) *carthami* (Hille Ris Lambers, 1948) (I)

(*U.*) *compositae* (Theobald, 1915) (I, N)

(*U.*) *echinatus* (Kulkarni, 1980) (I)

(*U.*) *gobonis* (Matsumura, 1917) (C, I, T)

(*U.*) *himachali* Ghosh, L. K., 1975 (I)

(*U.*) *jaceae* (L., 1758) (I)

(*U.*) *lactucicola* (Strand, 1928) (C, T)

(*U.*) *lambersi* (Ghosh, M. R., Basu, R. C. & Raychaudhuri, 1977) (I)

(*U.*) *minutum* (v. d. Goot. 1916) (I, S)

(*U.*) *omeishanensis* (Tao, 1963) (C)

(*U.*) *orientalis* (Kulkarni, 1980) (I)

(*U.*) *simile* (Hille Ris Lambers, 1935) (I)

(*U.*) *solidaginis* (Fabricius, 1779) (C, I)

Utamphorophora Knowlton, 1947

darjeelingensis (Ghosh, M. R., Basu, R. C. & Raychaudhuri, 1977) (I)

montana (Takahashi, 1925) (C, I, T)

Vesiculaphis del Guercio, 1911

caricis (Fullaway, 1909) (I, T)

grandis Basu, A. N., 1964 (I)

pieridis Basu, A. N., 1964 (I)

rhododendri Ghosh, A. K. & Raychaudhuri, 1972 (I)

sikkimensis Mondal, Agarwala & Raychaudhuri, 1979 (I)

Wahlgreniella Hille Ris Lambers, 1949

viburni (Takahashi, 1925) (T)

Xenosiphonaphis (Takahashi, 1961)

folisacculata Kumar & Burkhardt, 1971 (I)

Tribe : PTEROCOMMATINI

Pterocomma Buckton, 1879

pilosum Buckton, 1879 (I)

populeum (Kaltenbach, 1843) (A, I)

populifoliae (Fitch, 1851) (I)

sanpunum Zhang, 1980 (C)

sinipopulifoliae Zhang, 1980 (C)

thapsapopuleum Zhang, 1981 (C)

tibetasalicis Zhang, 1981 (C)

Subfamily : CHAITOPHORINAE

Chaitophorus Koch, 1854

clarus Tseng & Tao, 1936 (C, I)

dorocolus Matsumura, 1919 (I)

eugeniae Basu, M. & Raychaudhuri, D., 1983 (I)

himalayensis (Das, 1918) (C, I, P, Th)

horii Takahashi, 1939 (Th)

indicus Ghosh, A. K., Ghosh, M. R. & Raychaudhuri, 1970 (I)

kapuri Hille Ris Lambers, 1966 (I, P)

manaliensis Chakrabarti, 1977 (I)

nigritus Hille Ris Lambers, 9966 (P)

pakistanicus Hille Ris Lambers, 1966 (I, P)

populeti (Panzer, 1801) (A, C, I)

salijaponicus Essing & Kuwana, 1918 (C)

salijaponicus niger Mordvilko, 1929 (I)

saliniger Shinji, 1929 (C)

xizangensis Zhang, 1981 (C)

Periphyllus van der Hoeven, 1863

acerihabitans Zhang, 1982 (C)

aesculi Hille Ris Lambers, 1933

bengalensis Ghosh, A. K. & Raychaudhuri, 1972 (I)

californiensis (Shinji, 1917) (C, I)

diacerivorus Zhang, 1982 (C)

formosanus Takahashi, 1921 (C, T)

himalayensis Chakrabarti, 1977 (I)

koelreuteriae (Takahashi, 1919) (C)

pusillus Quednau & Chakrabarti, 1976 (I)

testudinaceus (Fernie, 1852) (I)

vandenboschi Hille Ris Lambers, 1966 (I, P)

villosii Chakrabarti, 1977 (I)

viridis (Matsumura, 1911) (I)

Sinochaitophorus Takahashi, 1936

maoi Takahashi, 1936 (C)

Sipha Passerini 1860

Subg. *Rungsia* Mimeur, 1933

(*R.*) *maydis* Passerini, 1860 (I)

Trichaitophorus Takahashi, 1937

aceris Takahashi, 1937 (C)

recurvispinus Hille Ris Lambers & Basu, A. N., 1966 (I)

Subfamily : DREPANOSIPHINAE

Betacallis Matsumura, 1919

luminiferus Zhang, 1982

prunicola Basu, R. C., Ghosh, A. K. & Raychaudhuri, 1973 (I)

querciphaga Basu, R. C., Ghosh, A. K. & Raychaudhuri, 1974 (I)

sikkimensis Basu, R. C., Ghosh, A. K. & Raychuudhuri, 1974 (I)

Betulaphis Glendenning, 1926

longicornis Quednau & Chakrabarti, 1980 (I)

Callaphis Walker, 1870

juglandis (Goezel, 1778) (A, I)

nepalensis Quednau, 1973 (N)

Castanocallis Zhang & Zhong, 1981

castanocallis Zhang & Zhong, 1981 (C)

ceresus Zhang & Zhong, 1981 (C)

margituberculatus Zhang & Zhong, 1981 (C)

Chromaphis Walker, 1870

hirsutustibis Kumar & Lavigne, 1970 (I, N)

juglandicola (Kaltenbach, 1843) (A, I)

Chromocallis Tao, 1961

pumili Zhang, 1982 (C)

similinirecola Zhang, 1982 (C)

Chuansicallis Tao, 1964

chengtuensis Tao, 1964 (C, I)

Chucallis Tao, 1964

bambusicola Takahashi, 1921 (C, T)

Clethrobius Mordvilko, 1928

dryobius Chakrabarti & Raychaudhuri, 1976 (I)

Cranaphis Takahashi, 1939

arundinariae Takahashi, 1940) (C, T)

formosana (Takahashi, 1924) (C, T)

indica Chakrabarti & Raychaudhuri, 1976 (I)

Drepanosiphum Koch, 1855

platanoidis (Schrank, 1801) (I)

Euceraphis Walker, 1870

betulae (L., 1919) (C)
tibiobrevis Zhang, 1981 (C)

Globulicaudaphis Hille Ris Lambers, 1966

pakistanicus Hille Ris Lambers, 1966 (P)

Hoplocallis Pintera, 1952

microsetosus (Quednau & Chakrabarti, 1976) (I)

Indiochaitophorus Verma, 1970

furcatus Verma, 1970 (I)

Machailaphis Takahashi, 1960

machaili (Takahashi, 1928) (C, I, T, Th)

Mesocallis Matsumura, 1919

alnicola Ghosh, A. K., 1974 (I)
obtusirostris Ghosh, A. K., 1974 (I)

Myzocallis Passerini, 1860

polychaetus David, 1969 (I)

Subg. *Nippoceallis* Matsumura, 1917

(*N.*) *kuricola* (Matsumura, 1917) (C)

Neobetulaphis Basu, A. N., 1964

chaetosiphon Quednau & Chakrabarti, 1980
immaculata Ghosh, A. K., 1976 (I)
pusilla Basu, A. N., 1964 (I)

Neophyllaphis Takahashi, 1920

podocarpi Takahashi, 1920 (C, T)

Paracallipterus Raychaudhuri & Ghosh, A. K., 1964

kalipadi Raychaudhuri & Ghosh, 1964 (I)

Phyllaphoides Takahashi, 1921

bambusicola Takahashi, 1921 (C)

Plocamaphis Oestlund, 1922

assetacea Zhang, 1981 (C)
salijpaponicus (Shinji, 1924) (C)

Pseudochromaphis Zhang, 1982

coreanus (Paik, 1965) comb. nov. Zhang, 1982 (C)

Pterocallis Passerini, 1860

Subg. *Mesocallis* Matsumura, 1919

(*M.*) *pteleae* (Matsumura, 1919) (C)

Subg. *Recticallis* Matsumura, 1919

(*R.*) *pseudoalni* (Takahashi, 1922) (T)

Saltusaphis Theobald, 1915

scirpus Theobald, 1915 (I)

Sappocallis Matsumura, 1919

ulmicola Matsumura, 1919 (C)

Sarucallis Shinji, 1922

kahawaluokalani (Kirkaldi, 1907) (C, I, T)
nigropunctatus Tao, 1964 (C)

Serratocallis Quednau & Chakrabarti, 1976

takahashii Quednau & Chakrabarti, 1976 (I)

Shivaphis Das, 1918

bambusicola (David, Rajasingh & Narayanan, 1971) (I)
celti Das, 1918 (C, I, N, P, S, Th)

Sinishivaphis Zhang & Zhong, 1982

hangzhouensis Zhang & Zhong, 1982 (C)

Sinotherioaphis Zhang, 1980

pterothorax Zhang, 1980 (C)

Subtakecallis Raychaudhuri & Pal, 1974

brevisetosus Raychaudhuri & Pal, 1974 (I)
pilosus (David, Rajasingh & Narayanan, 1970) (I)

Symydobius Mordvilko, 1894

kabae (Matsumura, 1917) (C)

Taiwanaphis Takahashi, 1934

decaspermi Takahashi, 1934 (C, T)
dineni Mondal, Agarwala & Raychaudhuri, 1979 (I)
randiae Ghosh, A. K., Banerjee & Raychaudhuri, 1971 (I)
sasae (Matsumura, 1917) (C)

Takecallis Matsumura, 1917

arundinariae (Essig, 1917) (B, C, I, T)
arundicolens (Clarke, 1903) (C)
taiwanus (Takahashi, 1926) (T)

Taoia Quednau, 1973

chuansiensis (Tao, 1954) (C, I)

indica (Ghosh, A. K. & Raychaudhuri, 1972) (B, I, N)

Therioaphis Walker, 1870

beijingensis Zhang, 1982 (C)

ononidis (Kaltenbach, 1846) (I)

rheimni (Borner, 1949) (I)

trifolii (Monell, 1882) (I)

trifolii forma *maculata* (Buckton, 1899) (C, I)

Tiliaphis Takahashi, 1961

coreanus Quednau, 1979 (C)

Tinocallis Matsumura, 1919

allozelkowae Zhang, 1980 (C)

dalbergiae Zhang, 1980 (C)

distinctus Ghosh, M. R., Ghosh, A. K. & Raychaudhuri, 1971 (I)

hemipteleae Zhang, 1980 (C)

himalayensis Ghosh, A. K., Ghosh, M. R. & Raychaudhuri, 1971 (I)

insularis (Takahashi, 1927) (C, T)

khonkaenensis Danielsson & Robinson, 1978 (Th.)

magnoliae Ghosh, A. K. & Raychaudhuri, 1972 (I)

mushensis (Takahashi, 1925) (T)

nirecola (Shinji, 1924) (C)

saltans (Nevsky, 1929) (C)

sophorae Zhang, 1980 (C)

suzhouensis Zhang, 1980 (C)

ulmiparvifoliae Matsumura, 1919 (C)

viridis (Takahashi, 1929) (T)

yinchaunensis Zhang, 1980 (C)

Tinocalloides Basu, A. N., 1970

montanus Basu, 1970 (I, N)

Tuberculatus Mordvilko, 1894

nervat s Chakrabarti & Raychaudhuri, 1976 (I)

Subg. *Acanthocallis* Matsumura, 1917

(*A.*) *indicus* Ghosh, L. K., 1972 (I)

(*A.*) *pilosus* (Takahashi, 1929) (T)

(*A.*) *quercicola* (Matsumura, 1917) (C)

(*A.*) *stigmatus* (Matsumura, 1917 (C)

(*A.*) *stigmatus* (Matsumura. 1917) (C)

Subg. *Orientuberculoides* Hille Ris Lambers, 1974

(*O.*) *capitatus* (Essig & Kuwana, 1918) (C)

(*O.*) *paiki* Hille Ris Lambers Lambers, 1974 (I)

(*O.*) *querciformosanus* (Takahashi, 1921) (T)

Yamatocallis Matsumura, 1917

sauteri (Takahashi, 1927) (C, T)

Subg. *Megalophyllaphis* Ghosh, M. R., Ghosh, A. K. & Raychaudhuri, 1971

(*M.*) *obscurus* (Ghosh, M. R., Ghosh, A. K. & Raychaudhuri, 1971 (I)

Subfamily : GREENIDEINAE

Tribe : CERVAPHIDINI

Anomalosiphum Takahashi, 1934

indigoferae Ghosh, A. K., Ghosh, M. R. & Raychaudhuri, 1971 (I)

pithecolobii Takahashi, 1934 (C, T)

takahashii Tao, 1947 (C)

Cervaphis van der Goot, 1917

echinata Hille Ris Lambers, 1956 (Th)

quercus Takahashi, 1918 (C, I, T, Th)

rappardi indica Basu, A. N., 1961 (I)

schoutenia van der Goot, 1917 (C, I)

Schoutedenia Rusaamen, 1905

luteu (van der Goot, 1917) (C, I, N, S, T, Th, V)

Sumatraphis Takahashi, 1935

celti Takahashi, 1935 (I, Th)

Tribe : GREENIDEINI

Allotrichosiphum Takahashi, 1962

assamense Raychaudhuri, Ghosh, M. R., Banerjee & Ghosh, A. K., 1973 (I)

Brevitrichosiphon Raychaudhuri, Ghosh, M. R., Banerjee & Ghosh, A. K., 1973

mukerjee Raychaudhuri, Ghosh, Banerjee & Ghosh, 1973 (I)

nungsireinae Singh, Raychaudhuri, D. & Raychaudhuri, 1979 (I)

Entrichosiphum Essig & Kuwana, 1918

alnifoliae Tao, 1958) (C)

arunachali Basu, R. C., Ghosh, A. K. & Raychaudhuri, 1972 (I)

betulae Mondal, Chatterjee & Raychaudhuri, 1979 (I)

davidi Raychaudhuri, 1956 (I)

dubium (van der Goot, 1918) (C, I, T)

grahwalense Maity & Chakrabarti, 1989 (I)

jugeshwari Singh, Raychaudhuri, D. & Raychaudhuri, 1979 (I)

makii Raychaudhuri & Chatterjee, 1974 (I)

manipurensis Singh, Raychaudhuri, D. & Raychaudhuri, 1979 (I)

manoji Chatterjee, Mandal & Raychaudhuri, 1981 (I)

menglunense Zhang, 1980 (C)

minutum (van der Goot, 1917) (I, T)

parvulum Eastop & Hille Ris Lambers nom. nov. per *minutum* Takahashi, 1923 (C)

pasaniae (Okajima, 1908) (C, I, N, T)

pseudopasaniae Szelegiewicz, 1968 (I, N, V)

pyri Chakrabarti, Ghosh, A. K. & Raychaudhuri, 1972 (I)

quercifoliae Raychaudhuri, Ghosh, M. R., Banerjee & Ghosh, A. K., 1973 (I, N)

rameshi Raychaudhuri, Chatterjii & Raychaudhuri, D., 1977 (I)

russelleae Ghosh, A. K., Ghosh, M. R. & Raychaudhuri, 1971 (I)

sankari Raychaudhuri, Ghosh, M. R., Banerjee & Ghosh, A. K., 1973 (I)

sclerophyllum Zhang, 1980 (C)

takahashii Basu, R. C., Ghosh, A. K. & Raychaudhuri, 1973 (I)

taoi Ghosh, A. K., Basu, R. C. & Raychaudhuri, 1970 (I)

tapatii Mondal, Chatterjee & Raychaudhuri, 1979 (I)

Subg. ***Ditrichosiphum*** Raychaudhuri, 1956

(*D.*) *elongatum* (Takahashi, 1940) (C, I, N, T, Th)

Subg. *Neotrichosiphum* Raychaudhuri, Ghosh, M. R., Banerjee & Ghosh, A. K., 1973

(*N.*) *atini* Raychaudhuri & Chatterjee, 1977 (I)

(*N.*) *flavum* (Takahashi, 1941) (I, Th)

(*N.*) *khashyanum* (Ghosh, A. K. & Raychaudhuri, 1962) (I)

(*N.*) *litseae* Raychaudhuri, D., Raha & Raychaudhuri, 1977 (I)

(*N.*) *manii* (Ghosh, A. K., Basu, R. C. & Raychaudhuri, 1970) (I)

(*N.*) *raychaudhurii* (Ghosh, A. K., 1969) (I)

(*N.*) *subinoyi* Raychaudhuri, Ghosh, M. R., Banerjee & Ghosh, A. K., 1973 (I)

Subg. *Paratrichosiphum* Takahashi, 1931

(*P.*) *alnicola* (Basu, A. N., 1968) (I)

(*P.*) *assamensis* (Ghosh, A. K. & Raychaudhuri, 1969) (I)

(*P.*) *neoalnicola* Raychaudhuri, Ghosh, L. K. & Das, 1980 (I)

(*P.*) *querciphaga* Chakrabarti & Maity, 1980 (I)

(*P.*) *sensoriatum* (Ghosh, A. K., 1974) (I)

(*P.*) *sikkimensis* (Raychaudhuri, Ghosh, M. R., Banerjee & Ghosh, A. K., 1973 (I)

(*P.*) *tattakanum* (Takahashi, 1925) (C, I, N, T)

Greenidea Schouteden, 1905

aborensis Ghosh, A. K., 1974 (I)

artocarpi (Westwood, 1890) (I, S)

brideliae Takahashi, 1928 (C, T)

decaspermi Takahashi, 1933 (C, I)

ficicola Takahashi, 1921 (C, I, T)

himansui Raychaudhuri, Ghosh, M. R., Banerjee & Ghosh, A. K., 1973 (I)

longicornis Ghosh, M. R., Ghosh, A. K. & Raychaudhuri, 1971 (I)

longirostris Basu, A. N., 1969 (I)

mangiferae Takahashi, 1925 (C, T)

mushana Takahashi, 1925 (C, T)

neoficicola Ghosh, A. K., Ghosh, M. R. & Raychaudhuri, 1970 (I)

photiniphaga Raychaudhuri, Ghosh, M. R., Banerjee & Ghosh, A. K., 1973 (I)

quercifoliae Takahashi, 1921 (C)

schimae Takahashi, 1929 (C, T)

sutepenis (Takahashi, 1941) (Th)

Subg. *Neogreenidea* Raychaudhuri, Ghosh, M. R., Banerjee & Ghosh, A. K., 1973

(*N.*) *ayyari* Raychaudhuri, Ghosh, Banerjee & Ghosh, 1973 (I)

(*N.*) *longisetosa* Raychaudhuri, Ghosh, Banerjee & Ghosh, 1973 (I)

(*N.*) *guerciphaga* Raychaudhuri, Ghosh, Banerjee & Ghosh, 1973 (I)

Subg. *Paragreenidea* Raychaudhuri, 1956

(*P.*) *symplocosis* Ghosh, A. K., Basu, R. C. & Raychaudhuri, 1969 (I)

(*P.*) *viticola* Takahashi, 1929 (C, T)

Subg. *Trichosiphum* Pergande, 1906

(*T.*) *anonae* (Pergande, 1906) (I)

(*T.*) *brachyunguis* Chatterjee, Mondal & Raychaudhuri, 1981 (I)

(*T.*) *bucktonis* Ghosh, A. K., Basu & Raychaudhuri, 1970 (I)

(*T.*) *chiengmaiensis* Robinson, 1972 (Th)

(*T.*) *formosana* (Maki, 1917) (Bd, C, I, N, T, Th)

(*T.*) *gigantea* Ghosh, A. K. & Raychaudhuri, 1972 (I)

(*T.*) *haldari* Maity & Chakrabarti, 1980 (I)

(*T.*) *heeri* Raychaudhuri, Ghosh, M. R., Banerjee & Ghosh, A. K., 1973 (I)

(*T.*) *kumaoni* Chakrabarti & Raychaudhuri, 1978 (I)

(*T.*) *kuwani* Pergande, 1906 (C, T)

(*T.*) *myricae* Takahashi, 1925 (C, T)

(*T.*) *nigra* (Maki, 1917) (C, T)

(*T.*) *prunicola* Ghosh, A. K., Banerjee & Raychaudhuri, 1971 (I)

(*T.*) *schoutedeni* Raychaudhuri, Ghosh, M. R., Banerjee & Ghosh, A. K., 1973 (I)

(*T.*) *siamensis* Takahashi, 1941 (Th)

(*T.*) *sikkimensis* Raychaudhuri, Ghosh, M. R., Banerjee & Ghosh, A. K., 1 973(I)

(*T.*) *sinensis* Raychaudhuri, 1956 (C, Th)

(*T.*) *spinotibium* Chatterjee & Raychaudhuri, 1977 (I)

Greenideoida van der Goot, 1917

Subg. *Neogreenideoida* Raychudhuri, 1956

(*N.*) *bengalensis* Raychaudhuri & Chatterjee, 1977 (I)

Subg. *Paragreenideoida* Raychaudhuri & Chatterjee, 1980

(*P.*) *ceyloniae* van der Goot, 1917 (I, C, Th)

(*P.*) *ceyloniae bhalukpongensis* Ghosh, A. K., Banerjee & Raychaudhuri, 1971 (I)

Subg. *Pentatrichosiphum* Basu, A. N., 1969

(*P.*) *lambersi* (Basu, A. N., 1964) (I)

(*P.*) *luteum* (Basu, A. N., 1969) (I)

Mollitrichosiphum Suenaga, 1934

shinji Raychaudhuri, Ghosh, M. R., Banerjee & Ghosh, A. K., 1973 (I)

tenuicorpus (Okajima, 1908) (C, I, T, Th)

Subg. *Metatrichosiphon* Raychaudhuri, 1956

(*M.*) *acutihirsutum* Maity & Chakrabarti, 1980

(*M.*) *alni* Ghosh, A. K., Ghosh, M. R. & Raychaudhuri, 1970 (I)

(*M.*) *alnifoliae* Chakrabarti & Raychaudhuri, 1978 (I)

(*M.*) *buddleiae* Ghosh, A. K., Banerjee & Raychaudhuri, 1971 (I)

(*M.*) *kazirangi* Ghosh, A. K., 1974 (I)

(*M.*) *lithocarpi* (Takahashi, 1931) (T)

(*M.*) *nandii* Basu, A. N., 1964 (I)

(*M.*) *nigrofasciatus* (Maki, 1917) (C, T)

(*M.*) *nittakaense* (Takahashi, 1937) (C, T)

(*M.*) *rhusae* Ghosh, A. K., 1974 (I)

(*M.*) *taiwanum* (Takahashi, 1921) (C, I, T)

Tritrichosiphum Robinson, 1972

thailandicum Robinson, 1972 (Th)

Subfamily : HORMAPHIDINAE

Aleurodaphis van der Goot, 1917

antennata Chakrabarti & Maity, 1982 (I)

blumeae van der Goot, 1917 (C, I, T)

mikaniae Takahashi, 1925 (T)

sinisalicis Zhang, 1982 (C)

Allothoracaphis Takahashi, 1958

piyananensis (Takahashi, 1935) (C)

Astegopteryx Karsh, 1890

bambusae (Buckton, 1893) (C, I)

bambusaefoliae (Takahashi, 1921) (T)

chinensis Tao, 1966 (C)

formosana (Takahashi, 1929) (I, T)

insularis (van der Goot, 1912) (C, I, S)
jamuritsu Takahashi, 1931 (T)
leeuweni Takahashi, 1936 (T)
minuta (van der Goot, 1917) (C, I)
neelagiriensis David, 1958 (I)
nipae (van der Goot, 1917) (C)
rhapidis (van der Goot, 1917) (C, T)
salatigensis (van der Goot, 1917) (Th)
sasaki Takahashi, 1939 (C, T)
shitosinensis Takohashi, 1939 (C)
striata (van der Goot, 1917) (Th)
styracicola Takahashi, 1936 (C, T)
styracophila Karsch, 1890 (T)
swinhoei (Takahashi, 1936) (C, T)
vandermeermohri Hille Ris Lambers, 1931 (C)
xinoglongensis Zhang, 1982 (C)

Cerataphis Lichtenstein, 1882
bambusifoliae Takahashi, 1925 (C)
formosana Takahashi, 1924 (T)
lataniae (Boisduval, 1867) (C, T)
orchidearum (Westwood, 1879) (I)
palmae (Ghesquire, 1934) (I, S)

Ceratoglyphina van der Goot, 1917
bambusae van der Goot, 1917 (C, T)
bambusae bengalensis Ghosh, L. K., 1972 (I)

Ceratovacuna Zehntner, 1897
hoffmanii Takahashi, 1936 (C)
indica Ghosh, M. R., Pal & Raychaudhuri, 1974 (I)
japonica (Takahashi, 1924) (C, T)
lanigera Zehntner, 1897 (C, I, N, T, Th)
longifolia (Takahashi, 1929) (T)
nekoashi (Sasaki, 1910) (C, T, Th)
perglandulosa Basu, R. C., Ghosh, M. R. & Raychaudhuri, 1973 (I)

silvestrii (Takahashi, 1927) (C, I)

spinulosa Ghosh, A. K. & Raychaudhuri, 1972 (I)

Chaitoregma Hille Ris Lambers & Basu, A. N., 1966

tattakana (Takahashi, 1925) (C, I,T)

tattakana suishana (Takahashi, 1929) (T)

Dermaphis Takahashi, 1953

takahashii (Strand, 1929) (C, T)

Doraphis Matsumura & Hori ex. Hori, 1929

populi (Maskell, 1898) (C, I, T)

Euthoracaphis Takahashi, 1938

heterotricha Ghosh, A. K. & Raychaudhuri, 1973 (I)

longisetosa A. K. Ghosh and Raychaudhuri, 1973 (I)

Glyphinaphis van der Goot, 1917

bambusae van der Goot, 1917 (C, I)

Hamemelistes Shimer, 1867

miyabei Matsumura, 1917 comb. nov. nec. Bhattacharya et. al. 1983

Hemipodaphis David, Narayanan & Raychaudhuri, 1971

montrosa David, Narayanan & Rajasingh, 1971 (I)

Indonipponaphis Ghosh, A. K. & Raychaudhuri, 1973

tuberculatus Ghosh, & Raychaudhuri, 1973 (I)

Kurisakia Takahashi, 1924

indica Basu, A. N., 1968 (I)

onigurumi (Shinji, 1923) (C)

sinocaryae Zhang, 1979 (C)

sinoplatyeraryae Zhang, 1979 (C)

yunnanensis Zhang, 1979 (C)

Metanipponaphis Takahashi, 1959

assamensis Ghosh, A. K. & Raychaudhuri, 1973 (I)

cuspidata (Essig & Kuwana, 1918) (C, T)

echnita Ghosh, A. K., 1974 (I)

lithocarpicola (Takahashi, 1933) (C, T)

silvestrii (Takahashi, 1935) (C, I)

Neothoracaphis Takahashi, 1958

depressa (Takahashi, 1933) (C)

haugzhouensis Zhang, 1982 (C)

quercicola (Takahashi, 1921) (C, T)

saramaoensis (Takahashi, 1935) (C, T)

sutepensis (Takrhashi, 1941) (C, T)

tarakoensis (Takahashi, 1937) (C, T)

Neotuberaphis Pal & Raychaudhuri, 1980

bengalensis Pal & Raychaudhuri, 1980 (I)

indica Raha & Raychaudhuri, 1981 (I)

Nipponaphis Pergande, 1906

holboelliae Ghosh, A. K. & Raychaudhuri, 1974 (I)

machili (Takahashi, 1933) (C)

manoji Ghosh, A. K. & Raychaudhuri, 1974 (l)

Subg. *Pseudonipponaphis* Ghosh, A. K. & Raychaudhuri, 1973

(*P.*) *himalayensis* Ghosh, A. K. & Raychaudhuri, 1973 (I)

(*P.*) *machiliphaga* Takahashi, 1959 (I)

(*P.*) *guerciphaga* Ghosh, A. K. & Raychaudhuri, 1973 (I, N)

(*P.*) *siamensis* (Takahashi, 1941) (Th)

Paraoregma Ghosh, M. R., Pal & Raychaudhuri, 1976

alexanderi (Takahashi, 1924) (B, I, N)

orientalis Agarwala, Mondal & Raychaudhuri, 1982 (I)

Parathoracaphis Takahashi, 1958

cheni (Takahashi, 1936 (C)

elongata (Takahashi, 1941) (Th)

setigera (Takahashi, 1932) (C)

Pseudoastegopteryx Ghosh, M. R., Pal & Raychaudhari, 1976

himalayensis Ghosh, Pal & Raychaudhuri, 1976 (I)

Pseudoregma Doncaster, 1966

bambusicola (Takahashi, 1921) (C, T)

bucktonis Ghosh, M. R., Pal & Raychaudhuri, 1974 (I)

cantonensis Takahashi, 1936 (C)=? *bambusicola* (Takahashi, 1921)

dendrocalami (Takahashi, 1935) (Th)

koshuensis (Takahashi, 1924) (C, T)

panicola (Takahashi, 1921) (C, I, T)

Pseudothoracaphis Raychaudhuri, Ghosh, L. K & Das, 1980

himachali Raychaudhuri, Ghosh & Das, 1980 (I)

Quernaphis Takahashi, 1958

tuberculata (Takahashi, 1933) (C, T)

Reticulaphis Takahashi, 1958

distylii fici (Takahashi, 1923) (C, T)

distylii foveolatae (Takahashi, 1935) (C)

distylii rotifera Hille Ris Lambers & Takahashi, 1959 (I)

mirabilis (Takahashi, 1939) (C, I, T)

Schizoneuraphis van der Goot, 1917

gallarum (van der Goot, 1917) (C)

Sinonipponaphis Tao, 1966

formosana (Takahashi, 1927) (C, Th)

Thoracaphis van der Goot, 1917

crematogastris Takahashi, 1941 (Th)

Tuberaphis Takahashi, 1933

indica Ghosh, M. R., Ghosh, A. K. & Raychaudhuri, 1974 (I)

loranthi Tseng & Tao, 1938

Xenothoracaphis Takahashi, 1958

kashifoliae (Uye, 1924) (C)

Subfamily : LACHNINAE

Tribe : CINARINI

Subtribe : CINARINA

Cinara Curtis, 1835

alba, Zhang, 1982 (C)

atratipinivora Zhang, 1982 (C)

atroalbipes David, Narayanan & Rajasingh, 1970 (I)

atrotibialis David, Narayanan & Rajasingh, 1970 (I)

chaetorostrata Ghosh, L. K. & Raychaudhuri, 1981 (I)

comata Doncaster, 1956 (I)

conifinis tenuipes Chakrabarti & Ghosh, A. K., 1974 (I)

cupressi (Buckton, 1881) (I)

curvipes (Patch, 1912) (I)
formosana (Takahashi, 1924) (C, T)
greeni (Schouteden, 1905) (S)
idahoensis Knowlton, 1935 (C)
indica Verma, 1970 (I)
juniperi (de Geer, 1773) (C, T)
lachnirostris Hille Ris Lambers, 1966 (I, P)
longipennis (Matsumura, 1917) (I)
maculipes Hille Ris Lambers, 1966 (I, P)
orientalis (Takahashi, 1925) (I, T)
paxilla Zhang, 1981 (C)
pinea (Mordvilko, 1895) (C, T)
pinidensiflorae (Essig & Kuwana, 1918) (C)
similis (van der Goot, 1917) (C)
subapicula Zhang, 1981 (C)
taiwana (Takhashi, 1925) (C, T)
tibetapini Zhang, 1981 (C)
tistaensis Agarwala & Raychaudhuri, D., 1982 (I)
tujafilina (del Guercio, 1909) (C, I, T)

Indocinara Ghosh, A. K., Basu, R. C. & Raychaudhuri, 1969
hottesis Ghosh, Basu & Raychaudhuri, 1969 (I)

Subtribe : EULACHNINA

Eulachnus del Guercio, 1909
agilis (Kaltenbach, 1843) (C)
cembrae Borner, 1950 (I)
rileyi (Williams, 1911) (T)
taiwanus Takahashi, 1923=? *thunbergi* (Wilson, 1919) (T)
thunbergii (Wilson, 1919) (C, I)

Pseudoessigella Hille Ris Lambers, 1966
brachychaeta Hille Ris Lambers, 1966 (P)

Schizolachnus Mordvilko, 1908
nittakayamensis (Takhashi, 1925) (T)
orientalis (Takahashi, 1924) (C, I, T)

Tribe : LACHNINI

Lachnus Burmeister, 1835

acutihirsutus Kumar & Burkhardt, 1970 (I)

siniquercus Zhang, 1982 (C)

tatakaensis Takahashi, 1937 (C)=? *Tuberolachnus salignus* (Gmelin, 1790)

tropicalis (van der Goot, 1916) (C, I, N, V)

Longistigma Wilson, 1909

liguidambarus (Takahashi, 1925) (C, I, T)

xiazangensis Zhang, 1981 (C)

Maculolachnus Gaumon, 1920

rubi Ghosh, A. K. & Raychaudhuri, 1972 (I)

submacula (Walker, 1848) (I)

Nippolachnus Matsumura, 1917

bengalensis Basu, A. N. & Hille Ris Lambers, 1968 (B, I)

himalayensis (van der Goot, 1917) (C, I)

piri Matsumura, 1917 (C, I, T)

xitianmushanus Zhang & Zhong, 1982 (C)

Pterochloroides Mordvilko, 1914

persicae (Cholodkovsky, 1899) (I, P)

Pyrolachnus Basu, A. N. & Hille Ris Lambers, 1968

imbricatus David, Narayan & Rajasingh, 1977 (I)

macrocorus Zhang & Zhong, 1982 (C)

pyri (Buckton, 1899) (I, N)

Sinolachnus Hille Ris Lambers, 1956

nittakayamensis (Takahashi, 1925 (C)

Stomaphis Walker, 1870

mordvilkoi Hille Ris Lambers, 1933 (I)

sinisalicis Zhang & Zhong, 1982 (C)

yanonis Takahashi, 1918 (C, T)

Tuberolachnus Mordvilko, 1908

salignus (Gmelin, 1790) (A, B, C, I)

Subg. *Tuberolachniella* Hille Ris Lambers & Basu, A. N., 1966

(*T.*) *scleratus* Hille Ris Lambers & Basu, A., 1966 (I)

Tribe : TRAMINI

Protrama Baker, 1920

longitarsus (Ferrari, 1872) (B)

longitarsus sclerodensus Kumar, 1973 (I)

penecaeca Stroyan, 1964 (I)

Subfamily : MINDARINAE

Mindarus Koch, 1857

japonicus Takahashi, 1931 (I, P, T)

Sigmacallis Zhang, 1981

pilosa Zhang, 1981 (C)

Subfamily : PEMPHIGINAE

Tribe : ERIOSOMATINI

Brysocryptoides Dzhibladze, 1960

polunini (Stroyan, 1963) (P)

Colopha Monella, 1877

graminis (Takahshi, 1930 (C)

Eriosoma Leach, 1818

clematicola Takahashi, 1924 (T)

clematis (Shinji, 1922) (C)

dilaniginosum Zhang, 1980

kashmiricum Ghosh, L. K., Verma & Raychaudhuri, 1976 (I)

lanigerum (Hausmann, 1802) (B, C, I, N, P)

Subg. *Schizoneura* Harting, 1839

(*S.*) *longipilosum* Chakrabarti & Raychaudhuri, 1975 (I)

(*S.*) *lanuginosum* (Harting, 1839) (A, I)

(*S.*) *patchiae* (Borner & Blunck, 1916) (C)

(*S.*) *phenax* Mordoilko, 1923 (I, P)

(*S.*) *ulmi* (L., 1758) (I)

(*S.*) *yangi* Takahashi, 1939 (C)

Kaltenbachiella Schouteden, 1906

carpinicola Ghosh, A. K., Chakrabarti & Bhattacharya, 1982 (I)

Schizoneurella Hille Ris Lambers, 1973

indica Hille Ris Lambers, 1973 (I, P)

Tetraneura Harting, 1841

javensis (van der Goot, 1917) (I, P)

kalimpongensis Raychaudhuri, Pal & Ghosh, M. R., 1978 (I)

multisetosa Raychaudhuri, Pal & Ghosh, M. R., 1978 (I)

polychaeta (H. R. L. 1968) (P)

radicicola Strand, 1929 (C, T)

radicicola Strand, 1929/*yezoensis* Matsumura, 1917 Group (I&L,N,M, T)

sikkimensis Raychaudhuri, Pal, & Ghosh, M. R., 1978 (I)

ulmi (L., 1758) (I)

zelkovisucta Zhang, 1980 (C)

Subg. *Indotetraneura* Chakrabarti & Maity, 1978

(*I.*) *lambersi* Chakrabarti & Maity, 1978 (I)

(I.) *utpali* Chakrabarti, Maity & Beattacharya, 1982 (I)

Subg. *Tetraneurella* Hille Ris Lambers, 1970

(*T.*) *basui* Hille Ris Lambers, 1970 (I)

(*T.*) *nigriabdominalis* (Sasaki, 1899) (B, C, I, N, P, S, T, Th)

Tribe : Fordini

Asiphoniella Theobald, 1922

cynodonti (Das, 1918) (I, P)

dacytonii Theobald, 1923 (Th)

Baizongia Rondani, 1848

pistaciae (L., 1767) (C, I, P, T, Th)

Chaetogeoica Remaudiere & Tao, 1957

foliodentata (Tao, 1947) (C)

graminiphaga Raychaudhuri, Pal, & Ghosh, M. R., 1978 (I)

polychaeta Raychaudhuri, Pal & Ghosh, M. R., 1978 (I)

Forda von Heyden, 1837

hirsuta Mordvilko, 1928 (I)

marginata Koch, 1857 (I)

orientalis George, 1920 (I)

riccobonii (Stefanai, 1899) (I)

sichangensis Remaudiere & Tao, 1957 (T)

Geoica Hart, 1894

indica Kulkarni & Rao, 1980 (I)

lucifuga (Zehntner, 1897) (C, I, S, T)

sikkimensis Raychaudhuri, Pal & Ghosh, M. R., 1978 (I)

Kaburagia Takagi, 1937

ailanthi Chowdhuri, Basu, Chakrabarti & Raychaudhuri, 1969 (I)

rhusicola Takagi, 1937 (C)

Nurudea Matsumura, 1917

meitanensis Tsai & Tang, 1946 (C)

shiraii (Matsumura, 1917) (C, T)

yanoniella (Matsumura, 1917) (C)

Smynthurodes Westwood, 1849

betae Westwood, 1849 (I)

Tribe : PEMPHIGINI

Ceratopemphigella Menon & Pawar, 1958

delhiensis Menon & Pawar, 1958 (I)

Ceratopemphigus Schouteden, 1905

zehnteneri Schouteden, 1905 (C)

Epipemphigus Hille Ris Lambers, 1966

imaicus (Cholodkovsky, 1912) (I, P)

Formosaphis Takahashi, 1925

micheliae Takahashi, 1925 (C, I, T)

Pemphigus Hartig, 1839

bursarius (L., 1758) (C, T)

chomoensis Zhang, 1979 (C)

cylindrica Zhang, 1981 (C)

ignotus nom. nud. nec. Habib & Ghani, 1970 (P)

immunis Buckton, 1896 (A, I, P)

indicus Kieffer, 1908 (I)

mangkamensis Zhang, 1981 (C)

mordvilkoi Cholodkovsky, 1912 (I, P)

nainitalensis Cholodkovsky, 1912 (I)

napeus Buckton, 1896 (C, I)

sinobursarius Zhang, 1979 (C)

siphunculata Hille Ris Lambers, 1973 (P)

tibetapolygoni Zhang, 1981 (C)

tibetensis Zhang, 1979 (C)

venosus nom. nud. nec. Habib & Ghani, 1970 (P)

vesicarius Passerini, 1861 (A)

vulgaris Raychaudhuri, Pal & Ghosh, M. R., 1978 (I)

yangcola Zhang, 1979 (C)

yunnanensis Zhang, 1979 (C)

Prociphilus Koch, 1857

bumeliae (Schrank, 1801) (C)

cheni Tao, 1970 (C)

conifoliae Singh, Das, & Raychaudhuri, 1977 (I, H)

dilonicerae Zhang, 1981 (C)

formosanus Takahashi, 1935 (C, T)

ligustrifoliae (Tseng & Tao, 1938) (C)

micheliae Hille Ris Lambers, 1933 (I)

osmanthae Essig & Kuwana, 1918 (I)

populi Tao, 1970 (C)

taxus (Ghosh, A. K., Chakrabarti, Chowdhuri & Raychaudhuri, 1969) (I)

Subg. *Neoparacletus* Strom 1942

(*N.*) *ghanii* Hille Ris Lambers, 1973 (P)

Subg. *Stagona* Koch, 1856

(*S.*) *himalayensis* Chakrabarti, 1976 (I)

(*S.*) *pini* (Burmeister, 1835) (C)

Sanpupemphigus Zhang & Zhong, 1979

sanpupuli Zhang & Zhong. 1979 (C)

Thecabius Koch, 1857

affinis (Kaltenbach, 1843) (I)

kelloggi (Takahashi, 1939) (C, T)

Subfamily : PHLOEMYZINAE

Phloemyzus Horvath, 1896

passerinii (Signoret, 1875) (C, P, T)

REFERENCES

AGARWALA, BASANT K. AND D. N. RAYCHAUDHURI, 1981. New records of aphids (Homoptera : Aphididae) from Bhutan. *Entomon*, **6** (3) : 225-227.

AGARWALA, BASANT K. AND D. RAYCHAUDHURI, 1982. Two species of *Cinara* Curtis from India, with description of a new species (Homoptera : Aphididae : Lachninae). *Akitu*, n. s. **46** : 1-4.

AGARWALA, BASANT K., PRAMANIK, D. R. AND RAYCHAUDHURI, D., 1982. Some new and little known macrosiphine aphids (Homoptera : Aphididae) from India. *Akitu* n. s. **47** : 1-7.

AGARWALA, BASANT K. AND GHOSH, A. K. 1984. A Check list of Aphidoidea of India. *Rec. zool. Surv. India*. Occ. paper. 50 : 1-71.

BASU, M. AND D. RAYCHAUDHURI, 1983. A new species of *Chaitophorus* (Homoptera : Aphididae) from Orissa. *Entomon*, **8** (1) : 7-11.

BHATTACHARYA, D. K., A. K. MONDAL AND S. CHAKRABARTI, 1983. New and hitherto not known species of aphids (Homoptera : Aphididae) producing leaf galls in the north west himalaya, India. *Entomon*, **8** (1) : 13-17.

BANZIGER, HANS, 1980. Aphids (Homoptera : Aphidoidea) collected in Thailand (1974-1977). *Mitteilungen Der Schweizerischen Entomologischen Gesellschaft Bulletin De La Societe Entomologigue Suisse*, **53** : 143-150.

BANZIGER, HANS. 1981. Description of *Uroleucon acutirostre* sp. nov. (Homoptera, Aphididae) from North Thailand. *Kontyu, Tokyo*, **48** (3) : 428-434.

BHAGAT, RAMESH CHANDER. 1982. *Drepanosiphum platanoidis* (Homoptera : Aphididae)—a new record for India. *Geobios*, **1** : 33-35.

CHAKRABARTI, S. 1978. A new genus and two new species of aphids (Homoptera : Aphididae) from north west India. *J. Linn. Soc. (ZooL.)*, **62** : 355-363.

CHAKRABARTI, S. AND P. MAITY, 1982a. New genus, new species and new records of cerataphidine aphids (Homoptera, Aphididae) from north west himalaya. *Proc. zool. Soc. Calcutta*, **33** : 55-63 (1980).

CHAKRABARTI, S. AND D. K. BHATTACHARYA, 1982. New genus and species of aphids (Homoptera, Aphididae) from north-western Himalaya. *Annales Zoologici*, **36** (28) : 539-548.

DAS, B. C. AND D. N. RAYCHAUDHURI, 1976. New records of aphids (Homoptera : Aphididae) from Nepal. *Sci. Cult.*, **42** (8) : 438.

DAS, B. C. AND D. N. RAYCHAUDHURI, 1977. New records of aphids (Homoptera : Aphididae) from Nepal. *Sci. Cult.*, **43** (4) : 172.

DAVID, S. K., S. G. RAJASINCH AND K. NARAYANAN, 1972. New genus, new species and morphs of aphids (Homoptera) from India. *Orient. Insects*, **6** : 35-44.

DUTTA, SUBIR AND D. N. RAYCHAUDHURI, 1977. New records of aphids (Homoptera ; Aphididae) from Bhutan. *Sci. Cult.*, **43** (11) : 486-487.

EASTOP, V. F. 1973. Deductions from the present day host plants of aphids and related insects. In *Insect/Plant Relationships*, ed. van Emden, pp. 157-178. Oxford : Blackwell.

EASTOP, V. F. AND H. F. VAN EMDEN, 1972. The insect material. 1-45, *In* Aphid Technology. 344 pp. ed. H. F. van Emden. Academic Press. London and New York.

GHOSH, A. K. 1974. A list of aphids (Homoptera : Aphididae) from India and adjacent countries. *J. Bomay nat. Hist. Soc.*, **71** : 201-225.

GHOSH, A. K. 1977. Additions to the list of aphids (Homoptera : Aphididae) from India and adjacent countries. *J. Bombay nat. Hist. Soc.*, **74** : 29-44.

GHOSH, A. K. 1980. The fauna of India and the adjacent countries. Homoptera : Aphidoidea. Part 1. General Introduction and subfamily Chaitophorinae. IX+124+XI plates. Zoological Survey of India.

GHOSH, A. K. 1982. The fauna of India and the adjacent countries. Homoptera : Aphidoidea. Part 2. subfamily Lachninae. VIII+167+81 plates. Zoological Survey of India.

GHOSH, A. K. 1984. The fauna of India and the adjacent countries. Homoptera : Aphidoidea Part 3. Pemphiginae. XV+429. *Zoological Survey of India.*

GHOSH, A. K. 1983. Review of the family Adelgidae from the Indian region (Homoptera : Aphidoidea). *Orient. Insects*, **17** : 1-34.

GHOSH, A. K., R. C. BASU AND D. N. RAYCHAUDHURI, 1971. On a collection of aphids (Homoptera : Aphididae) from Bhutan with descriptions of two new species. *Kontyu*, **39** : 120-125.

GHOSH, A. K., R. C. BASU AND D. N. RAYCHAUDHURI, 1973. A new species of *Neoacyrthosiphon* Tao, and records of five genera and seven other species of aphids (Homoptera : Aphididae) from Nepal. *Sci. Cult.*, **39** : 193-201.

GHOSH, L. K. 1972. Notes on a collection of aphids from Bhutan with description of a new species (Homoptera : Aphididae). *Kontyu*, **40** (2) : 72-76.

HABIB, REHANA AND M. A. GHANI, 1970. Eriosomatinae on poplar and their natural enemies in West Pakistan. *Tech. Bull. No. 13, Common. Inst. Biol. Control.*, : 43-58.

HABIB, REHANA, 1973. Natural enemies and their role in limitations and control of *Brevicoryne brassicae* L. in Pakistan. *Tech. Bull. No. 16, Common Inst. Biol. Control.*, : 69-78.

HAMID, S., M. A. SHAH AND A. M. ANWAR, 1974. Investigations on *Acyrthosiphon pisum* Harris with special reference to its parasite *Aphidius smithi* Sharma and Subba Rao. *Tech. Bull. No. 17 Common. Inst. Biol. Control.*, : 69-85.

HILLE RIS LAMBERS, D. 1973. Notes on some Oriental aphids with descriptions of a new genus and four new species (Homoptera : Aphididae). *Orient. Insects*, **7** : 239-258.

MAITY, S. P., BHATTACHARYA, D. K. AND S. CHAKRABATI, 1982. Four new species of aphids (Homoptera : Aphididae) from Garhwal Himalaya, Uttar Pradesh, India. *Annales Zoologici*, **36** (26) : 501-516.

MIYAZAKI, M. 1977. A list of aphids (Homoptera : Aphidoidea) collected by the Hokkaido University Expendition to Nepal Himalaya, 1968, with descriptions of two new species. *Kontyu*, **45** (2) : 199-213.

MONDAL, NAZIM UDDIN, 1981. The effects of host plants on the food value of *Myzus persicae* Sulz. for larvae of *Chrysopa carnea* Steph. and *Adalia bipunctata* L. *Bangladesh J. Zool.*, **9** (1) : 1-7.

QUEDNU, F. W. 1973. Taxonomic notes on aphids from Nepal and India with descriptions of a new genus and two new species (Homoptera : Aphididae). *Can. Ent.*, **105** : 217-230.

RAYCHAUDHURI, D. N. 1980 (ed.). *Aphids of North East India and Bhutan.* The Zoological Society, Calcutta, 521 pp.

ROBINSON, A. G. 1972. Annotated list of aphids (Homoptera : Aphididae) collected in Thailand, with description of a new genus and species. *Can. Ent.*, **104** : 603-608.

SHARMA, K. C. 1968. Biological notes on the aphids of Nepal. *Nepalese J. agric.* **3** : 105-132.

SINGH, T. K. AND D. N. RAYCHAUDHURI, 1975. A new genus and a new species of the subfamily Anoeciinae (Homoptera : Aphididae) from Manipur, north east India. *Proc. zool. Soc. Calcutta*, **28** : 155-159.

STARY, P. AND A. VAN HARTEN, 1983. Aphid parasitoids from Bangladesh (Hymenoptera : Aphididae). *Ent. Bericht.*, **43** : 29-32.

STROYAN, H. L. G. 1981. A new species of *Dysaphis* Borner from Nepal (Homoptera : Aphidoidea). *Orient. Insects*, **15** (3) : 321-326.

ZHANG, G. S. 1980a. New species of *Eutrichosiphum* Essig *et* Kuwana from China (Homoptera : Aphidoidea). *Acta Zootaxonomica Sinica*, **5** (3) : 303-305.

ZHANG, G. S. 1980b. Two new species of Pemphigidae from China (Homoptera : Aphidoidea). *Acta zootaxonomica Sinica*, **5** (4) : 392-394.

ZHANG, G. S. AND T. S. ZHONG, 1979a. Three new species of *Kurisakia* Takahashi from China (Thelaxidae, Aphidoidea, Homoptera). *Entomotaxonomia*, **1** (1) : 49-54.

ZHANG, AND T. S. ZHONG, 1979b. Five new species of *Pemphigus* Harting and a new species of *Sanp'upemphigus* gen. nov. from China (Aphidoidea, Pemphigidae). *Acta Entomologica*, **22** (3) : 324-332.

ZHANG, G. S. AND T. S. ZHONG, 1980a. New species and new records of *Pterocomma* Buckton from China (Homoptera : Aphididae). *Acta Entomologica Sinica* **23** (2) ; 207-212+9 plates.

ZHANG, G. S. AND T. S. ZHONG, 1980b. Six new species of *Tinocallis* Mastumura and a new species of *Sinotherioaphis* Zhang, gen. nov. from China (Aphidoidea : Callaphididae). *Zoological Research*, **1** (4) : 429-442.

ZHANG, G. S. AND T. S. ZHONG, 1980c. New species and new subspecies of Chinese Macrosiphinae (I) (Homoptera : Aphididae). *Entomotaxonomia*, **2** (1) ; 53-63.

ZHANG, G. S. AND T. S. ZHONG, 1980d. New species of Chinese Macrosiphinae (II) (Homoptera : Aphidinae). **2** (3) ; 215-225.

ZHANG, G. S. AND T. S. ZHANG, 1981a. Studies on Chinese *Aphis craceivora* complex with descriptions of two new species and two new subspecies. *Sinozoologia*, **1** : 39-43.

ZHANG, G. S. AND T. S. ZHONG, 1981b. *Linaphis Lini*, gen. et. sp. nov.—a new pest of *Linus*. *Sinozoologia*, **1** : 44-46.

ZHANG, G. S. AND T. S. ZHONG, 1981c. Homoptera : Aphidoidea. *Insects of Xizang*, **1** : 233-282.

ZHANG, G. S. AND T. S. ZHONG, 1981d. A new genus and three new species of callaphididae from China (Homoptera : Aphidoidea). *Zoological Research*, **2** (4) : 343-347.

ZHANG, G. S. AND T. S. ZHGNG, 1982a. New genera and new species of Chinese. Callaphididae and Chaitophoridae. *Acta Zootaxonomica Sinica*, **7** (1) : 67-77.

ZHANG, G. S. AND T. S. ZHONG, 1982b. Description of *Pyrolachnus macroconus* sp. nov. (Homoptera : Aphidoidea). *Acta Entomologica Sinica*, **25** (2) : 197-198.

FIGURES

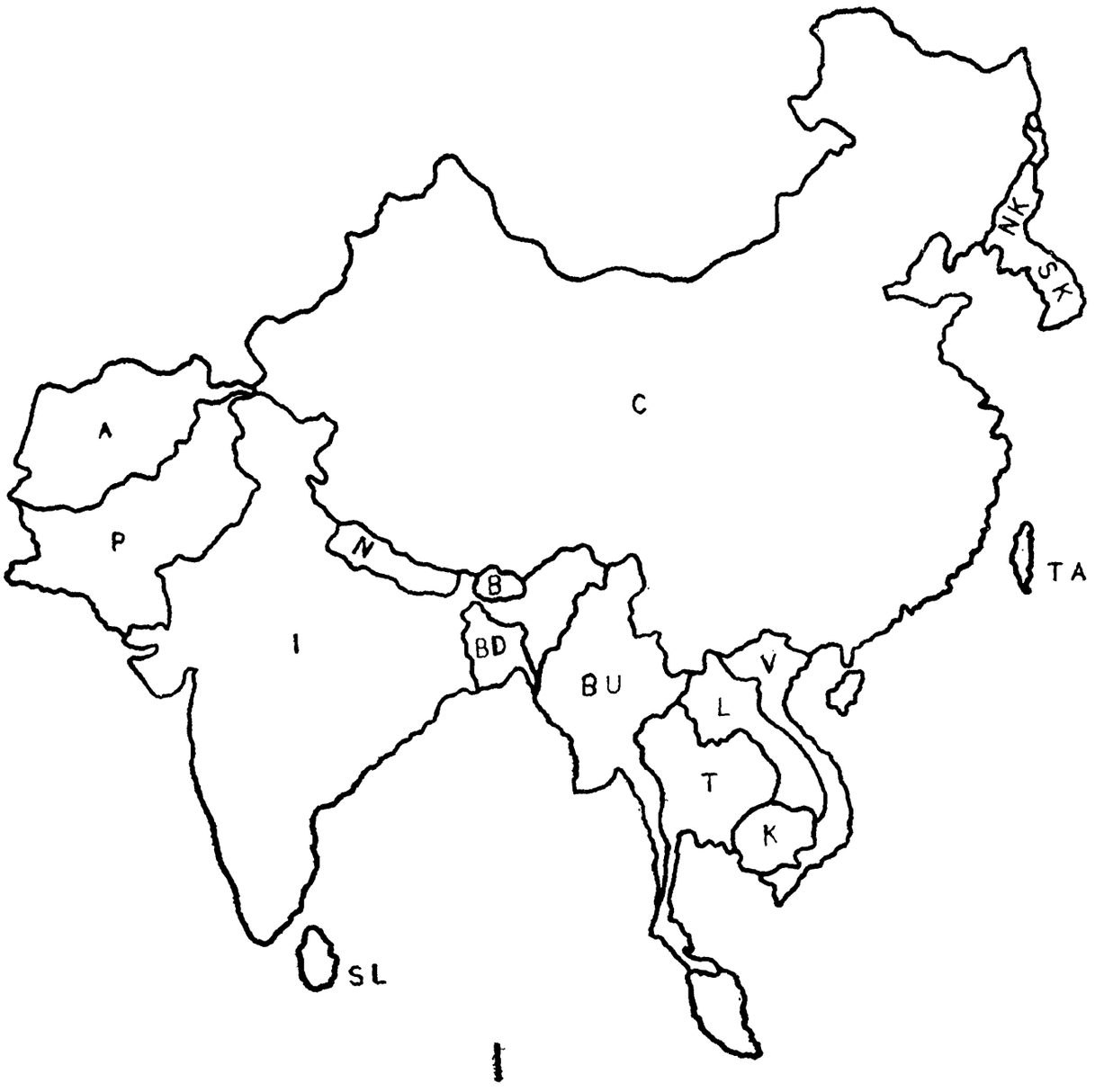
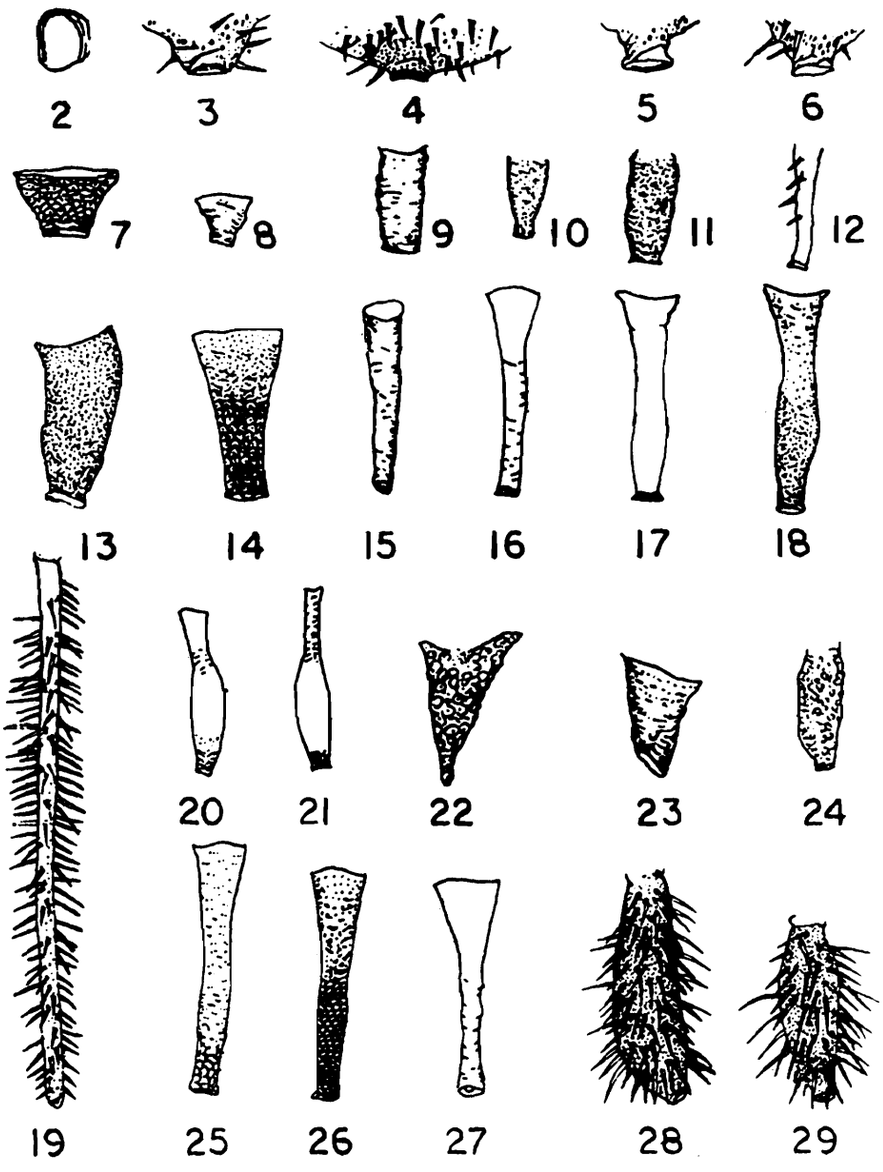


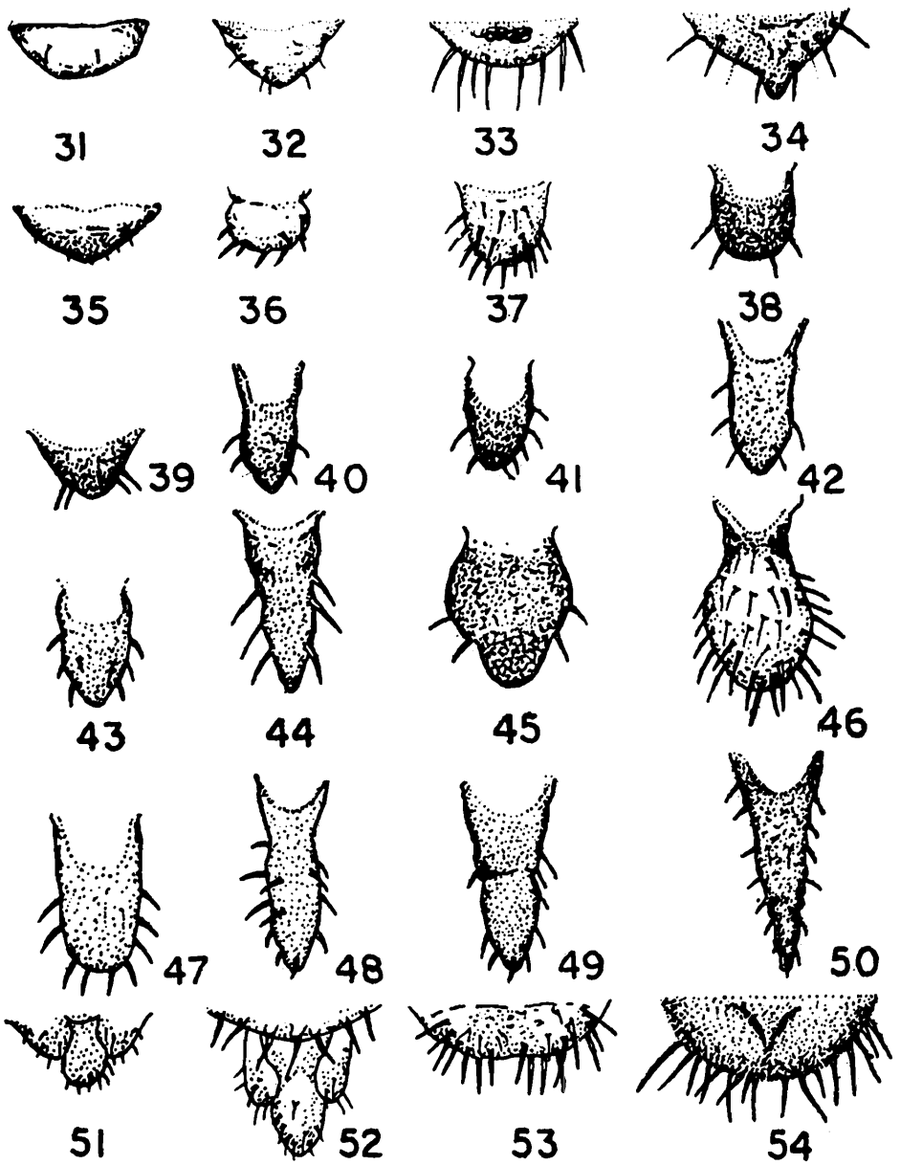
Fig. 1.

Map of the Oriental Region : A—Afghanistan, B—Bhutan, BD—Bangladesh, BU—Burma, C—China, I—India. K—Kampuchea, L—Laos, N—Nepal, NK—North Korea, P—Pakistan, SK—South Korea, SL—Sri Lanka, T—Thailand, TA—Taiwan, V—Vietnam.



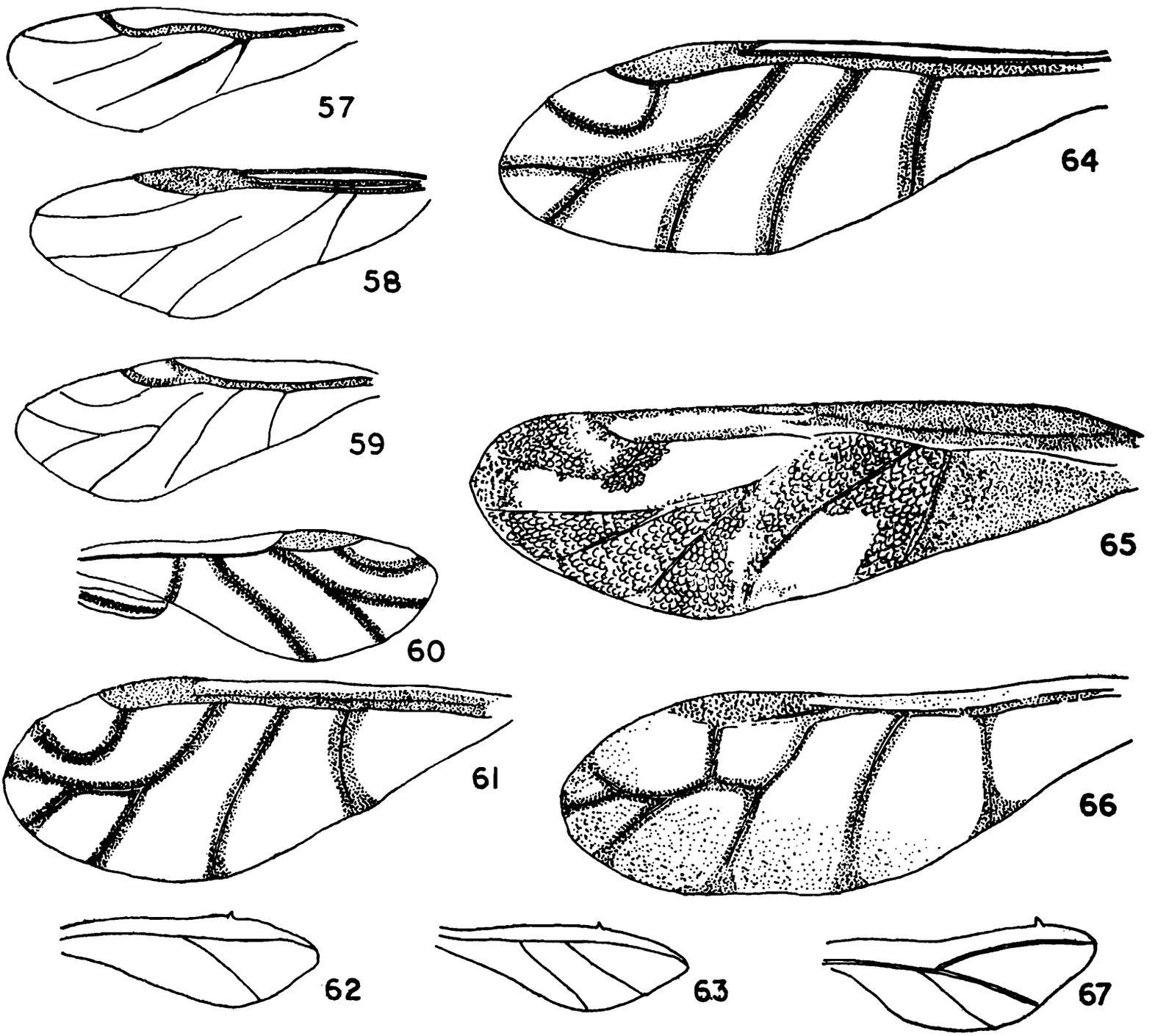
Figs. 2-29.

Siphunculi : 2 & 3. *Eriosoma* : aptera and alata ; 4. *Cinara* : aptera 5. *Serratocallis* : alata ; 6. *Callaphis* : alata ; 7. *Periphyllus* : aptera ; 8. *Brachycaudus* : aptera ; 9. *Oedisiphum* : aptera ; 10. *Rhopalosiphum* : aptera ; 11. *Brevicoryne* : aptera ; 12. *Chaetosiphon* : aptera ; 13. *Aphis* : aptera ; 14. *Macrosiphoniella* : aptera ; 15. *Trichosiphonaphis* : aptera ; 16. *Nasonovia* : aptera ; 17. *Capitophorus* : aptera ; 18. *Hyalomyzus* : aptera ; 19. *Mollitrichosiphum* : aptera ; 20. *Liosomaphis* : aptera ; 21. *Neomasonaphis* : aptera ; 22 & 23. *Acutosiphon* : aptera and alata ; 24. *Vesiculaphis* : aptera ; 25. *Macrosiphum* : aptera ; 26. *Uroleucon* : aptera ; 27. *Jacksonia* : aptera ; 28. *Eutrichosiphum* : aptera ; 29. *Greenidea* : aptera.



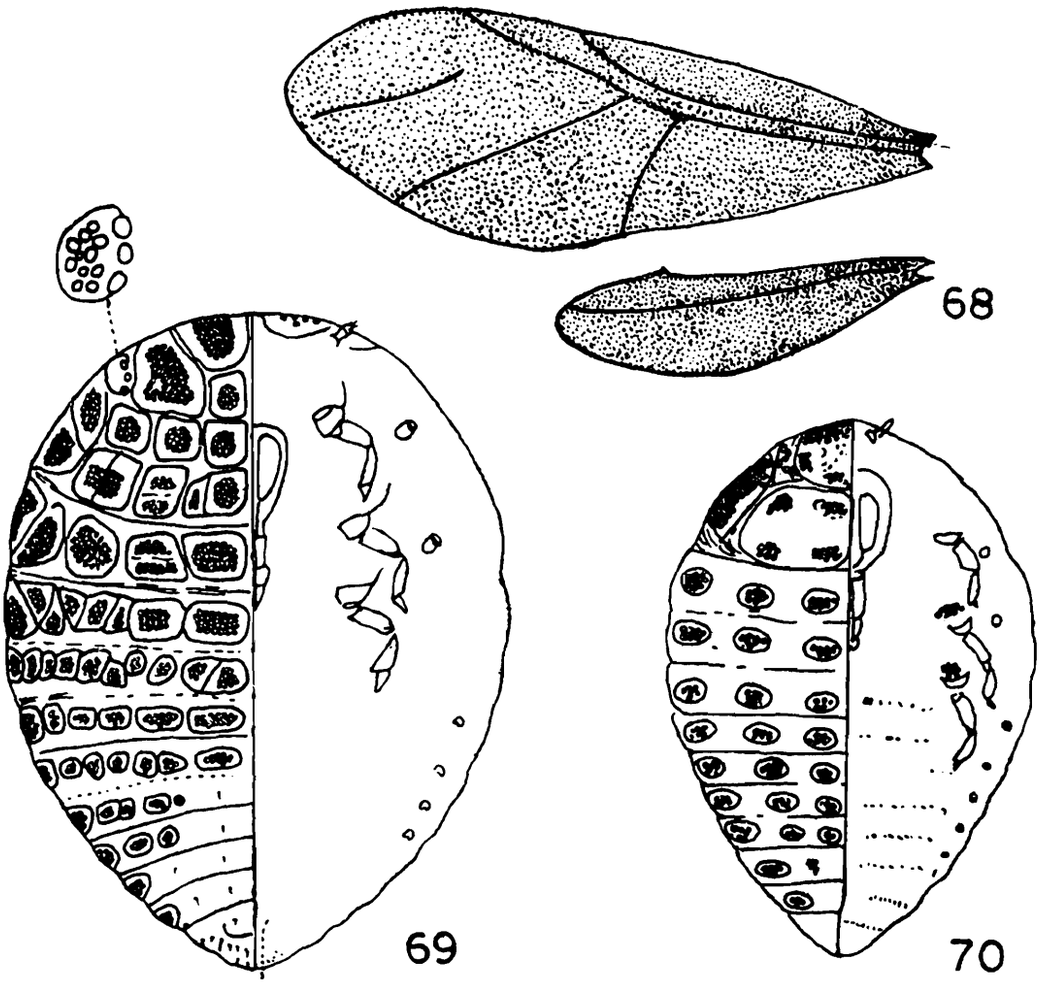
Figs. 31-54.

Cauda : 31. *Eriosoma* : aptera ; 32. *Tetraneura* : aptera ; 33. *Eutrichosiphum* : aptera ; 34. *Greenidea* : aptera ; 35. *Cinara* : aptera ; 36. *Ceratovacuna* : aptera ; 37. *Serratocallis* : alata ; 38. *Oedisiphum* : aptera ; 39. *Brachycaudus* (*Thuleaphis*) : aptera ; 40. *Rhopalosiphum* : aptera ; 41. *Aphis* : aptera ; 42. *Myzus* : Aptera ; 43. *Chaetosiphon* : aptera ; 44. *Capitophorus* : aptera ; 45. *Vesiculaphis* : aptera ; 46. *Callaphis* : alata ; 47. *Macrosiphoniella* : aptera ; 48. *Macrosiphum* : aptera ; 49. *Hyperomyzus* : aptera ; 50. *Uroleucon* : aptera ; 51. *Astegopteryx* : aptera ; 52. *Neobetulaphis* : aptera ; 53. *Ceratoglyphina* : aptera ; 54. *Pterocomma* : aptera.



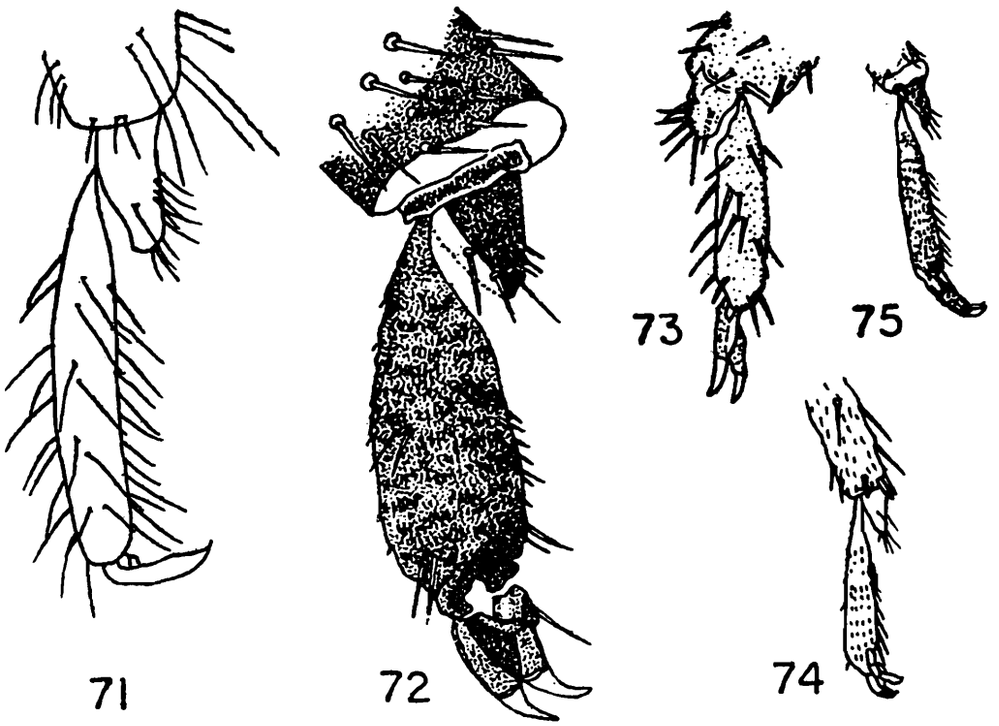
Figs. 57-67.

Forewings : 57. *Tetraneura* : alata ; 58. *Eriosoma* : alata ; 59. *Serratocallis* : alata ; 60. *Schoutedenia* : alata ; 61. *Micromyzus* : alata ; *Hindwings* : 62. *Hysteroneura* : alata ; 63. *Aphis* : alata ; Forewings : 64. *Cryptosiphum* : alata ; 65. *Lachnus* : alata ; 66. *Pentalonia* : alata ; 67. *Epipemphigus* : alata.



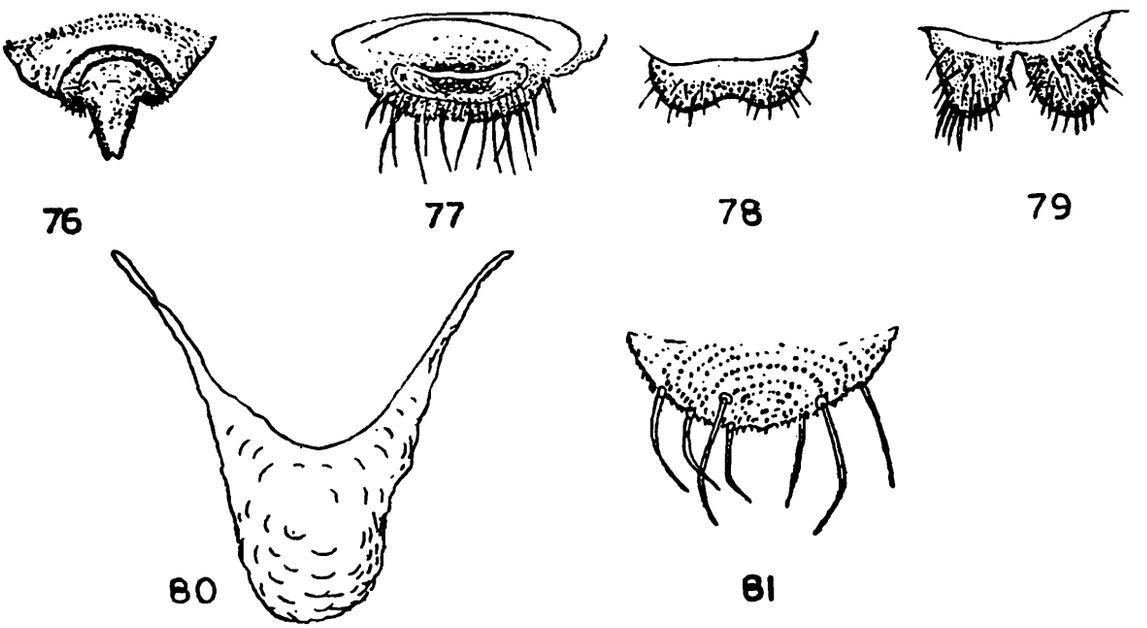
Figs. 68-70.

68. Adelgidae : wings ; 69. *Pineus* : Fundatrix ; 70. *Aphrastasia* : Fundatrix.



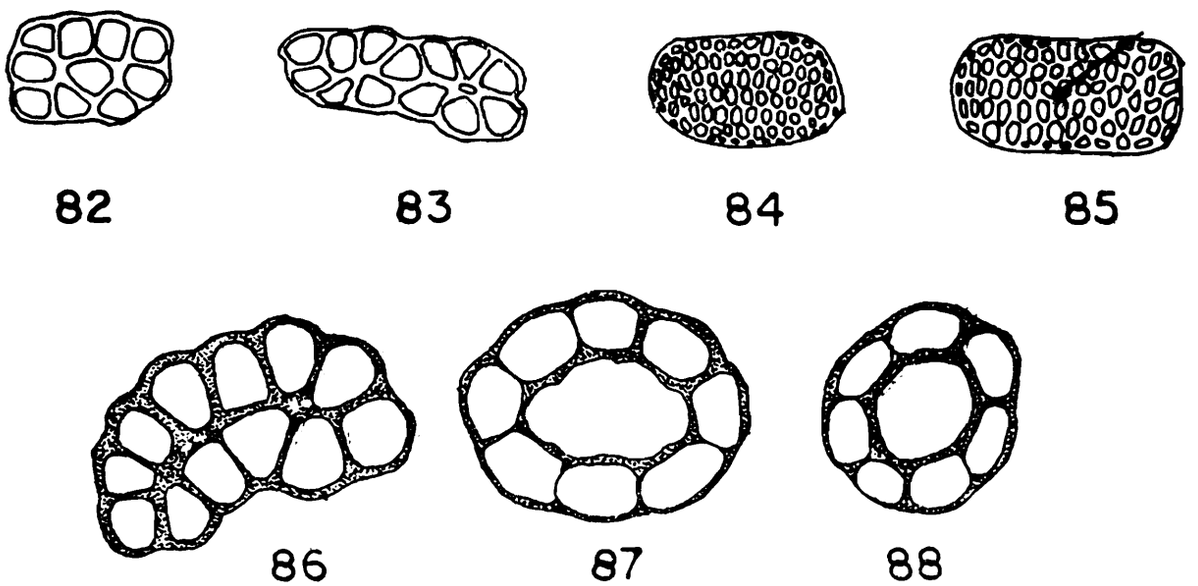
Figs. 71-75.

Hindtarsi : 71. ***Maculolachnus*** **: aptera ; 72.** ***Neoacyrthosiphon*** **: aptera ; 73.** ***Chaetogeoica*** **: aptera ; 74.** ***Betacallis*** **: alata ; 75.** ***Neomasonaphis*** **: aptera.**



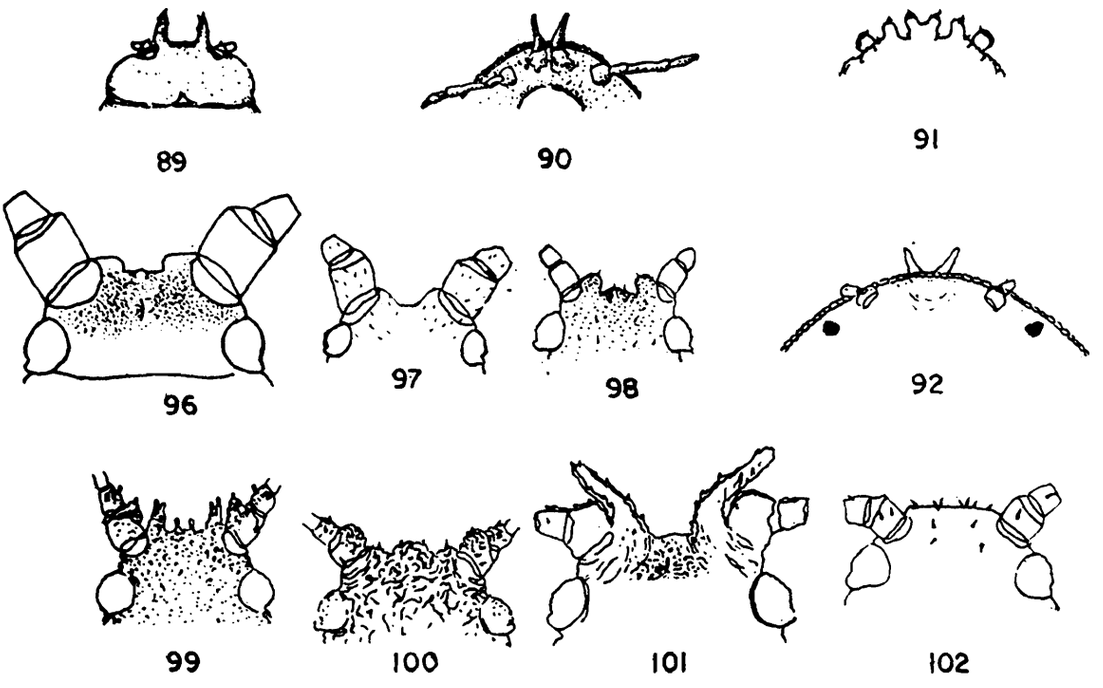
Figs. 76-81.

Subanal plate : 76. *Myzus* : aptera ; 77. *Greenidea* ; aptera ; 78. *Cerataphis* ; aptera ; 79. *Callaphis* : alata ; Cauda : 80. *Mindarus* : alata ; 81. *Ghyphina* : aptera.



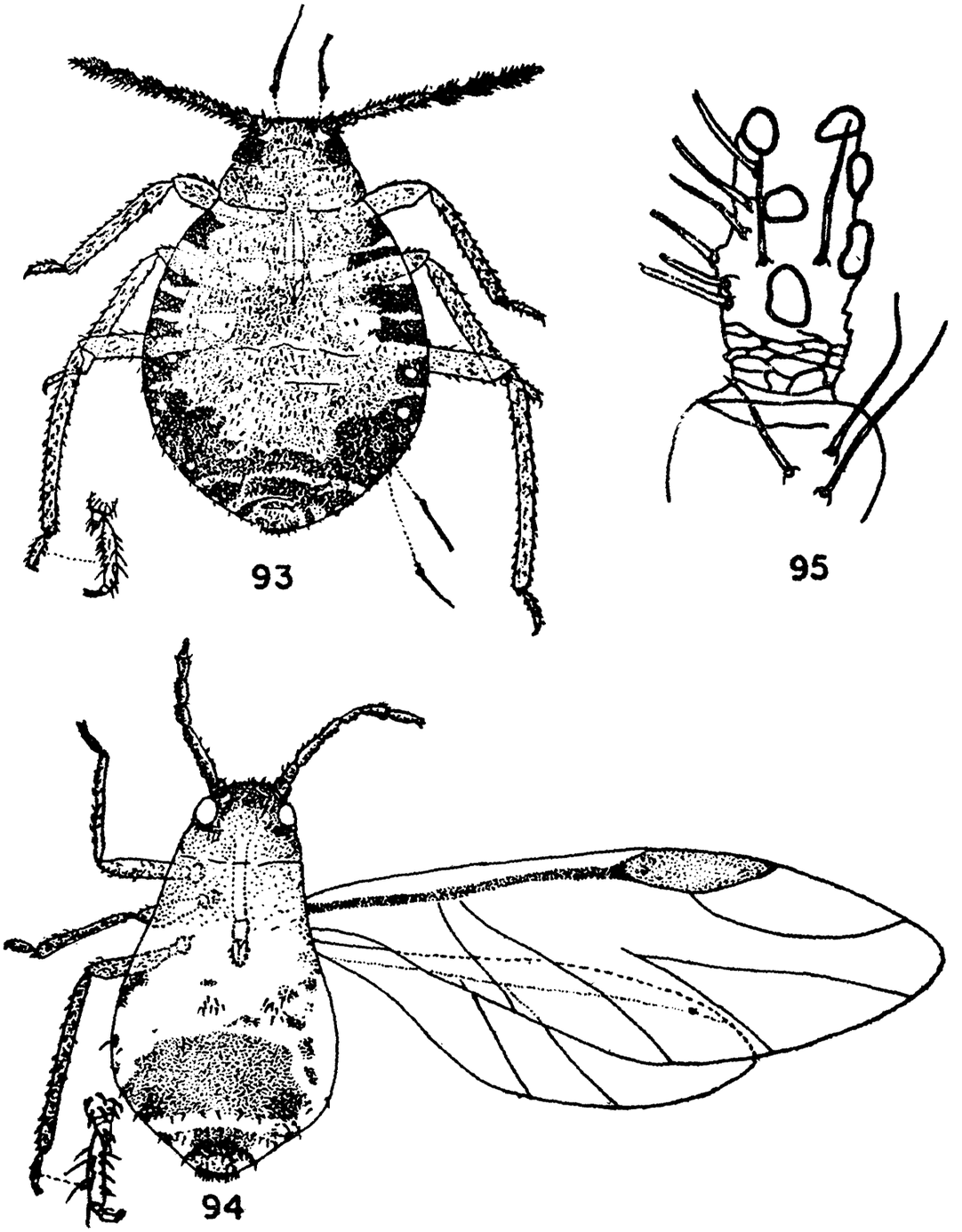
Figs. 82-88.

Wax plates : 82 & 83. *Eriosoma* : alata ; 84. *Smynthurodes* : alata ; 86-88. *Eriosoma* : alata.



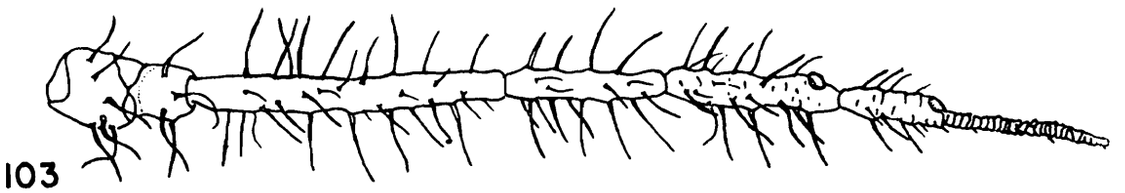
Figs. 89-92 and 96-102.

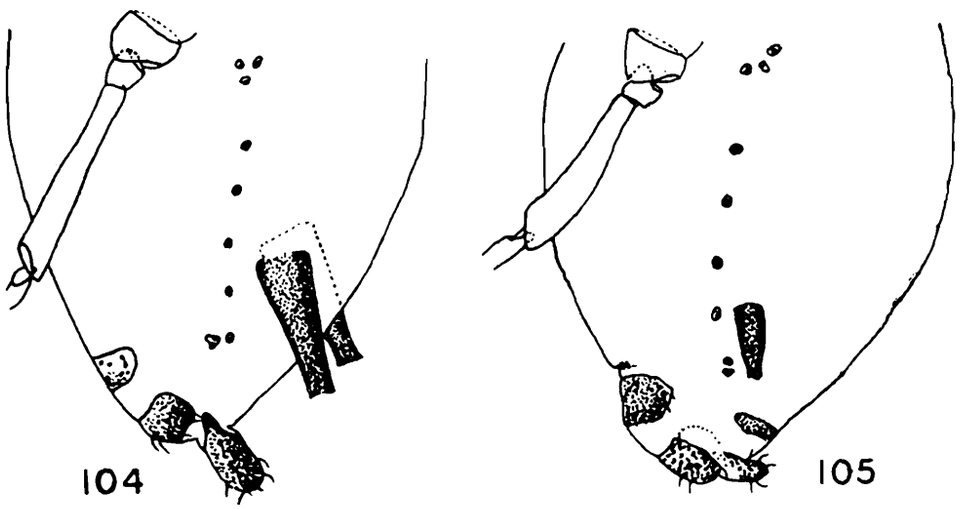
Head : 89. *Ceratoglyphina* : aptera ; 90. *Cerataphis* : aptera ; 91. *Tuberaphis* : aptera ; 92. *Cerataphis* : aptera ; 96. *Aulacorthum* : aptera ; 97. *Acyrthosiphon* : aptera ; 98. *Myzus* : aptera ; 99. *Phorodon* : aptera ; 100. *Vesiculaphis* : aptera ; 101. *Akkaia* : aptera ; 102. *Aphis* : aptera.



Figs. 93-95.

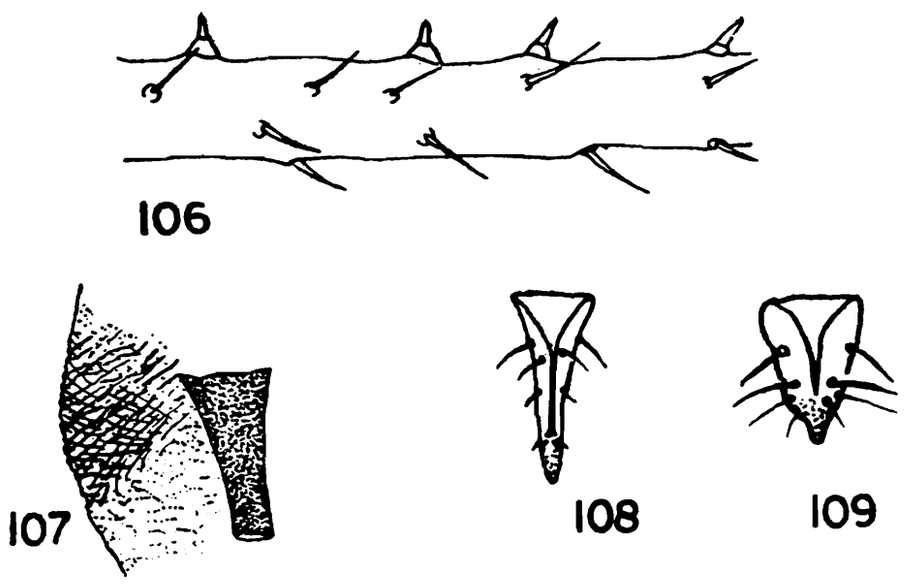
93. *Anoecia vagans* : whole body, aptera ; 94. *A. radiciphaga* : whole body, alata ; 95. *Subaiceona* : basal part of antennal segment III, alata.





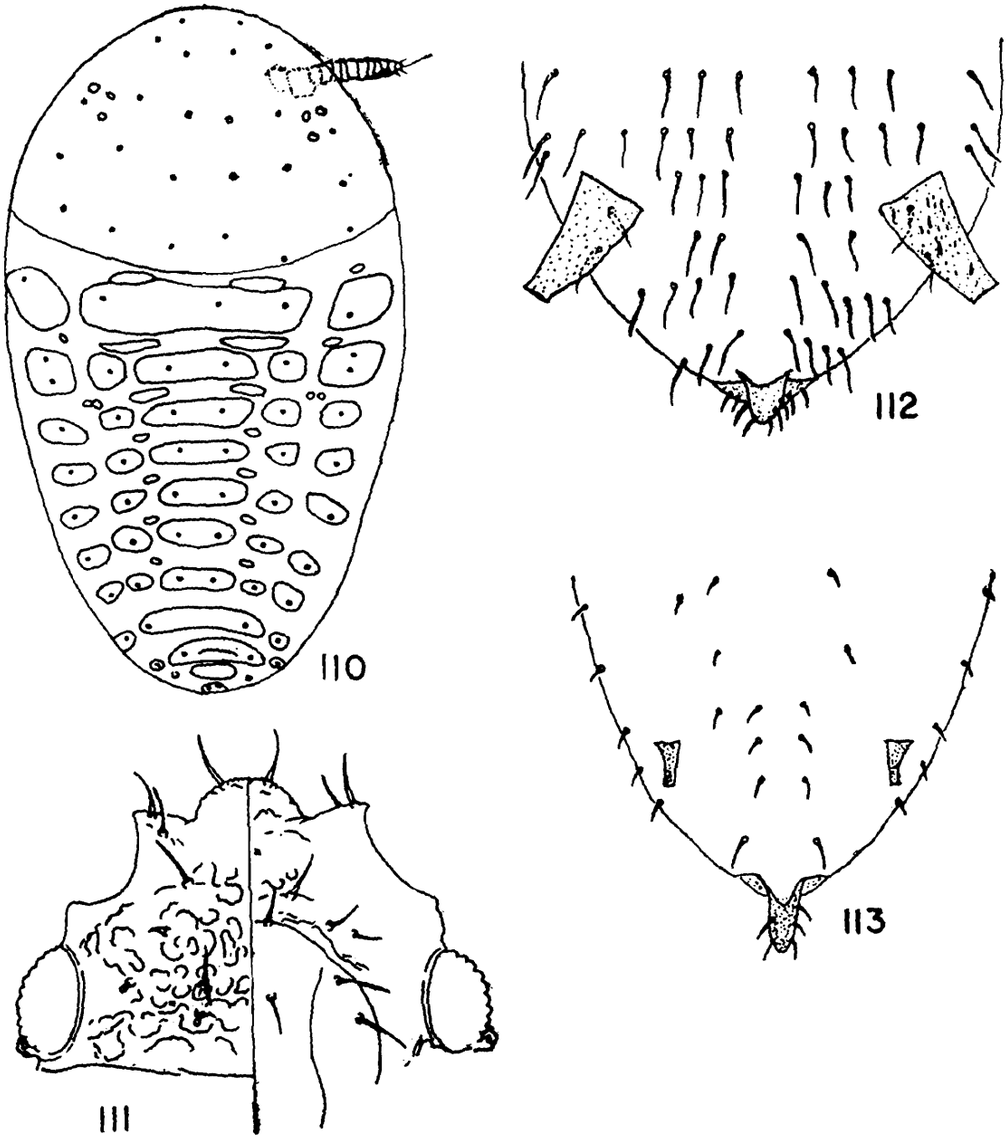
Figs. 103-105.

103. *Pterocomma* : antenna, aptera ; 104. *Aphis* : Lateral part of abdomen, aptera ; 105. *Rhopalosiphum* ; lateral part of abdomen, aptera.



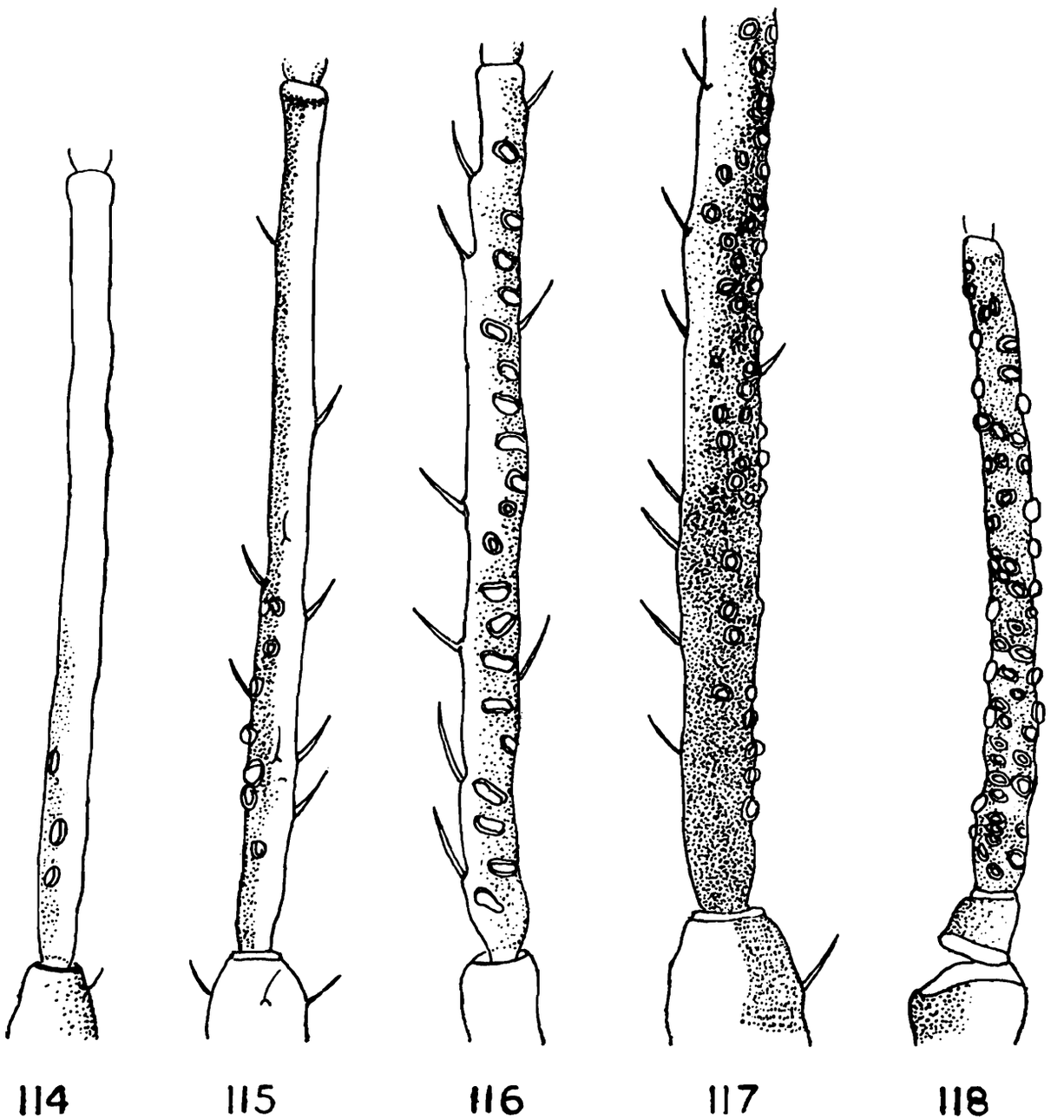
Figs. 106-109.

106. *Toxoptera* : hindtibia, aptera ; 107. *Toxoptera* : Stridulatory ridges, aptera ; 108. *Cryptosiphum* : Ultimate rostral segment, aptera ; 109. *Ephedraphis* : Ultimate rostral segment, aptera.



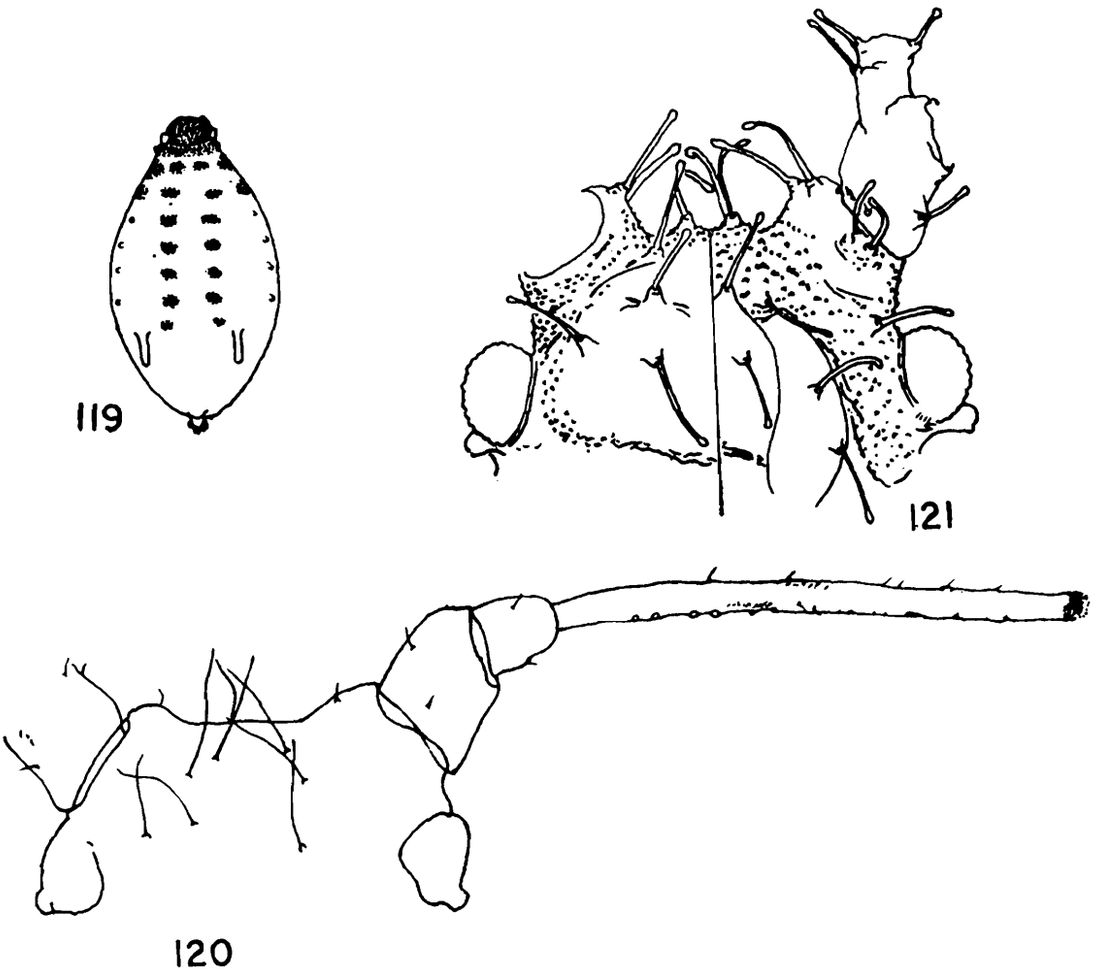
Figs. 110-113.

110. *Adelges* : First instar nymph ; 111. *Myzaphis* : Head, aptera ; 112. *Indiaphis* : posterior part of abdomen, aptera 113. *Casimira* : posterior part of abdomen, aptera.



Figs. 114-118.

Antennal segment III : 114. *Acyrthosiphon* : aptera ; 115. *Hyperomyzus* : aptera ; 116. *Callaphis* : alata ; 117. *Macrosiphum* : aptera ; 118. *Neoacyrthosiphon* (*Pseudoacyrthosiphon*) : aptera.



Figs. 119-121.

119. *Redisectaphis* : whole body, aptera ; 120. *Hillerislambersia* : Head, aptera ; 121. *Matsumuraja* : Head, aptera.

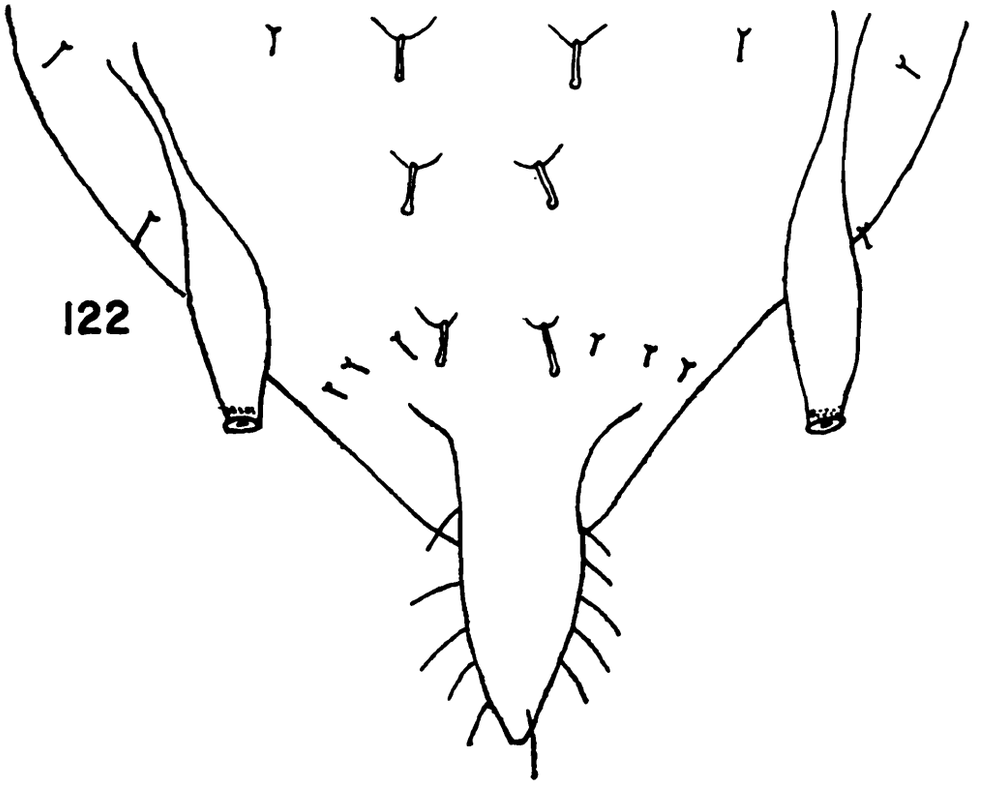
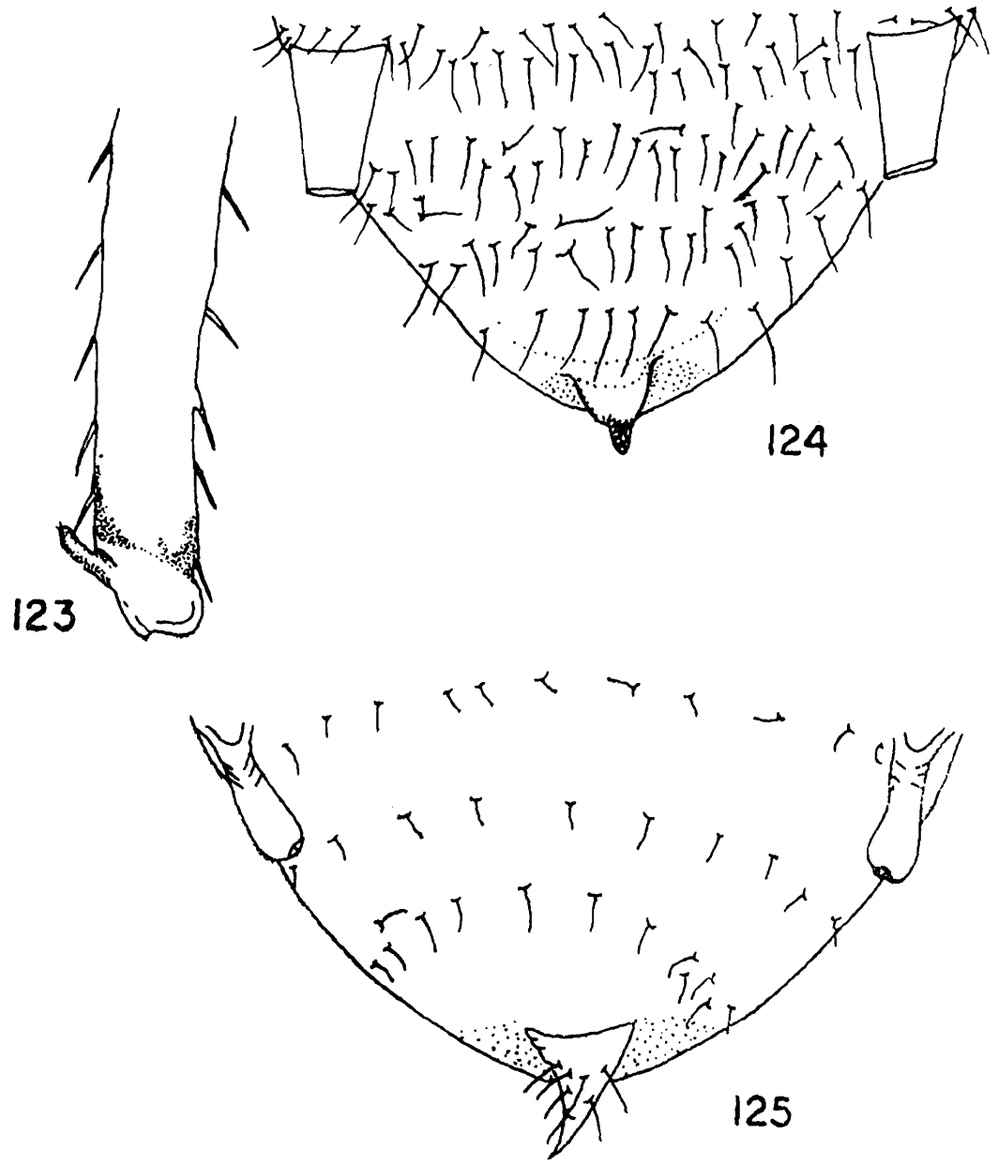


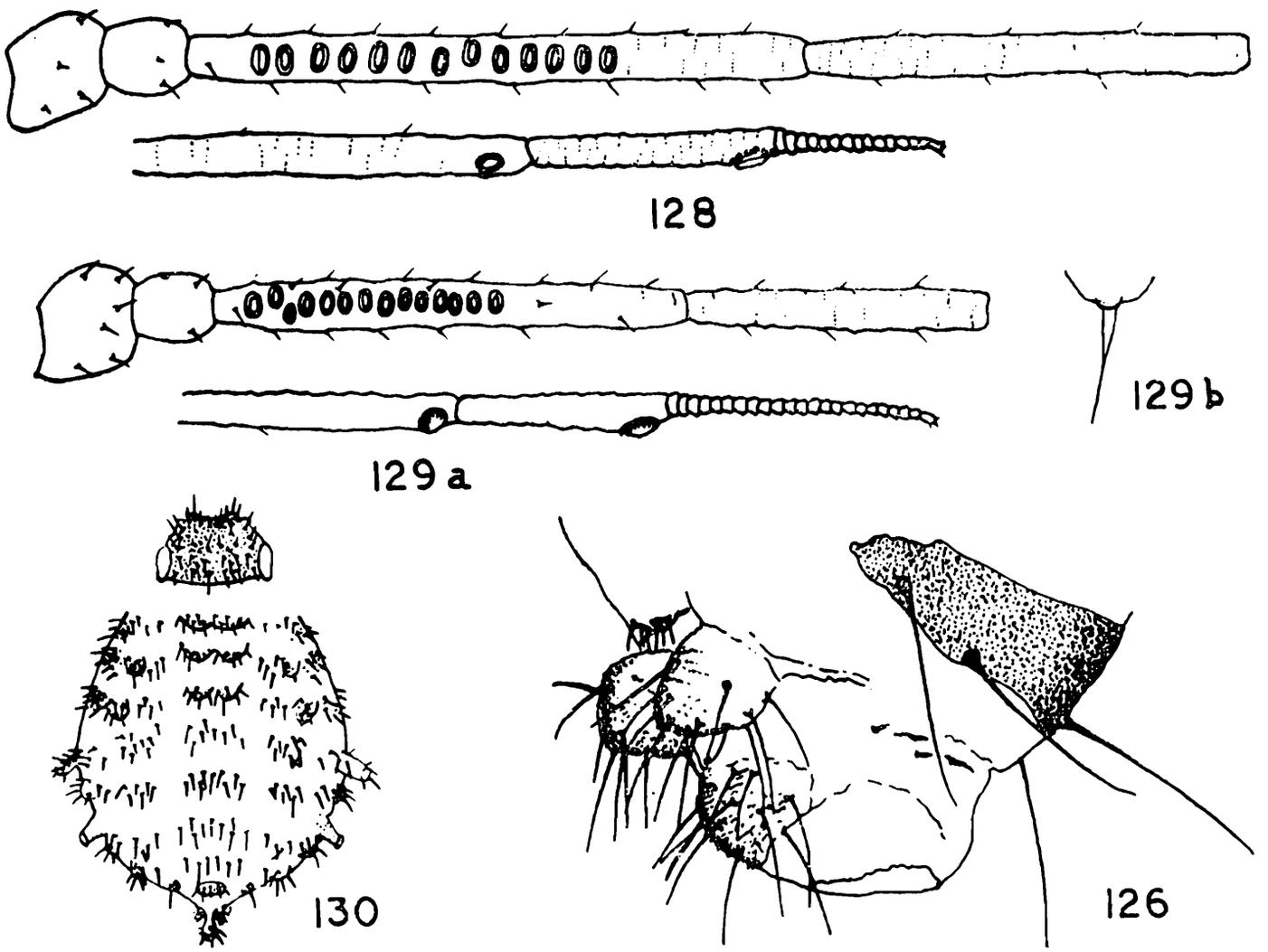
Fig. 122.

122. *Himalayaphis* : posterior part of abdomen, aptera.



Figs. 123-125.

123. *Shinjia* : atrophied tarsi, aptera ; 124. *Tubicauda* : posterior part of abdomen, aptera : 125. *Nudisiphon* : posterior part of abdomen, aptera.



Figs. 126 and 128-130

126. *Globulicaudaphis* : posterior part of abdomen, aptera ; 128. *Sinishivaphis* : antenna ; 129a. *Tiliaphis* : antenna, alata ; 129b. *Tiliaphis* : body hair, alata ; 130. *Castanocallis* : dorsum of head and abdomen.

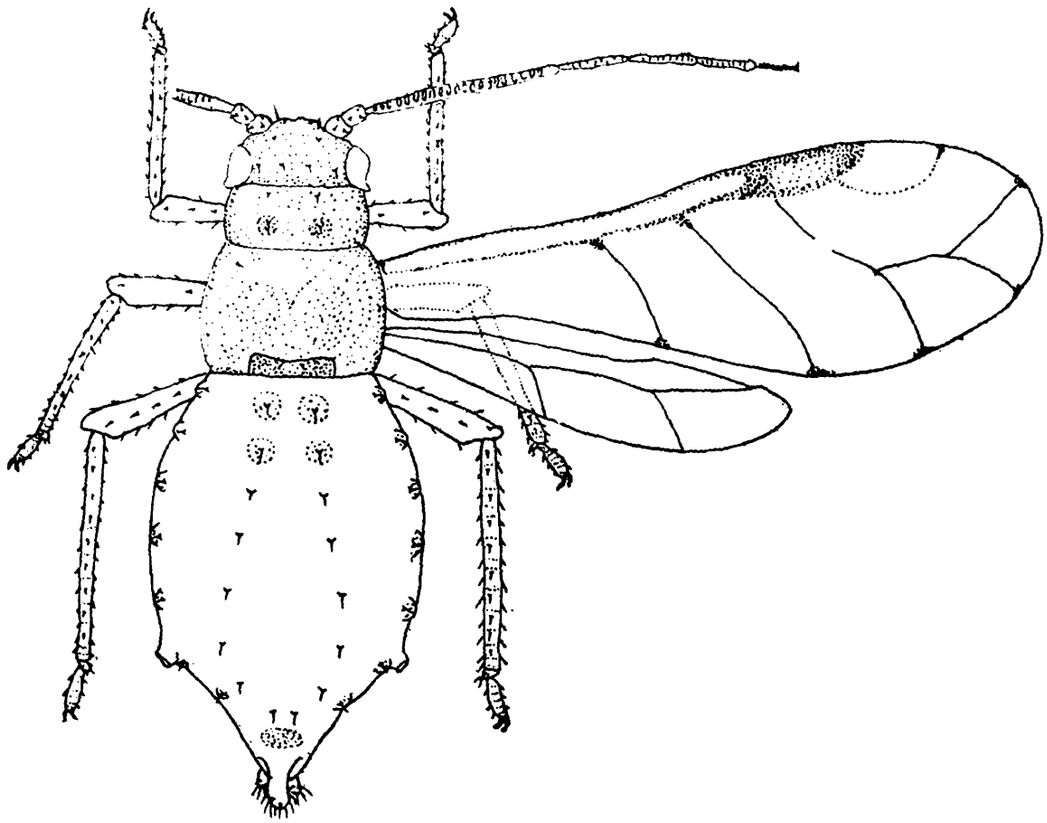
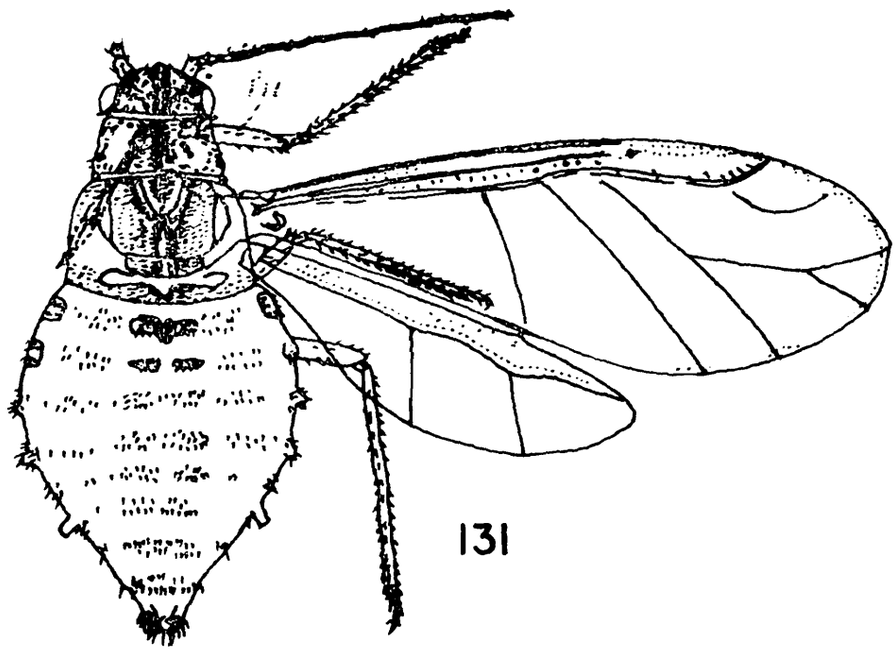
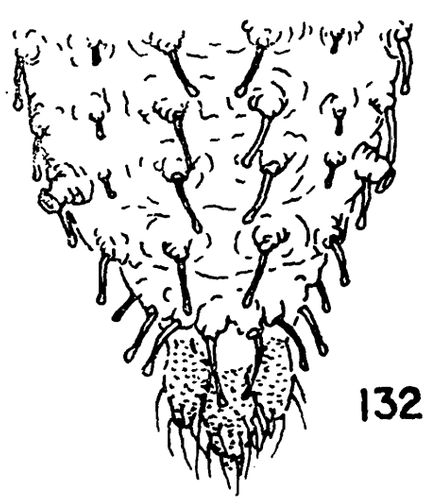


Fig. 127.

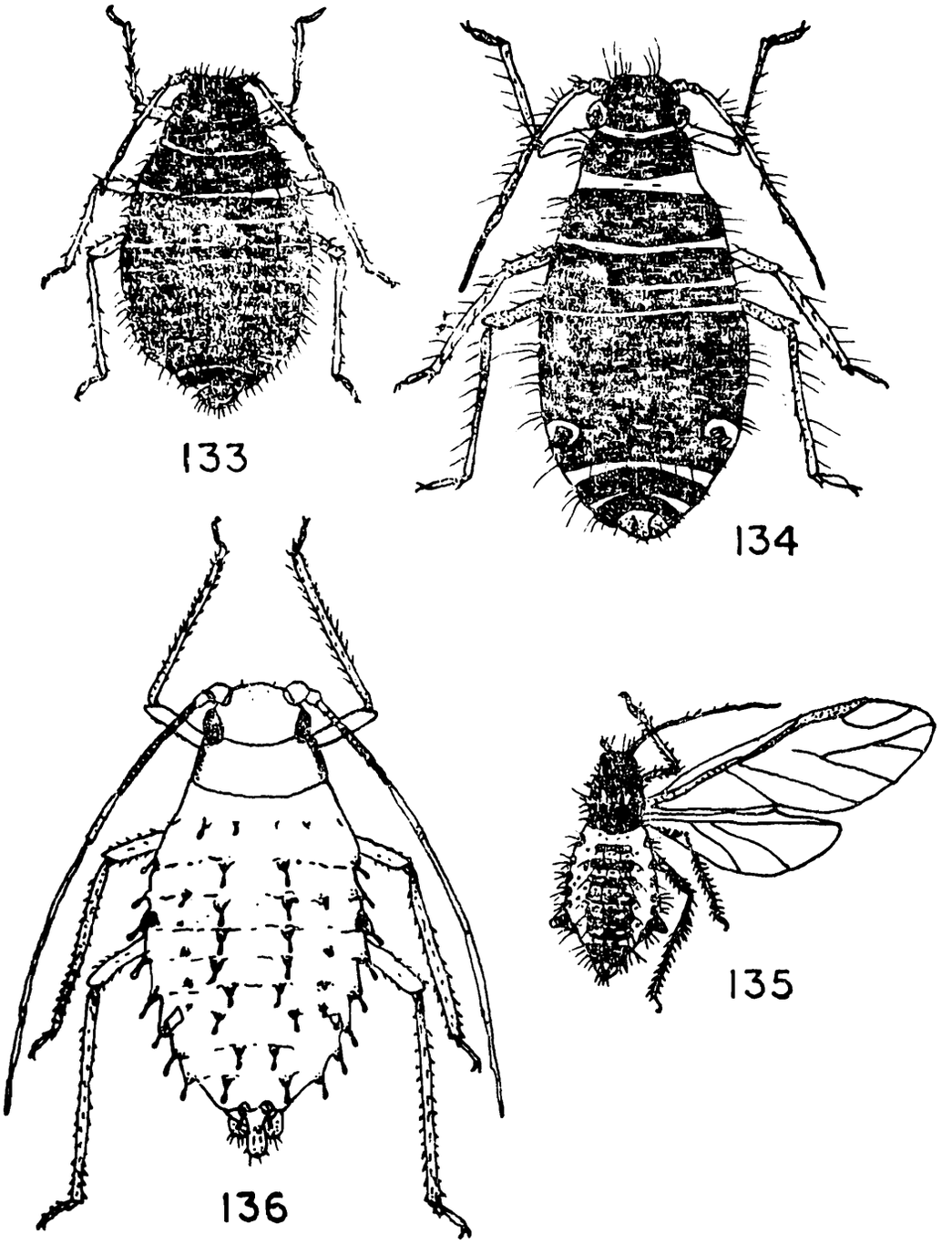
Sinotherioaphis : whole body, alata.





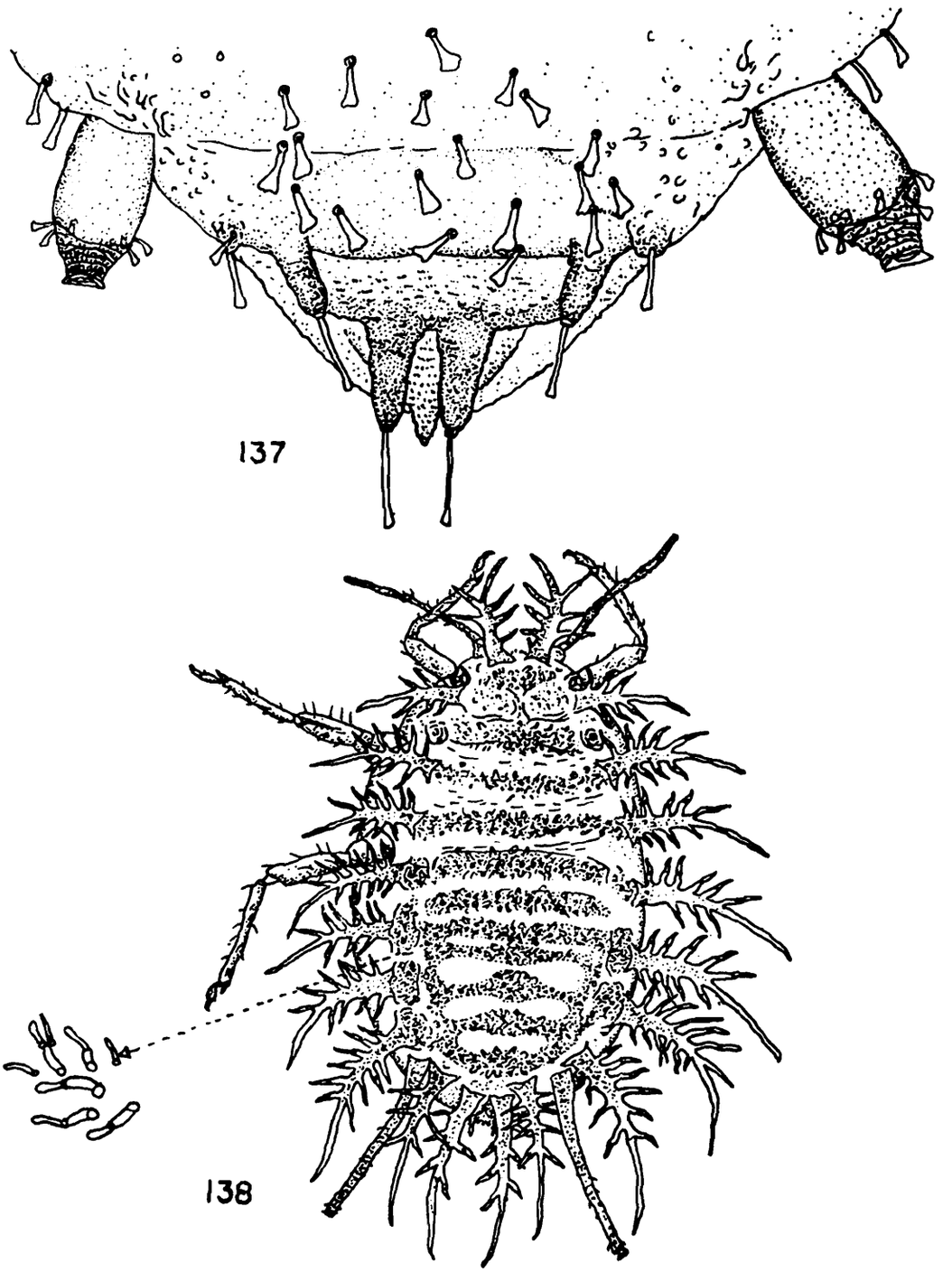
Figs. 131-132.

131. *Hoplocallis* : whole body, alata ; 132. *Neobetulaphis* : abdomen, aptera.



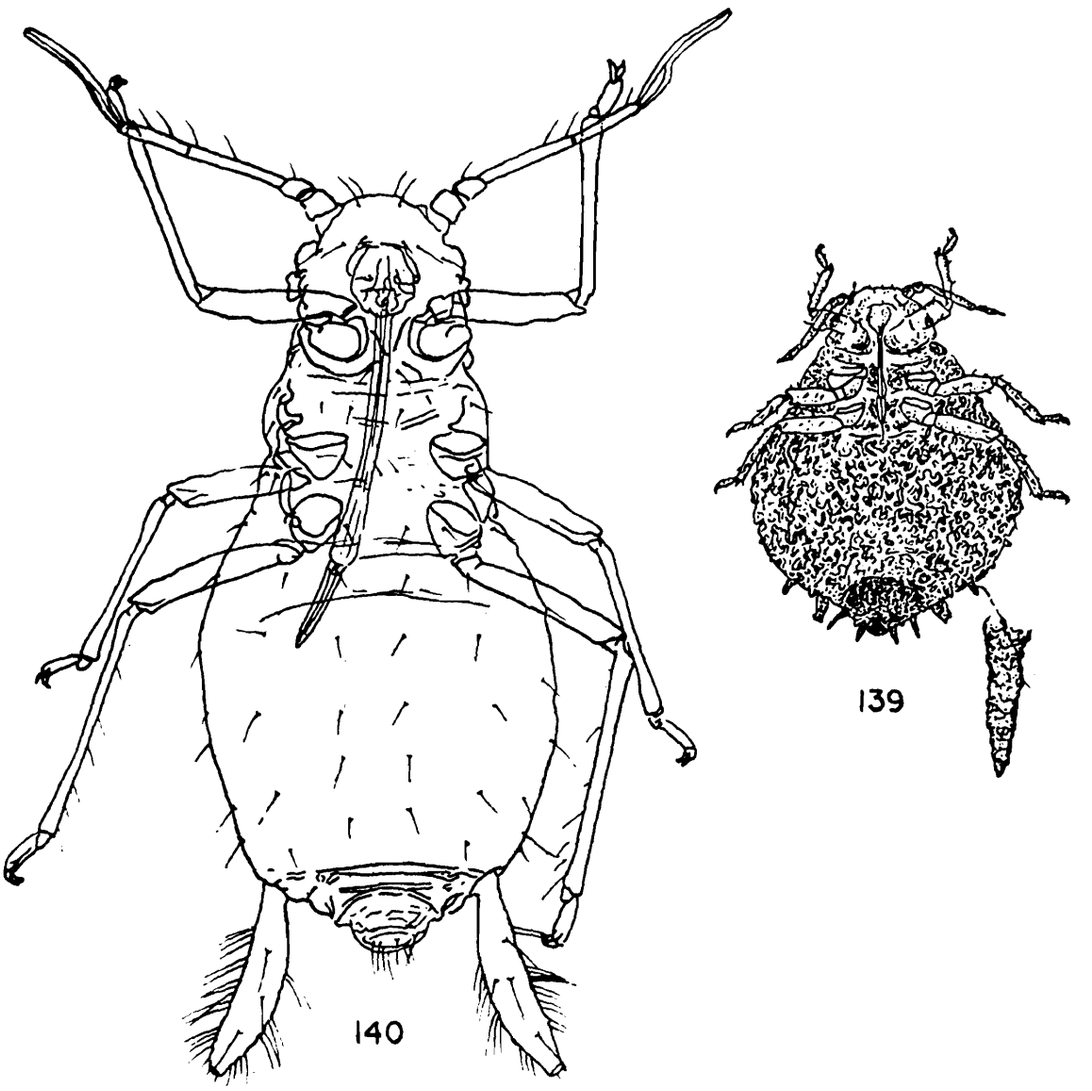
Figs. 133-136.

Whole body : 133. *Sipha* (Rungsia) : aptera ; 134. *Chaitophorus* : aptera ; 135. *Periphyllus* : alata ; 136. *Therioaphis* : aptera.



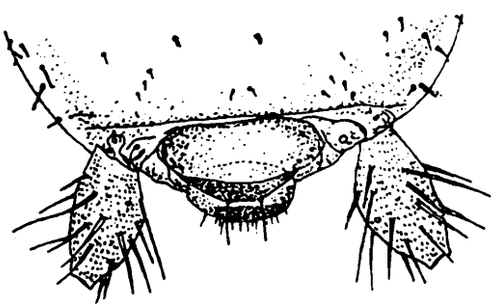
Figs. 137-138.

137. *Anomalosiphum* : abdominal tergite ; 138. *Cervaphis* : dorsal body hairs.

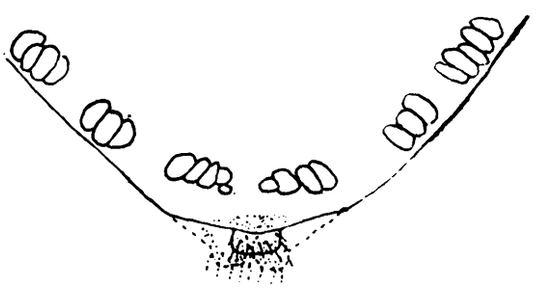


Figs. 139-140.

Whole body : 139. *Sumatraphis* : aptera ; 140. *Tritrichosiphum* : aptera.



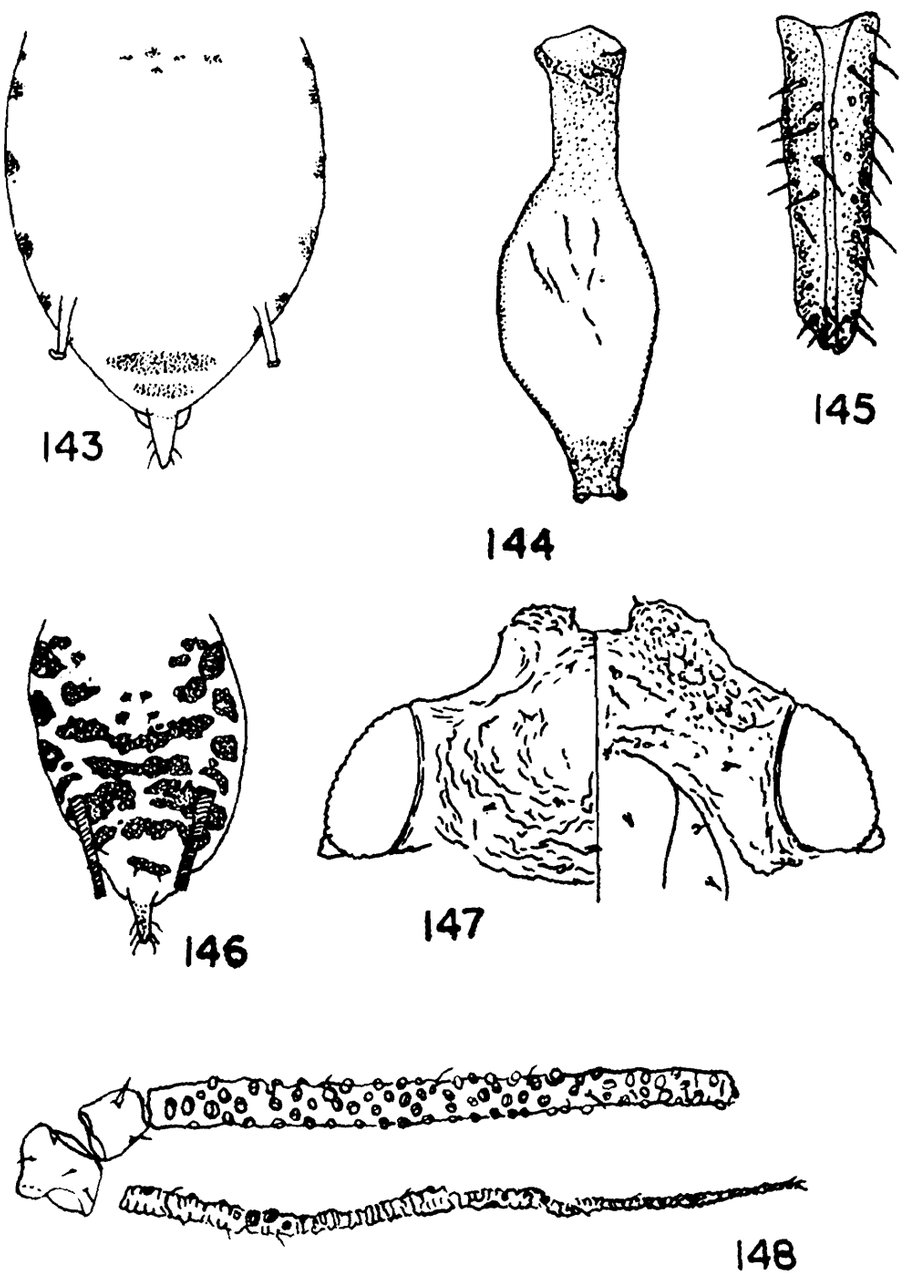
141



142

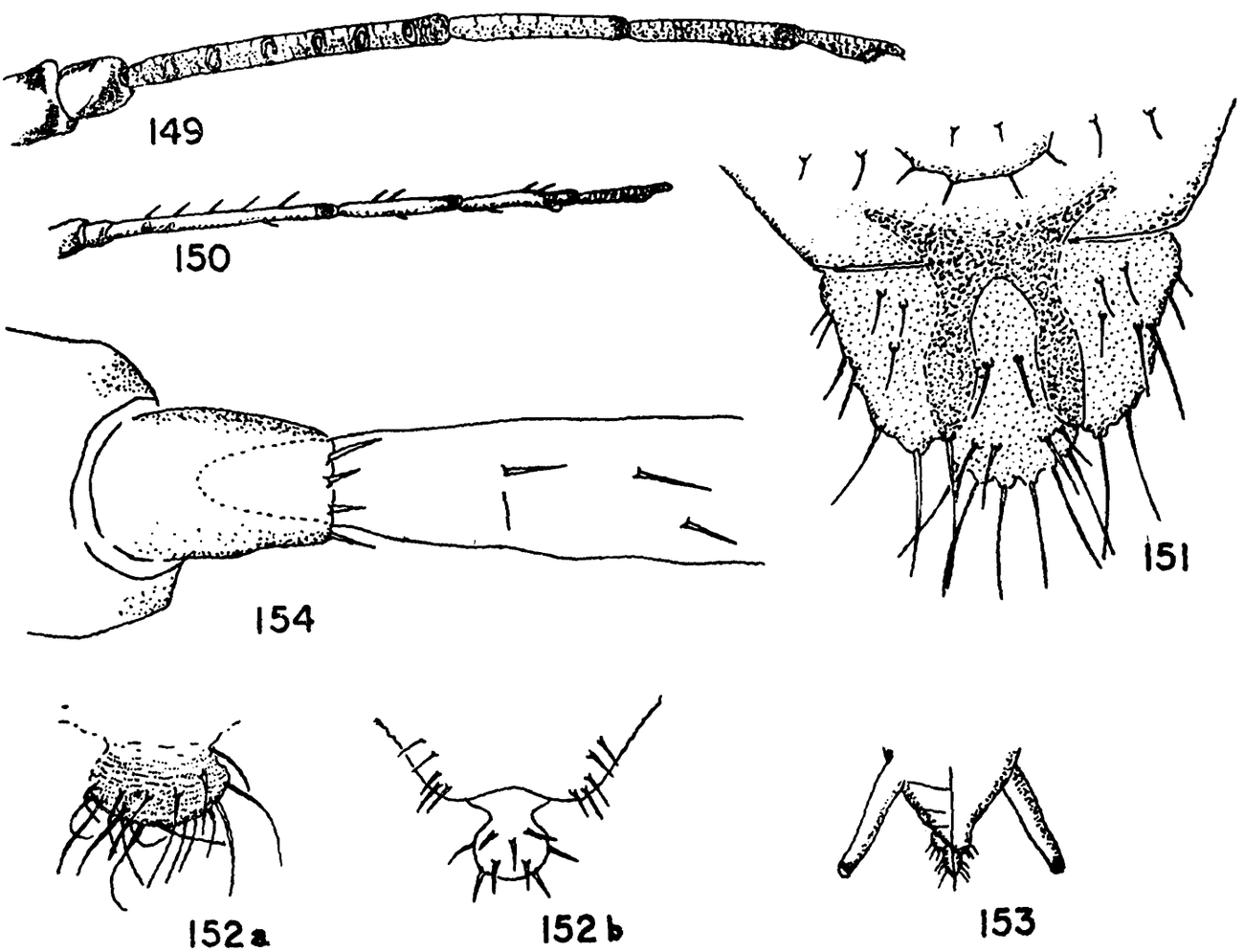
Figs. 141-142.

Posterior part of abdomen : 141. *Brevitrichosiphon* : aptera ; 142. *Astegopteryx* : aptera.



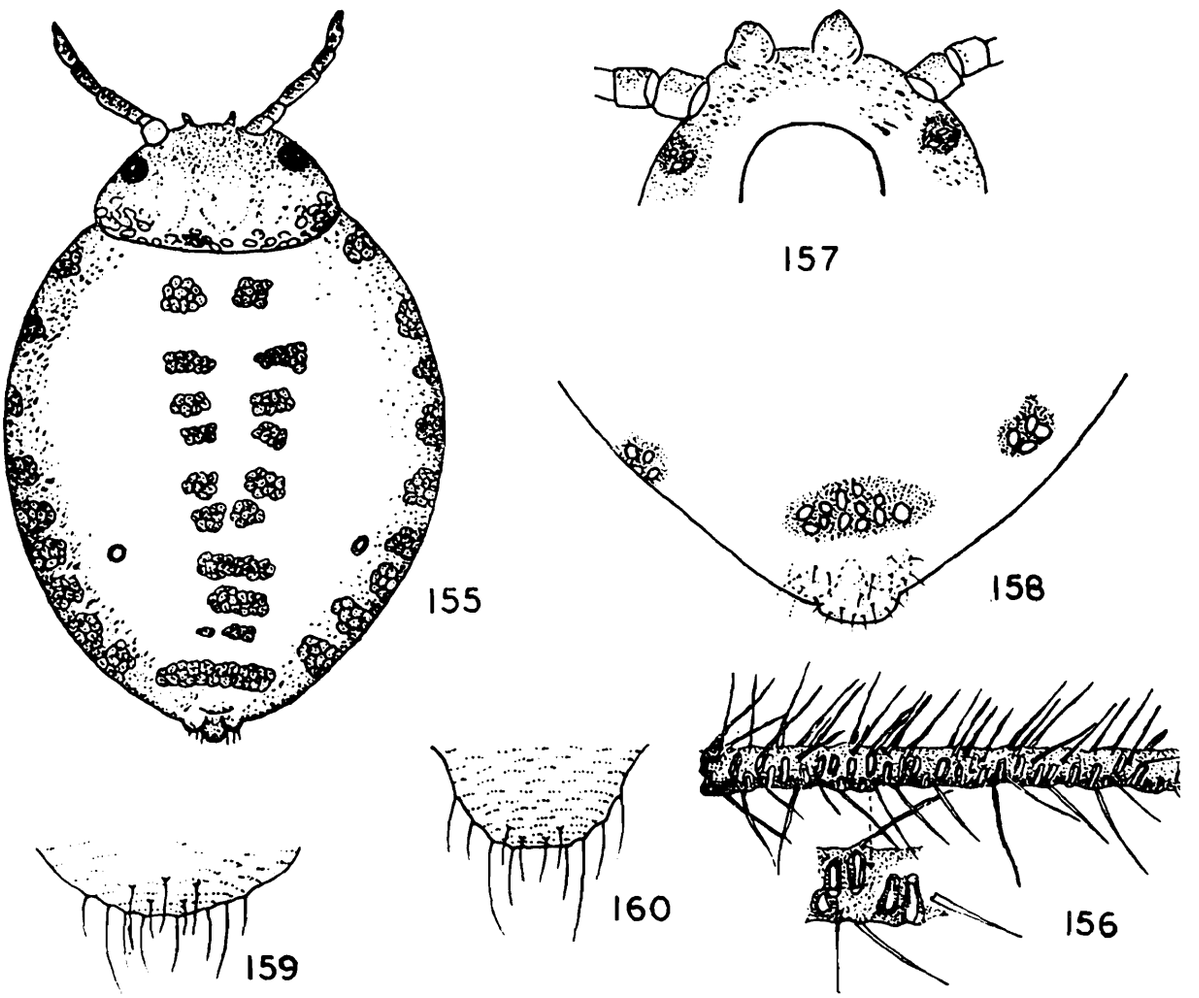
Figs. 143-148.

143. *Linaphis* : abdomen, aptera ; 144. *Rhopalosiphoninus* : Siphunculus, aptera ; 145. *Pilorostris* : ultimate rostral segment, aptera ; 146. *Nasonovia* : abdomen, alata ; 147. *Juncomyzus* : Head, aptera ; 148. *Senisetotarsaphis* : antenna, alata.



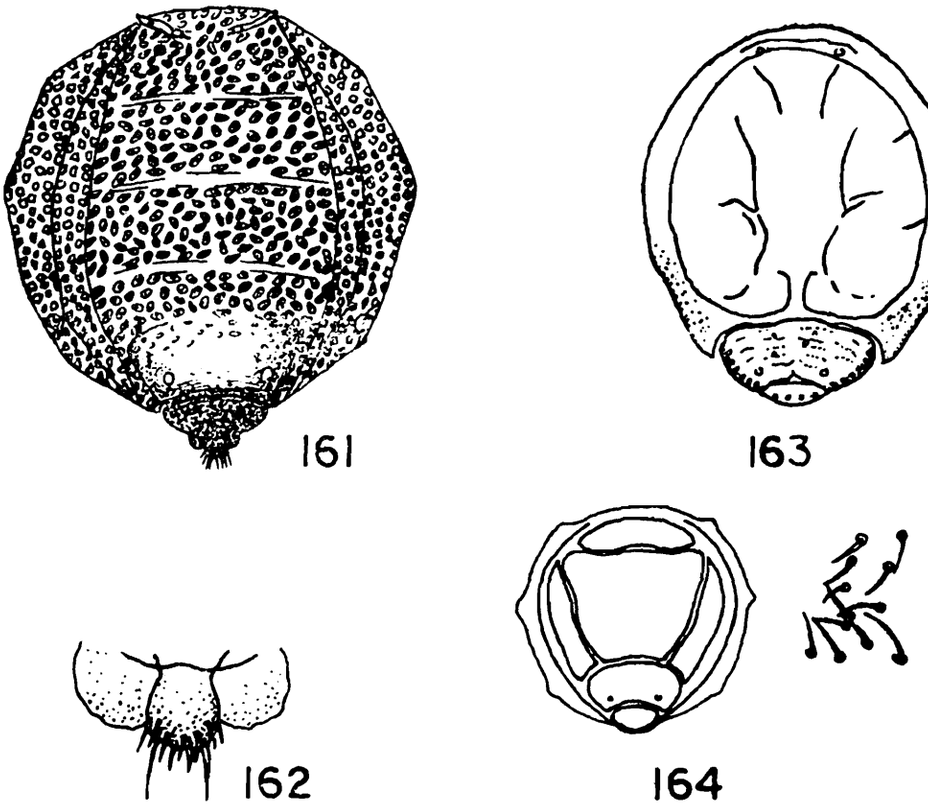
Figs. 149-154.

149. *Chromaphis* : antenna, alata ; 150. *Pterocallis*: antenna, alata ; 151. *Callaphis* : cauda and subanal plate, alata ; 152a. *Chromocallis* : cauda, alata ; 152b. *Phyllaphis* : cauda and subanal plate, alata ; 153. *Drepanosiphum* : posterior part of abdomen, alata ; 154. *Anaulacorthum* : hind tarsus, aptera.



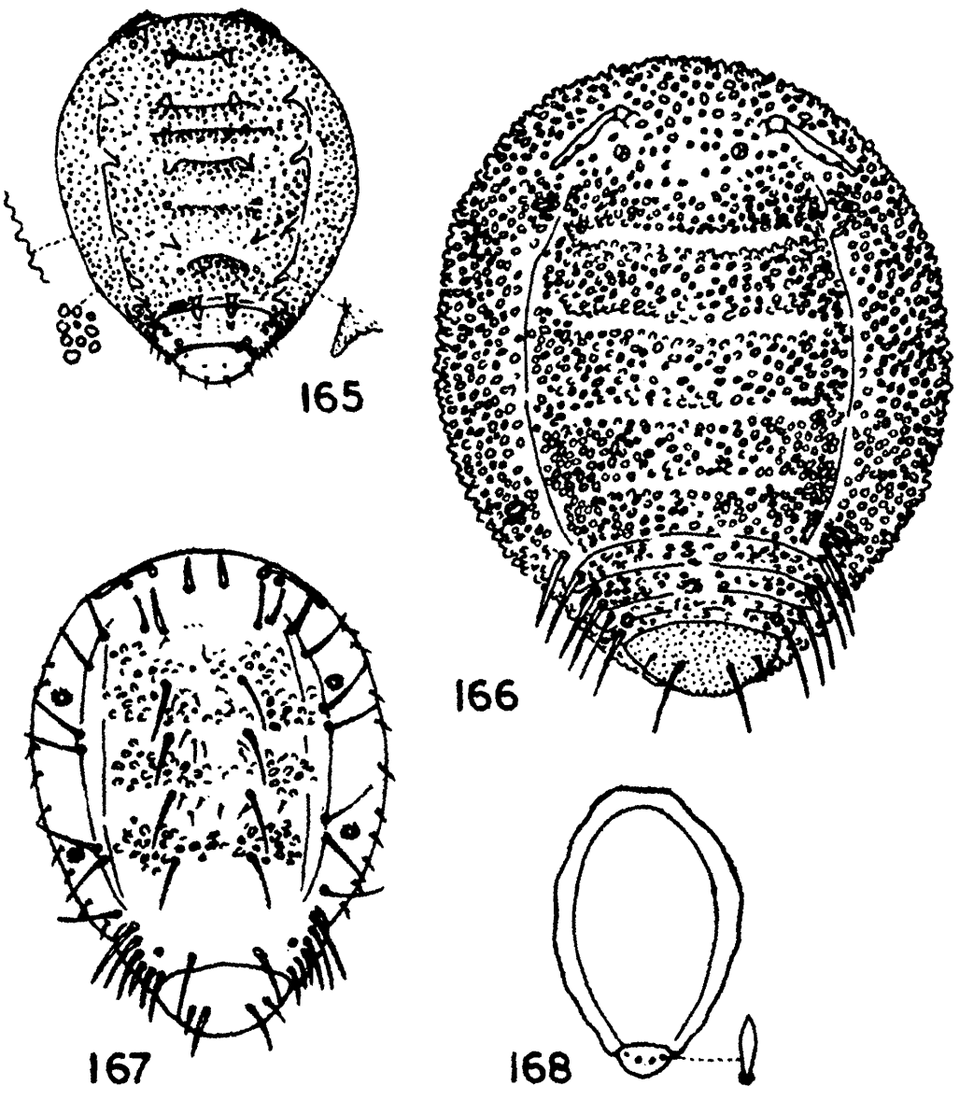
Figs. 155-160.

155. *Ceratovacuna* : whole boby, aptera ; 156. *Clethrobius* : part of antennal segment III, alata ; 157. *Chaitoregma* : Head, first instar nymph ; 158. *Paraoregma* : posterior part of abdomen, aptera ; 159. *Kurisakia* : subanal plate, aptera ; 160. *Kurisakia* : Cauda, aptera.



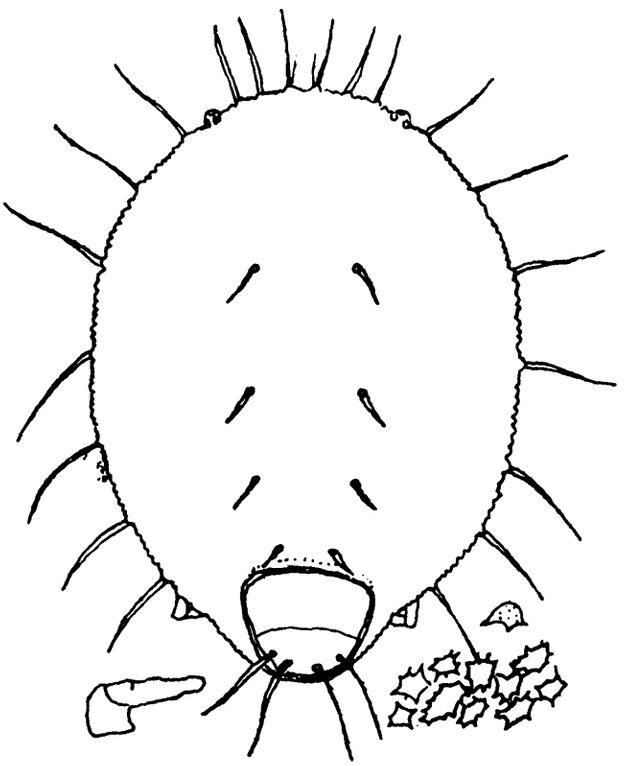
Figs. 161-164.

161. *Metanipponaphis* : whole body, aptera ; 162. *Xenothoracaphis* : cauda, aptera ; 163. *Xenothoracaphis* : whole body, aptera ; 164. *Euthoracaphis* : whole body, aptera.



Figs. 165-168.

Whole body : 165. *Indonipponaphis* : aptera ; 166. *Thoracaphis* : aptera ; 167. *Nipponaphis* : aptera ; 168. *Parathoracaphis* : aptera.



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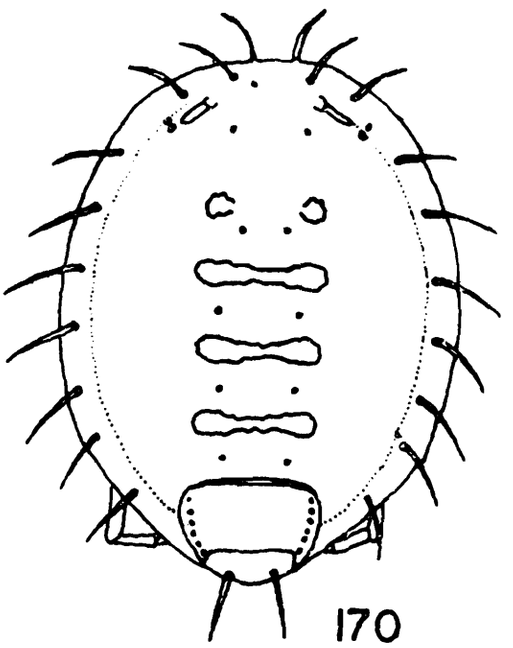

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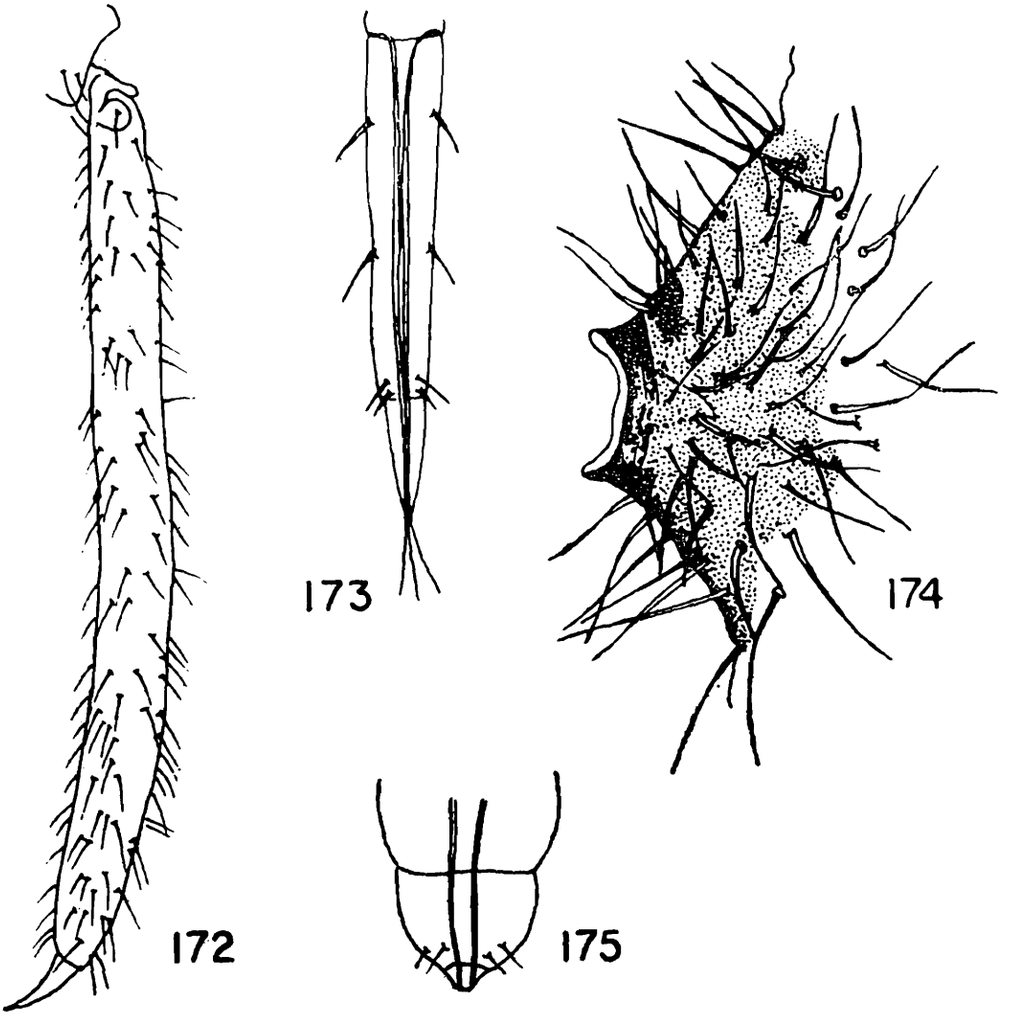
171

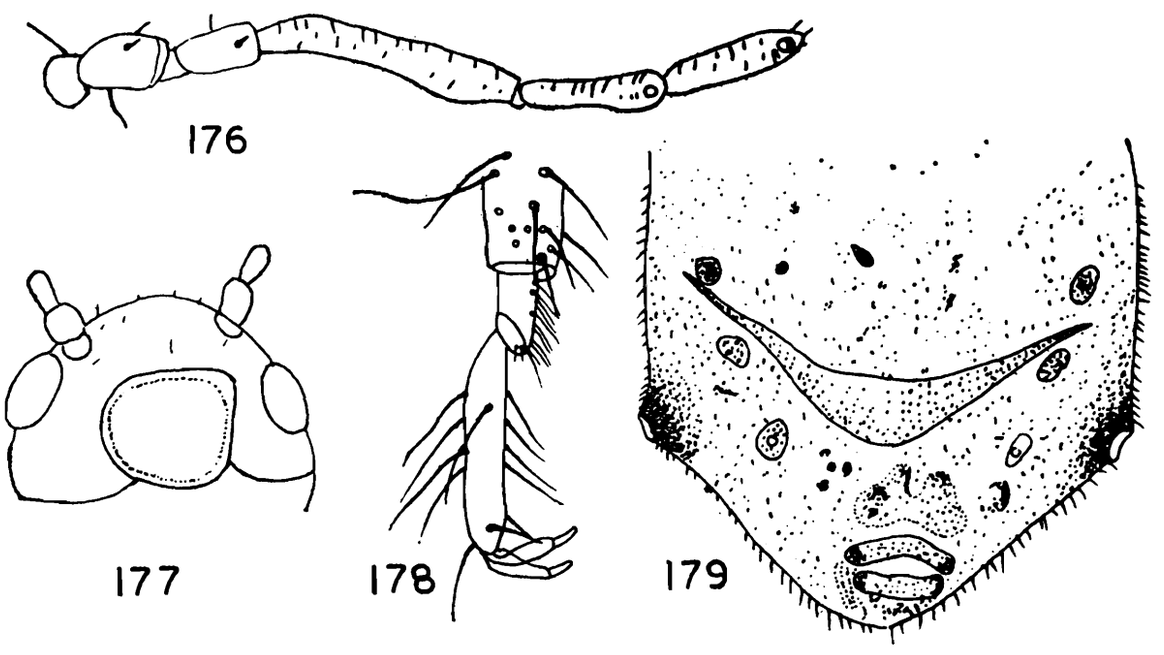
Figs. 169-171.

Whole body : 169. *Dermaphis* : aptera ; 170. *Reticulaphis* : aptera ; 171. *Quernaphis* : aptera.



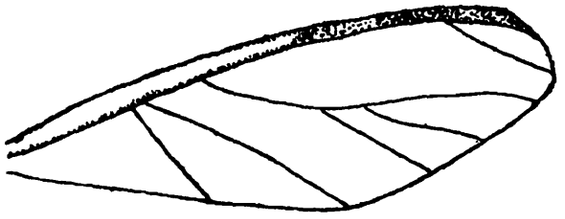
Figs. 172-175.

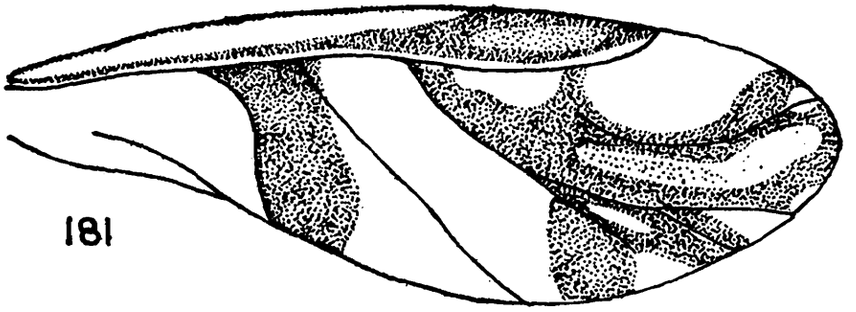
172. *Protrama* : hindtarsus, aptera ; 173. *Cinara* : ultimate rostral segment, aptera ; 174. *Cinara* : Siphunculus, aptera ; 175. *Eulachnus* ; ultimate rostral segment, aptera.

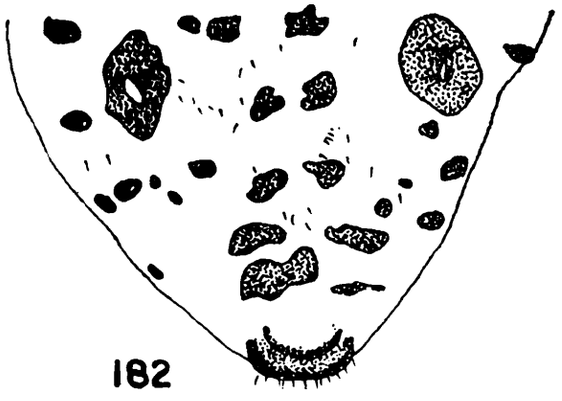


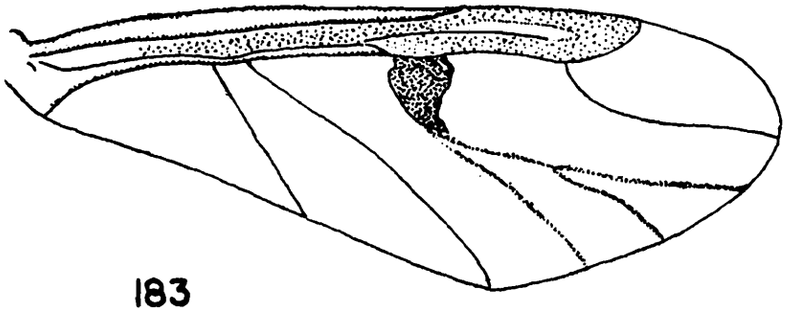
Figs. 176-179.

176. *Pseudessigella* : antenna, aptera ; 177. *Pseudessigella* : head, aptera ; 178. *Schizolachnus* : hindtarsus, aptera ; 179. *Tuberolachnus* : posterior part of abdomen, aptera.









Figs. 180-183.

180. *Longstigma* : forewing, alata ; 181. *Pterochloroides* : forewing, alata ; 182. *Pterochlorides* : posterior part of abdomen, alata ; 183. *Maculolachnus* : forewing, alata.

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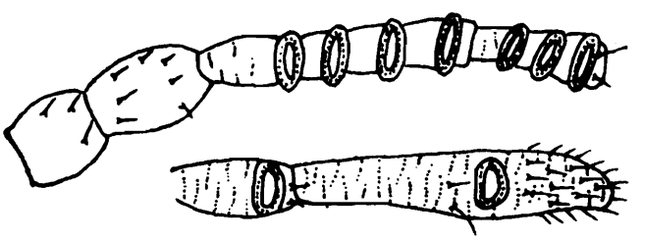

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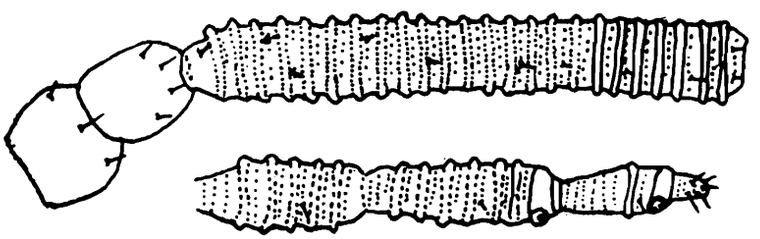

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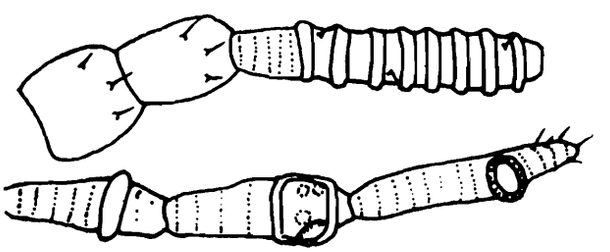
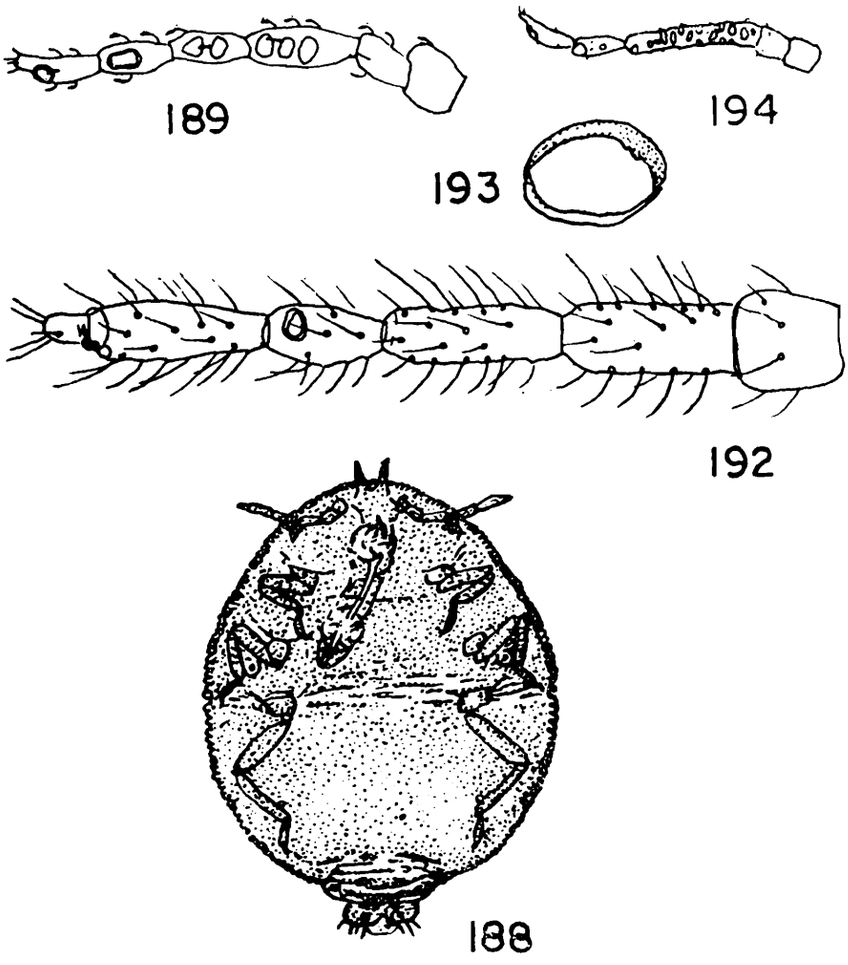


187

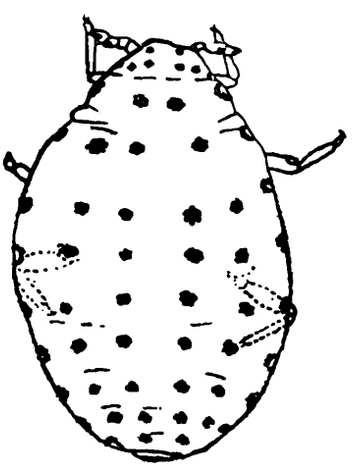
Figs. 184-187.

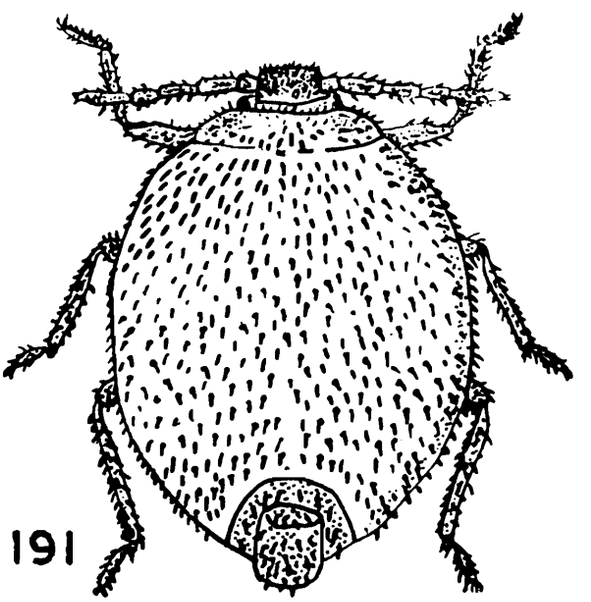
184. *Sigmacallis*: forewing, alata; 185. *Sanpupemphigus*: antenna, alata; 186. *Eriosoma*: antenna, alata; 187. *Pemphigus*: antenna, alata.



Figs. 188-189 and 192-194.

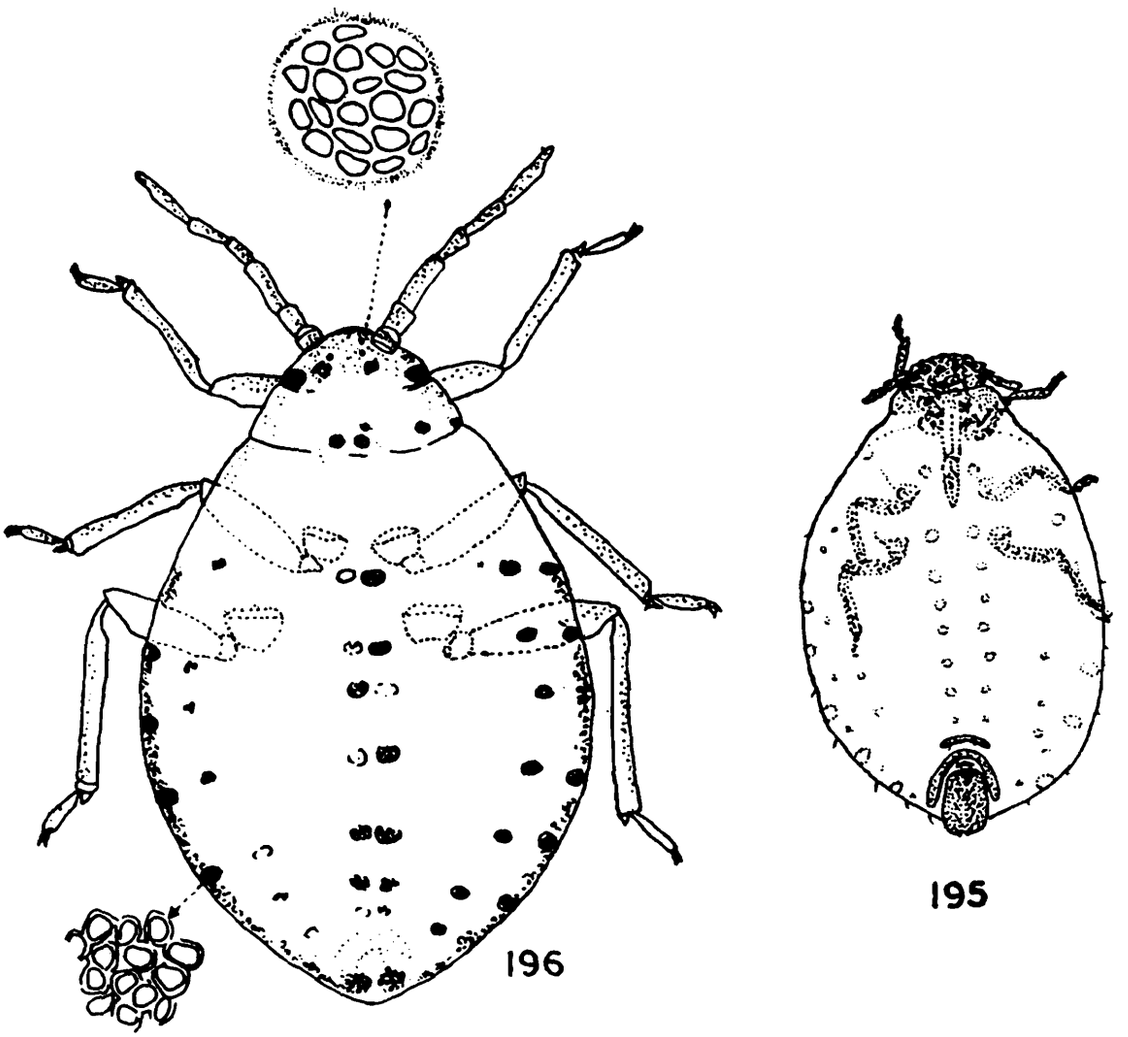
188. *Cerataphis* : whole body, aptera ; 189. *Geoica* : antenna, alata ; 192. *Smynthurodes* : antenna, aptera ; 193. *Smynthurodes* : Primary rhinarium, aptera ; 194. *Forda* : antenna, alata.





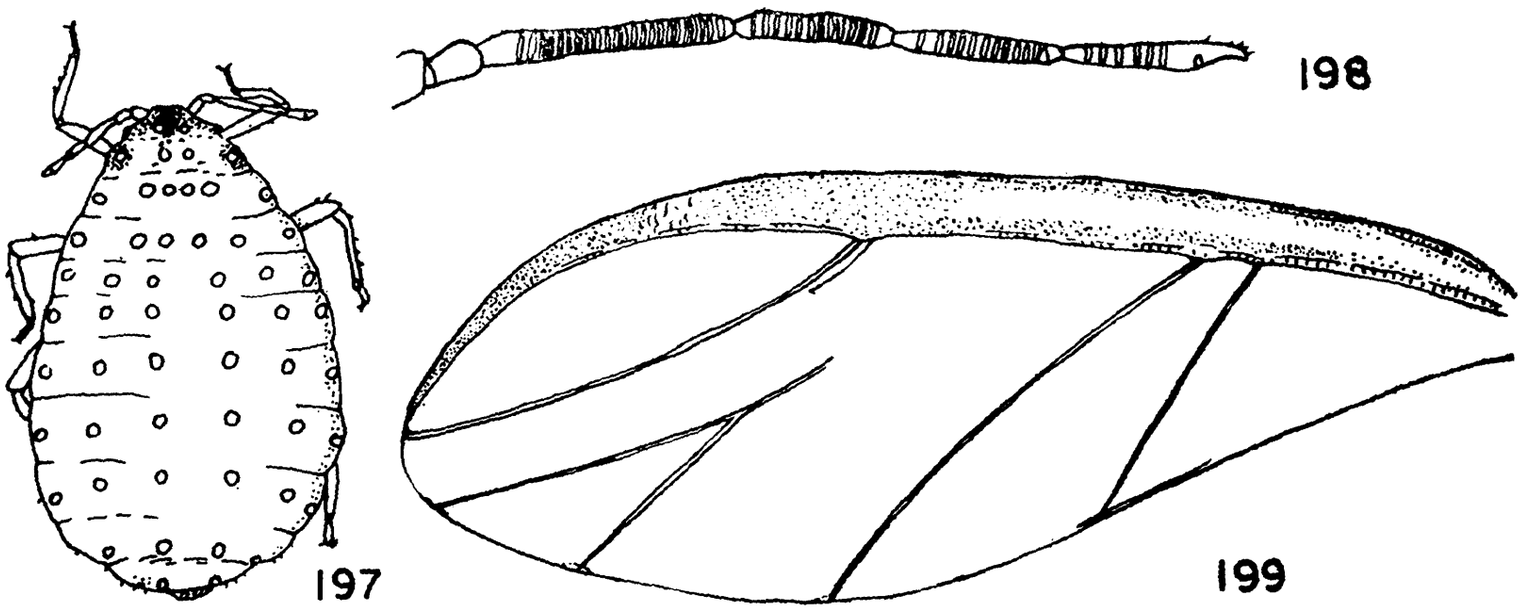
Figs. 190-191.

190. *Kaltenbachiella* : fundatrigenia, aptera ; 191. *Smynthurodes* ; whole body, aptera.



Figs. 195-196.

Whole body : 195. *Baizongia* : aptera ; 196. *Asiphoniella* : aptera.



Figs. 197-199.

197. *Thecabius*: Fundatrix; 198. *Prociphilus*: antenna, alata; 199. *Mindarus*: forewing, alata.