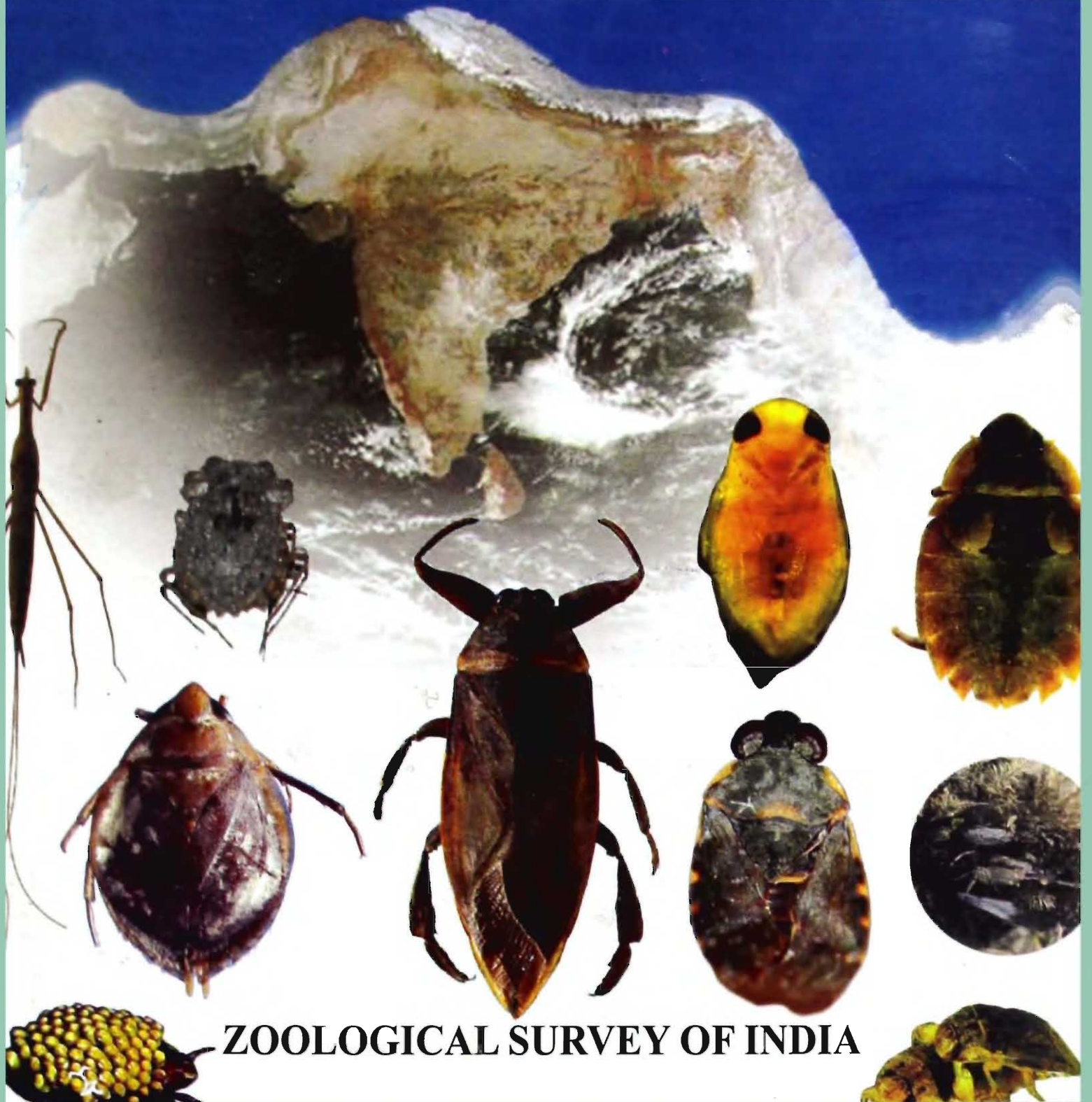


# **A Synoptic list of Nepomorpha** (Hemiptera : Heteroptera) **from India**

**G. THIRUMALAI**



**ZOOLOGICAL SURVEY OF INDIA**

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**RECORDS OF THE  
ZOOLOGICAL SURVEY OF INDIA**

**A Synoptic List of Nepomorpha  
( Hemiptera : Heteroptera ) from India**

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**Zoological Survey of India  
Kolkata**

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# RECORDS OF THE ZOOLOGICAL SURVEY OF INDIA OCCASIONAL PAPER

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## INTRODUCTION

The infraorder Nepomorpha comprises of true aquatic bugs, as well as two littoral families, Gelastocoridae and Ochteridae, which are mostly terrestrial, yet also found on the banks and bunds of freshwater habitats. Out of these, 5 major families, Belostomatidae, Corixidae, Notonectidae, Naucoridae and Nepidae are totally aquatic, leaving water during their migratory phase. They are characterized by their short antennae that are usually hidden. 'Water Scorpion' belonging to the family Nepidae, attracted attention of taxonomists, since 1592. As of now, this infraorder consists of 11 families and 137 genera accommodating around 2006 species distributed globally except in Antarctica (Polhemus *et al.* 1995 and Hebsgaard *et al.* 2004), with greatest diversity of the taxa in the tropics. All these bugs are essentially predacious although many corixids are omnivorous. Size ranges from 110mm (largest Heteroptera, *Lethocerus*) to 1.3mm (the smallest *Micronecta*).

Taxonomy, nomenclature, higher classification and phylogeny of Nepomorpha were reviewed by many workers and important contributions have been made by Popov (1971), Štys and Kerzhner (1975), Rieger (1976), Štys and Jansson (1988), Mahner (1993), Andersen (1995), Polhemus *et al.* (1995) and Hebsgaard *et al.* (2004). Since, no comprehensive data is available on the truly aquatic bug fauna of the country, information on 10 families (except Ponotamocoridae) containing 34 genera and 153 species is presented in this work.

The earlier knowledge on Indian aquatic bugs is mainly limited to taxonomic preliminaries by Distant (1903, 1906, 1910), Annandale (1919), Paiva (1919a & b), Dover (1928), Hutchinson (1933, 1940), Hafiz & Mathai (1938), Hafiz & Riberio (1939), Hafiz & Pradhan (1947) and Pradhan (1950). The revisionary work of Lundblad (1933b), Chen (1960) and Wróblewski (1960, 1968 & 1972) on the genus *Micronecta* (Corixidae), Todd (1955) on the genus *Nerthra* (Gelastocoridae), Esaki & China (1928), Polhemus (1990) and Papáček & Zettel (2003 & 2004) on the family Helotrephidae, Polhemus & Polhemus (1988) on Aphelocheiridae, La Rivers (1971a & b, 1974) on Naucoridae, Lansbury (1972, 1973a & b) on the genera *Ranatra Montonepa* and *Cercotmetus* (Nepidae), Hungerford (1933), Brooks (1951) and Lansbury (1968) on the genera *Notonecta*, *Anisops*, *Enithares* (Notonectidae) and Jaczewski (1934), Kormilev (1971) on the family Ochteridae of the World are noteworthy to understand the nepomorphan fauna of India. Consolidated information throwing light on the occurrence as well the present status of aquatic bugs in India pertains to the works of Bal & Basu (1994, 1997, 2000a & b, 2002, 2003 & 2004), Ghosh *et al.* 1989, 2005), Nahar (2004), Papáček & Zettel (2001), Polhemus & Starmuhlner (1990), Ramakrishna (2000), Ravishankar & Venkatesan (1988), Thirumalai (1983, 1986, 1989, 1994, 1997, 1999 a & b, 2001, 2002, 2004 & 2006), Thirumalai & Raghunathan (1988), Thirumalai & Radhakrishnan (1999), Thirumalai & Sharma (2002a & b, 2005), Thirumalai & Suresh Kumar (2005 & 2006), Thirumalai *et al.* (2002, 2004, 2005 & 2006), Varshney (1995), Venkatesan & Rao (1980) and Zettel (1977 a & b, 1998, 2000 & 2001).

Nepomorphan bugs occupy diverse ecological niches ranging from salt-water pools to mountain lakes, hot springs, torrential streams and rivers. Based on their ecology, aquatic bugs can be grouped as follows :

Family	Habitat
APHELOCHEIRIDAE	(bottom bugs) Lentic & lotic
BELOSTOMATIDAE	(giant water bugs)-ponds, admist aquatic vegetation
CORIXIDAE	(water boatman)-fresh & brackish lentic waters
GELASTOCORIDAE	(toad bugs)-shorelines, admist mud & plant debris
HELOTREPHIDAE	(Beetle back swimmers) ponds & lakes, on aquatic vegetation
NAUCORIDAE	(Pigmy/creeping water bugs)-lentic & lotic, admist stones & aquatic vegetation
NEPIDAE	(water scorpions)-ponds, on aquatic vegetation
NOTONECTIDAE	(backswimmers)-ponds and lakes
OCHTERIDAE	(shore bugs)-stream margins, on pond vegetation
PLEIDAE	(pygmy backswimmers) ponds & lakes, on aquatic vegetation

Out of the 11 globally recognised families, one family viz Pontamocoridae is not represented in India. Results on the present study revealed information pertaining to 153 species (7.6% of the global species) (5 species under 1 genera of Aphelocheiridae, 6 in 2 of Belostomatidae, 48 in 8 of Corixidae, 4 in 1 of Gelastocoridae, 13 in 6 of Helotrephidae, 17 in 6 of Naucoridae, 24 in 4 of Nepidae, 31 in 4 of Notonectidae, 1 in 1 of Ochteridae and 4 in 1 of Pleidae) of Nepomorpha from India. Currently valid names together with synonyms and state-wise distributional data of each taxon are provided.

### HIGHER CLASSIFICATION OF NEPOMORPHA

Order HEMIPTERA

Suborder HETEROPTERA

Infraorder NEPOMORPHA POPOV, 1968

(After Andersen, 1995; Mahner, 1993; Polhemus, *et al.*, 1995; Hebsgaard *et al.*, 2004)

Superfamily NEPOIDEA Latreille, 1802

Family NEPIDAE Latreille, 1802

- Subfamily NEPINAЕ Latreille, 1802
  - Tribe **Curictini\*** Menke & Stange, 1964
  - Tribe **Nepini** Latreille, 1802
- Subfamily RANATRINAE Douglas & Scott, 1865
  - Tribe **Austronepini\*** Menke & Stange, 1964
  - Tribe **Goondnomdanepini\*** Lansbury, 1974
  - Tribe **Ranatrini** Douglas & Scott, 1865
- Family BELOSTOMATIDAE Leach, 1815
- Subfamily BELOSTOMATINAE Leach, 1815
- Subfamily HORVATHINIINAE\* Lauck & Menke, 1961
- Subfamily LETHOCERINAE Lauck & Menke, 1961
- Superfamily OCHTEROIDEA Kirkaldy, 1906
  - Family GELASTOCORIDAE Kirkaldy, 1897
  - Subfamily GELASTOCORINAE\* Kirkaldy, 1897
  - Subfamily NERTHRINAE Kirkaldy, 1906
  - Family OCHTERIDAE Kirkaldy, 1906
- Superfamily CORIXOIDEA Leach, 1815
  - Family CORIXIDAE Leach, 1815
  - Subfamily CORIXINAE Leach, 1815
    - Tribe **Agraptocorixini** Hungerford, 1948
    - Tribe **Corixini** Leach, 1815
    - Tribe **Glaenocorisini\*** Hungerford, 1948
    - Tribe **Graptocorixini\*** Hungerford, 1948
- Subfamily CYMATIAINAE Walton, 1940
- Subfamily DIAPREPOCORINAE\* Lundblad, 1928

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\* Not represented in India

Subfamily HETEROCORIXINAE\* Hungerford, 1948

♣ Subfamily MICRONECTINAE Jaczewski, 1924

Subfamily STENOCORIXINAE\* Hungerford, 1948

♣ **Raised to the family level by Nieser (2002).**

Superfamily NAUCOROIDEA Leach, 1815

Family APHELOCHEIRIDAE Fieber, 1851

Family POTAMOCORIDAE\* Usinger, 1941

Family NAUCORIDAE Leach, 1815

Subfamily CHEIROCHELINAE Montandon, 1897

Tribe **Cheirochelini** Montandon, 1897

Tribe **Sagocorini\*** La Rivers, 1971

Tribe **Tanycricini\*** La Rivers, 1971

Subfamily CRYPHOCRICINAE\* Montandon, 1897

Tribe **Ambrysini\*** Usinger, 1941

Tribe **Cataractocorini\*** Popov, 1970

Tribe **Cryphocricini\*** Montandon, 1897

Subfamily LACCOCORINAE Stal, 1876

Subfamily LIMNOCORINAE\* Stal, 1876

Subfamily NAUCORINAE Leach, 1815

Tribe **Naucorini** Leach, 1815

Superfamily NOTONECTOIDEA Latreille, 1802

Family NOTONECTIDAE Latreille, 1802

Subfamily ANISOPINAE Hutchinson, 1929

Tribe **Anisopini** Hutchinson, 1929

Subfamily **Notonectinae** Latreille, 1802

Tribe **Aphelonectini\*** Lansbury, 1965

Tribe **Notonectini** Latreille, 1802

- Tribe **Nychiini** Hungerford, 1933
- Superfamily PLEOIDEA Fieber, 1851
- Family PLEIDAE Fieber, 1851
- Family HELOTREPHIDAE Esaki & China, 1927
- Subfamily FISCHEROTREPHINAE Zettel, 1994
- Subfamily HELOTREPHINAE Esaki & China, 1927
- Tribe HELOTREPHINI Polhemus, 1990
- Tribe **Limnotrephini** Polhemus, 1990
- Subfamily IDIOCORINAE\* Esaki & China, 1927
- Subfamily NEOTREPHINAE\* China, 1940
- Subfamily TREPOTOMASINAE\* Papáček, Stys & Tonner, 1988

#### SYNOPTIC LIST OF INFRAORDER NEPOMORPHA

- Superfamily NEPOIDEA Latreille, 1802
- Family NEPIDAE Latreille, 1802
- Subfamily NEPINAE Latreille, 1802
- Tribe **Nepini** Latreille, 1802
- Genus *Laccotrephes* Stål, 1866
- Subgenus *Laccotrephes* Stål, 1866

##### 1. *Laccotrephes elongatus* Montandon, 1907

1907b. *Laccotrephes elongatus* Montandon, *Bull. Soc. Sci. Bucarest*, **15** : 330.

1910. *Laccotrephes elongatus* Montandon : Distant, *Fauna British India*, **5** : 313.

*Distribution* : (1) Maharashtra; (2) West Bengal.

##### 2. *Laccotrephes fabricii fabricii* Stål, 1866

*Note* : Polhemus *et al.* (1995) doubts the record by Brown (1951) from India.

##### 3. *Laccotrephes griseus* (Güerin-Méneville, 1844)

1844. *Nepa griseus* Güerin- Méneville, *Iconogr. Regne. Anim. Ins.*, 352.

1910. *Laccotrephes griseus* (Güerin- Méneville) : Distant, *Fauna British India*, **5** : 314.

1947. *Laccotrephes griseus* (Güerin- Méneville) : Hafiz & Pradhan, *Rec. Indian Mus.*, **45** : 363.

1988. *Laccotrephes griseus* (Güerin- Méneville) : Ravishankar and Venkatesan, *Entomon*, **13** : 227.

1989. *Laccotrephes griseus* (Güerin- Méneville) : Thirumalai, *Rec. zool. Surv. India, Occ. Pap. No.*, **118** : 28.

1994. *Laccotrephes griseus* (Güerin- Méneville) : Thirumalai, *Rec. zool. Surv. India, Occ. Pap. No.*, **165** : 21.  
 2001. *Laccotrephes griseus* (Güerin- Méneville) : Thirumalai, *ZSI, Fauna of Conservation Area*, **11** : 118.  
 2004. *Laccotrephes griseus* (Güerin- Méneville) : Thirumalai, *Rec. zool. Surv. India*, **102** : 66.  
 2005. *Laccotrephes griseus* (Güerin- Méneville) : Thirumalai & Suresh Kumar, *Rec. zool. Surv. India*, **105** : 11.

*Distribution* : (1) Andhra Pradesh; (2) Arunachal Pradesh; (3) Assam; (4) Bihar; (5) Chandigarh; (6) Delhi; (7) Gujarat; (8) Himachal Pradesh; (9) Karnataka; (10) Kerala; (11) Madhya Pradesh; (12) Maharashtra; (13) Manipur; (14) Meghalaya; (15) Nagaland; (16) Orissa; (17) Pondicherry; (18) Punjab; (19) Rajasthan; (20) Tamilnadu; (21) Tripura; (22) Uttar Pradesh; (23) West Bengal.

#### 4. *Laccotrephes grossus* (Fabricius, 1787)

1787. *Nepa grossa* Fabricius, *Mantissa insectorum*, **2** : 277.  
 1934. *Laccotrephes grossus* (Fabricius) : Lundblad, *Arch. Hydrobiol. Suppl.*, **12** : 21.  
 1995. *Laccotrephes grossus* (Fabricius) : Polhemus *et al*, *Cat. Het. Palaearctic region*, **1** : 15.  
 1999. *Laccotrephes grossus* (Fabricius) : Polhemus & Keffer, *J. New York Entomol. Soc.*, **107** : 2-3.  
 2005. *Laccotrephes grossus* (Fabricius) : Nieser *et al.*, *Raff. Bull. Zoology*, **53** : 203.  
 1787. *Nepa rubra* Fabricius, *Mantissa insectorum*, **2** : 277.  
 1888. *Nepa kohlii* Ferrari, *Ann. Naturhist. Mus. Wien*, **3** : 181.

*Distribution* : Tamilnadu.

#### 5. *Laccotrephes maculatus* (Fabricius, 1775)

1775. *Nepa maculata* Fabricius, *Syst. Ent.* **30** : 692.  
 1868. *Laccotrephes maculatus* (Fabricius) : Stål, *K.Svenska Vetensk. Akad.*, **7** : 135.  
 1906. *Laccotrephes maculatus* (Fabricius). Distant, *Fauna British India*, **3** : 19.  
 1994. *Laccotrephes maculatus* (Fabricius) : Bal & Basu, *Zool. Surv. India, State Fauna*, **3** : 541.  
 1995. *Laccotrephes maculatus* (Fabricius) : Polhemus *et al.*, *Cat. Het. Palaearctic region*, **1** : 15.

*Distribution* : (1) Assam; (2) Maharashtra; (3) West Bengal.

**Note** : Polhemus *et al.*, (1995) consider *Laccotrephes chinensis* (Hoffmann, 1925) a synonym of *L. maculatus*

#### 6. *Laccotrophès pfeiferiae* (Ferrari, 1888)

1888. *Nepa pfeiferiae* Ferrari, *Ann. Natu rhist. Mus. Wien*, **3** : 187.  
 1906. *Laccotrephes robustus* Stål : Distant, *Fauna British India*, **3** : 18.  
 1934. *Laccotrephes robustus* Stål : Lundblad, *Arch. Hydrobiol. Suppl.*, **12** : 26.  
 1995. *Laccotrephes robustus* Stål : Polhemus *et al*, *Cat. Het. Palaearctic region*, **1** : 15.  
 1999. *Laccotrephes pfeiferiae* (Ferrari) : Polhemus & Keffor, *J. New York Entomol. Soc.*, **107** : 2.

2005. *Laccotrephes pfeiferiae* (Ferrari) : Nieser *et al.*, *Raff. Bull. Zoology*, **53** : 203.

*Distribution* : Nagaland.

### 7. *Laccotrephes ruber* (Linnaeus, 1764)

1764. *Nepa ruber* Linnaeus, *Mus. Lud. Ulr.*, 165.

1906. *Laccotrephes ruber* (Linn.) : Distant, *Fauna Brit. India*, **3** : 18.

1947. *Laccotrephes ruber* (Linn.) : Hafiz & Pradhan, *Rec. Indian Mus.*, **45** : 364.

1981. *Laccotrephes robustus* Stål : Selvanayagam & Rao, *J. Bombay, Nat. Hist.*, **78** : 621

1989. *Laccotrephes ruber* (Linn.) : Thirumalai, *Rec. zool, Surv. India, Occ. Pap. No.*, **118** : 29.

1994. *Laccotrephes ruber* (Linn.) : Thirumalai, *Rec. zool, Surv. India, Occ. Pap. No.*, **165** : 22.

2004. *Laccotrephes ruber* (Linn.) : Bal & Basu, *Zool. Surv. India, State Fauna*, **10** : 298.

2006. *Laccotrephes ruber* (Linn.) : Thirumalai & Suresh Kumar, *Rec. zool. Surv. India*, **105** : 11.

*Distribution* : (1) Andhra Pradesh; (2) Arunachal Pradesh; (3) Assam; (4) Bihar; (5) Chandigarh; (6) Delhi; (7) Gujarat; (8) Himachal Pradesh; (9) Jammu and Kashmir; (10) Karnataka; (11) Kerala; (12) Madhya Pradesh; (13) Maharashtra; (14) Manipur; (15) Meghalaya; (16) Nagaland; (17) Orissa; (18) Punjab; (19) Sikkim; (20) Tamilnadu; (21) Tripura; (22) Uttar Pradesh. (23) West Bengal.

**Note** : The genus *Laccotrephes* needs revision as many identifications and records are suspect (Polhemus *et al*, 1995).

### Genus *Montonepa* Lansbury, 1973

#### 8. *Montonepa erutus* (Montandon, 1910)

1910b. *Borborophes erutus* Montandon, *Ann. Mus. Nat. Hung.*, **8** : 164.

1910. *Borborophes erutus* Montandon : Distant, *Fauna British India*, **5** : 315.

1973a. *Montonepa erutus* (Montandon) : Lansbury, *Zoologica Scripta*, **2** : 111.

*Distribution* : Meghalaya.

Subfamily RANATRINAE Douglas & Scott, 1865

Tribe **Ranatrini** Douglas & Scott, 1865

Genus *Cercotmetus* Amyot & Serville, 1843

#### 9. *Cercotmetus asiaticus* Amyot & Serville, 1843

1843. *Cercotmetus asiaticus* Amyot & Serville, *Histoire naturelle des insectes, Hemipteres*, Paris, 441.

1903a. *Cercotmetus asiaticus* Amyot & Serville : Montandon, *Bull. Soc. Sci. Bucarest*, **12** : 107.

1934. *Cercotmetus asiaticus* Amyot & Serville : Lundblad, *Arch. Hydrobiol. Suppl.*, **12** : 45.

1973b. *Cercotmetus asiaticus* Amyot & Serville : Lansbury, *Tijdschrift Voor Entomol.*, **116** : 89.

*Distribution* : Kerala.

### 10. *Cercotmetus brevipes* Montandon, 1909

1909. *Cercotmetus brevipes* Montandon, *Annl. Hist. Nat. Mus. nat. Hung.*, **7** : 65.  
 1934. *Cercotmetus brevipes* Montandon : Lundblad, *Arch. Hydrobiol. Suppl.*, **12** : 48.  
 1973b. *Cercotmetus brevipes* Montandon : Lansbury, *Tijdschrift Voor Entomol.*, **116** : 92.  
 1995. *Cercotmetus brevipes* Montandon : Polhemus *et al.*, *Cat. Het. Palaearctic region.* **1** : 17.

*Distribution* : (1) Assam; (2) Kerala; (3) Madhya Pradesh; (4) Meghalaya.

### 11. *Cercotmetus fumosus* Distant, 1904

1904. *Cercotmetus fumosus* Distant, *Entomologist*, **37** : 278.  
 1906. *Cercotmetus fumosus* Distant : *Fauna Brit. India*, **3** : 23.  
 1947. *Cercotmetus fumosus* Distant : Hafiz & Pradhan, *Rec. Indian Mus.*, **45** : 361.  
 1973b. *Cercotmetus fumosus* Distant : Lansbury, *Tijdschrift Voor Entomol.*, **116** : 100.  
 2001. *Cercotmetus fumosus* Distant : Thirumalai, ZSI, *Fauna of Conservation Area*, **11** : 118.

*Distribution* : (1) Bihar; (2) Himachal Pradesh; (3) Madhya Pradesh (4) Punjab; (5) Tamilnadu; (6) Uttar Pradesh.

### 12. *Cercotmetus pilipes* (Dallas) 1850

1850. *Ranatra (Cercotmetus) pilipes* Dallas, *Trans. R. ent. Soc. Lond.*, **1** : 9.  
 1903a. *Cercotmetus pilipes* ( Dallas) : Montandon, *Bull. Soc. Sci. Bucarest*, **12** : 110.  
 1906. *Cercotmetus pilipes* ( Dallas) : Distant, *Fauna Brit. India*, **3** : 23.  
 1918. *Cercotmetus pilipes* ( Dallas) : Paiva, *Rec. Indian Mus.*, **14** : 26.  
 1973b. *Cercotmetus pilipes* ( Dallas) : Lansbury, *Tijdschrift Voor Entomol.*, **116** : 99.  
 1984. *Cercotmetus pilipes* ( Dallas) : Nirmala Kumari & Nair, *Rec. zool. Surv. India*, **81** : 395.  
 1997. *Cercotmetus pilipes* ( Dallas) : Bal & Basu, *Zool. Surv. India, State Fauna Series*, **6** : 267.

*Distribution* : (1) Delhi; (2) Karnataka; (3) Kerala.

Genus *Ranatra* Fabricius, 1790

Subgenus *Ranatra* Fabricius, 1790

### 13. *\*Ranatra chinensis* Mayr, 1865

1865. *Ranatra chinensis* Mayr. *Verh.zool.-bot. Ges. Wien*, **15** : 446.  
 1972. *Ranatra chinensis* Mayr : Lansbury, *Trans. R. ent. Soc. Lond.*, **124** : 306.  
 1995. *Ranatra chinensis* Mayr : Polhemus *et al.*, *Cat. Het. Palaearctic region*, **1** : 17.

\*Polhemus *et al.*, (1995) in his catalogue of the Heteroptera of the Palaearctic region stated that *R. chinensis* is found in India.

14. *Ranatra digitata* Hafiz & Pradhan, 1947

1947. *Ranatra digitata* Hafiz & Pradhan, *Rec. Indian Mus.*, **45** : 361.

1972. *Ranatra digitata* Hafiz & Pradhan : Lansbury, *Trans. R. ent. Soc. Lond.*, **124** : 337.

Distribution: (1) Bihar; (2) Haryana; (3) Himachal Pradesh; (4) Madhya Pradesh; (5) West Bengal.

15. *Ranatra distanti* Montandon, 1910

1910a. *Ranatra distanti* Montandon, *Bull. Soc. Sci. Bucarest*, **19** : 652.

1910. *Ranatra distanti* Montandon : Distant, *Fauna British India*, **5** : 317.

1972. *Ranatra distanti* Montandon : Lansbury, *Trans. R. ent. Soc. Lond.*, **124** : 296.

1990. *Ranatra distanti* Montandon : Polhemus & Starmuhlner, *Ann. Naturhist. Mus. Wien*, **91** : 44.

*Distribution* : Andaman & Nicobar Islands.

16. *Ranatra elongata* Fabricius, 1790

1790. *Ranatra elongata* Fabricius, *Skrif. Nat. Selesk.*, **1** : 228.

1906. *Ranatra elongata* Fabricius : Distant, *Fauna Brit. India*, **3** : 18.

1947. *Ranatra elongata* Fabricius : Hafiz & Pradhan, *Rec. Indian Mus.*, **45** : 368.

1972. *Ranatra elongata* Fabricius : Lansbury, *Trans. R. Ent. Soc. Lond.*, **124** : 306.

1994. *Ranatra elongata* Fabricius : Thirumalai, *Rec. zool. Surv. India, Occ. Pap. No.*, **165** : 22.

2001. *Ranatra elongata* Fabricius : Thirumalai, *Fauna conservation area*, **11** : 118.

2004. *Ranatra elongata* Fabricius : Thirumalai, *Rec. zool. Surv. India*, **102** (1-2) : 66.

*Distribution* : (1) Andhra Pradesh; (2) Arunachal Pradesh; (3) Bihar; (4) Chandigarh; (5) Delhi; (6) Himachal Pradesh; (7) Jammu & Kashmir; (8) Karnataka; (9) Kerala; (10) Madhya Pradesh; (11) Maharashtra; (12) Orissa; (13) Pondicherry; (14) Punjab; (15) Rajasthan; (16) Tamilnadu; (17) Tripura; (18) Uttar Pradesh; (19) West Bengal.

17. *Ranatra feana* Montandon, 1903

1903b. *Ranatra feana* Montandon, *Bull. Soc. Ent. Ital.*, **35** : 23.

1906. *Ranatra feana* Montandon : Distant, *Fauna Brit. India*, **3** : 21.

1972. *Ranatra feana* Montandon : Lansbury, *Trans. R. ent. Soc. Lond.*, **124** : 311.

1998. *Ranatra feana* Montandon : Nieser & Polhemus, *Amemboa*, **2** : 22.

*Distribution* : (1) Assam; (2) Haryana.

18. *Ranatra filiformis* Fabricius, 1790

1790. *Ranatra filiformis* Fabricius, *Skrit. Nat. Selsk.*, **1** : 228.

1906. *Ranatra filiformis* Fabricius : Distant, *Fauna British India*, **3** : 21.

1972. *Ranatra filiformis* Fabricius : Lansbury, *Trans. R. Ent. Soc. Lond.*, **124** : 321.  
 1994. *Ranatra filiformis* Fabricius : Thirumalai, *Rec. zool. Surv. India, Occ. Pap. No.*, **165** : 22.  
 1997. *Ranatra filiformis* Fabricius : Bal & Basu, *Zool. Surv. India, State Fauna Series*, **6** : 266.  
 2001. *Ranatra filiformis* Fabricius : Thirumalai, *ZSI, Fauna of Conservation Area*, **11** : 118.  
 1860. *Ranatra sordidula* Dohrn, *Stett. ent. Zeit.*, **21** : 409  
 1906a. *Ranatra sordidula* Dohrn : Distant, *Fauna British India*, **3** : 22.

*Distribution* : (1) Andhra Pradesh; (2) Arunachal Pradesh; (3) Assam; (4) Bihar; (5) Chandigarh; (6) Delhi; (7) Gujarat; (8) Himachal Pradesh; (9) Karnataka; (10) Kerala; (11) Maharashtra; (12) Madhya Pradesh; (13) Manipur; (14) Meghalaya; (15) Orissa; (16) Pondicherry; (17) Punjab; (18) Rajasthan; (19) Tamilnadu; (20) Tripura; (21) Uttar Pradesh; (22) West Bengal.

### 19. *Ranatra gracilis* Dallas, 1850

1850. *Ranatra gracilis* Dallas, *Trans. R. Ent. Soc. Lond.*, **1** : 10.  
 1906a. *Ranatra gracilis* Dallas : Distant, *Fauna British India*, **3** : 22.  
 1972. *Ranatra gracilis* Dallas : Lansbury, *Trans. R. Ent. Soc. Lond.*, **124** : 299.  
 2000. *Ranatra gracilis* Dallas : Ramakrishna., *Rec. zool. Surv. India*, **98** : 183. (Identification doubtful)  
 2004. *Ranatra gracilis* Dallas : Bal & Basu, *Zool. Surv. India, State Fauna*, **10** : 299.

*Distribution* : (1) Assam; (2) Manipur; (3) Meghalaya.

### 20. *Ranatra longipes thai* Lansbury, 1972

1861. *Ranatra longipes* Stål, *Ofv. Vet.-Ak. Forh.*, **18** : 203.  
 1910. *Ranatra longipes* Stål : Distant, *Fauna British India*, **5** : 315.  
 1934. *Ranatra longipes* Stål : Lundblad, *Arch. Hydrobiol. Suppl.*, **12** : 30.  
 1939. *Ranatra longipes* Stål : Hafiz & Ribeiro, *Rec. Indian Mus.*, **41**(4) : 431.  
 1972. *Ranatra longipes thai* Lansbury, *Trans. R. Ent. Soc. Lond.*, **124** : 334.  
 1998. *Ranatra longipes thai* Lansbury : Nieser & Polhemus, *Amemboa*, **2** : 22.

*Distribution* : (1) Assam; (2) Bihar; (3) Meghalaya; (4) Uttar Pradesh; (5) West Bengal.

### 21. *Ranatra parmata* Mayr, 1865

1865. *Ranatra parmata* Mayr, *Verh.zool.-bot.Ges.Wien*, **15** : 446.  
 1934. *Ranatra parmata* Mayr : Lundblad, *Arch. Hydrobiol. Suppl.*, **12** : 42.  
 1972. *Ranatra parmata* Mayr : Lansbury, *Trans. R. Ent. Soc. Lond.*, **124** : 298.  
 1990. *Ranatra parmata* Mayr : Polhemus & Starmuhlner, *Ann. Naturhist. Mus. Wien*, **91** : 44.

*Distribution* : (1) Andaman & Nicobar Islands.

**22. *Ranatra titilaensis* Hafiz & Pradhan, 1947**

1947. *Ranatra titilaensis* Hafiz & Pradhan, *Rec. Indian Mus.*, (45) : 369.  
 1972. *Ranatra titilaensis* Hafiz & Pradhan : Lansbury, *Trans. R. Ent. Soc. Lond.*, 124 : 338.

*Distribution* : (1) Bihar and (2) Madhya Pradesh.

**23. *Ranatra varipes atropa* Montandon, 1903**

- 1903a. *Ranatra atropa* Montandon, *Bull. Soc. Sci. Bucarest*, 12 : 105.  
 1907a. *Ranatra varipes atropa* Montandon, *Ann. Soc. Ent. France*, 76 : 57.  
 1972. *Ranatra varipes* var *atropa* Mayr : Lansbury, *Trans. R. Ent. Soc. Lond.*, 124 : 317.  
 1998. *Ranatra varipes atropa* Montandon : Nieser & Polhemus, *Amemboa*, 2 : 22.  
 2005. *Ranatra varipes atropa* Montandon : Thirumalai & Suresh Kumar, *Rec. zool. Surv. India*, 105 : 12.

*Distribution* : (1) Assam; (2) Bihar; (3) Karnataka; (4) Madhya Pradesh; (5) Pondicherry; (6) Tamilnadu.

**24. *Ranatra varipes varipes* Stål, 1861**

1861. *Ranatra varipes* Stål, *Ofvers. K. Vetensk. Akad. Forh.*, 18 : 203.  
 1972. *Ranatra varipes* Stål : Lansbury, *Trans. R. Ent. Soc. Lond.*, 124 : 316.  
 1998. *Ranatra varipes varipes* Stål : Nieser & Polhemus, *Amemboa*, 2 : 22.

*Distribution* : (1) Bihar; (2) Maharashtra; (3) Manipur; (4) Meghalaya; (5) Orissa; (6) Pondicherry; (7) Tamilnadu; (8) Uttar Pradesh; (9) West Bengal.

Family BELOSTOMATIDAE Leach, 1815

Subfamily BELOSTOMATINAE Leach, 1815

Genus *Diplonychus* Laporte, 1833

**25. *Diplonychus annulatus* (Fabricius, 1781)**

1781. *Nepa annulata* Fabricius, *Carol. Ernest. Bokhni. Hamburgi et Kiloni*, 333.  
 1833. *Sphaerodema rotundata* Laporte, *Systematique Hemipteres, zoologie, Paris* : 18.  
 1863. *Sphaerodema annulatum* (Fabricius) : Dufour, *Ann. Soc. Entomol. France*, 4 (3) : 397.  
 1906. *Sphaerodema annulatum* (Fabricius) : Distant, *Fauna British India*, 3 : 35.  
 1947. *Sphaerodema annulatum* (Fabricius) : Hafiz and Pradhan, *Rec. Indian Mus.*, 45 : 375.  
 1985. *Abedus sangameshwari* Rupavathi *Ph.D Dissertation, Nagarjuna University, Andhra Pradesh*, 169.  
 1994. *Sphaerodema annulatum* (Fabricius) : Agarker et al *Bionature*, 14 : 77.  
 1995. *Diplonychus annulatus* (Fabr.) : Polhemus et al, *Proc. Entomol. Soc. Washington*, 97 : 651.  
 2002. *Diplonychus annulatus* (Fabr.) : Thirumalai, Metha & Sharma, *Res. Bull. Panjab Univ.*, 52 : 157.

1832. *Belostoma marginata* Gray, *Griffith's Animal King., Insecta., 2* : 248.

*Distribution* : (1) Andhra Pradesh; (2) Assam; (3) Bihar; (4) Chandigarh; (5) Delhi; (6) Gujarat; (7) Kerala; (8) Madhya Pradesh; (9) Maharashtra; (10) Orissa; (11) Punjab; (12) Rajasthan; (13) Tamilnadu; (14) Uttar Pradesh; (15) West Bengal.

### 26. *Diplonychus molestus* (Dufour, 1863)

1863. *Appasus molestum* Dufour, *Ann. Soc. Ent. France*, **4** (3) : 395.

1871. *Diplonychus molestum* (Dufour) : Mayr, *Verh. Zool.-bot. Ges. Wien*, **21** : 437.

1871. *Diplonychus subrhombeus* Mayr, *Verh. Zool.-bot. Ges. Wien*, **21** : 437.

1906. *Sphaerodema molestum* (Dufour) : Distant, *Fauna British India Rhyn.*, **3** : 36.

1947. *Sphaerodema molestum* (Dufour) : Hafiz and Pradhan, *Rec. Indian Mus.*, **45** : 374.

2000. *Diplonychus molestms* (Dufour) : Ramakrishna, *Rec. zool. Surv. India*, **98** : 183.

2002. *Diplonychus molestus* (Dufour) : Thirumalai, Metha & Sharma, *Res. Bull. Panjab Univ.*, **52** : 157.

2004. *Diplonychus molestus* (Dufour) : Bal & Basu, *Zool. Surv. India, State Fauna Series*, **10** : 302.

*Distribution* : (1) Andhra Pradesh; (2) Bihar; (3) Chandigarh; (4) Delhi; (5) Himachal Pradesh; (6) Jammu & Kashmir; (7) Kerala; (8) Madhya Pradesh; (9) Maharashtra; (10) Manipur; (11) Orissa; (12) Punjab; (13) Tripura; (14) Uttar Pradesh; (15) West Bengal.

### 27. *Diplonychus rusticus* (Fabricius, 1781)

1781. *Nepa rustica* Fabricius, *Species insectorum*, **2** : 333.

1868. *Diplonychus rusticus* (Fab.) : Mayr *Zoolog. TeilWien*, 188.

1871. *Diplonychus rusticum* (Fab.) : Mayr, *Verh.zool.-bot.Ges.Wien*, **21** : 437.

1906. *Sphaerodema rusticum* (Fab.) : Distant, *Fauna British India*, **3** : 36.

1915. *Sphaerodema rustica* (Fab.) : Bergroth, *J. Bombay nat. Hist.*, **24** : 179.

1934. *Diplonychus rusticum* (Fab.) : Lundblad, *Arch. Hydrobiol. Suppl.*, **12** : 55.

1947. *Diplonychus rusticum*( Fab.) : Hafiz & Pradhan, *Rec. Indian Mus.*, **45** : 374.

1961. *Diplonychus rusticus* (Fab.) : Lauck & Menke, *Ann. Entomol. Soc. Amer.*, **54** : 649.

1980. *Diplonychus indicus* Venkatesan & Rao, *J. Bombay. Nat. Hist. Soc.* **77** : 299.

1994. *Diplonychus rusticus* (Fab.) : Thirumalai, *Rec. zool. Surv. India, Occ. Pap. No.*, **165** : 25.

1995. *Diplonychus rusticus* (Fab.) : Polhemus *et al*, *Proc. Entomol. Soc. Wash.*, **97** : 651.

2005. *Diplonychus rusticus* (Fab.) : Thirumalai & Suresh Kumar, *Rec. zool. Surv. India*, **105** : 13.

1776. *Nepa plana* Sulzer, *abgek. Gesch. Insect*, 92.

1863. *Appasus marginicollis* Dufour, *Ann. Soc. Ent. France*, **4** (3) : 393.

*Distribution* : (1) Andaman & Nicobar Island; (2) Andhra Pradesh; (3) Arunachal Pradesh; (4) Assam; (5) Bihar; (6) Chandigarh; (7) Delhi; (8) Goa; (9) Gujarat; (10) Himachal Pradesh;

(11) Jammu & Kashmir; (12) Karnataka; (13) Kerala; (14) Madhya Pradesh; (15) Maharashtra; (16) Manipur; (17) Meghalaya; (18) Orissa; (19) Pondicherry; (20) Punjab; (21) Rajasthan; (22) Tamilnadu; (23) Tripura; (24) Uttar Pradesh; (25) West Bengal.

**Note :** Polhemus & Kerzhner (1995) have requested the ICZN to suppress all usage including homonymy of the species group name *Nepa rustica* Fabricius before 1781 as all references to the name before that date refer to a new world species presumably *Belostoma stollii* (Amyot & Seville, 1843) and also to suppress the species group name *Nepa plana* Sulzer, 1776 in order to conserve *Nepa rustica* (Fabricius, 1781).

Subfamily LETHOCERINAE Lauck & Menke, 1961

Genus *Lethocerus* Mayr, 1853

Subgenus *Lethocerus* Mayr, 1853

28. *Lethocerus deyrolli* (Vuillefroy, 1864)

1864. *Belostoma deyrolli* Vuillefroy, *Ann. Soc. Ent. France*, **4** : 141.  
 1871. *Belostoma deyrollei* Vuillefroyi : Mayr, *Verh. Zool.-bot. Ges. Wien*, **21** : 424.  
 1871. *Belostoma aberrans* Mayr, *Verh. Zool.-bot. Ges. Wien*, **21** : 424.  
 1910. *Belostoma deyrollei* Vuillefroy : Distant, *Fauna British India*, **5** : 328.  
 1934. *Kirkaldyia deyrollei* (Vuillefroy) : Lundblad, *Arch. Hydrobiol. Suppl.*, **12** : 51.  
 1934. *Kirkaldyia deyrollei aberrans* (Vuillefroy) : Lundblad, *Arch. Hydrobiol. Suppl.*, **12** : 51.  
 1995. *Lethocerus deyrolli* (Vuillefroy) : Polhemus *et al*, *Cat. Het. Palaerctic region*, **1** : 22.

*Distribution* : Assam.

29. *Lethocerus indicus* (Lepeletier & Serville, 1825)

1825. *Belostoma indica* Lepeletier & Serville, *Encycl. Meth.*, **X** : 272.  
 1871. *Belostoma indicum* Lepeletier & Serville : Mayr, *Verh. Zool.-bot. Ges. Wien*, **21** : 426.  
 1906. *Belostoma indicum* (Lepeletier & Serville) : Distant, *Fauna British India*, **3** : 38.  
 1911. *Belostoma indica* Lepeletier & Serville : D'Abreu, *J. Bombay nat. Hist.*, **20** : 883.  
 1927. *Lethocerus indicus* (Lep. & Serv.) : Torre-Bueno *Bull. Brooklyn Entomol. Soc.*, **22** : 30.  
 1934. *Lethocerus indicus* (Lep. & Serv.) : Lundblad, *Arch. Hydrobiol. Suppl.*, **12** : 52.  
 1939. *Lethocerus indicus* (Lep. & Serv.) : Hafiz & Ribeiro, *Rec. Indian Mus.*, **41**(4) : 432.  
 1995. *Lethocerus indicus* (Lep. & Serv.) : Polhemus *et al*, *Cat. Het. Palaerctic region*, **1** : 23.  
 2004. *Lethocerus indicus* (Lep. & Serv.) : Thirumalai, *Rec. zool. Surv. India*, **102** (1-2) : 67.  
 1901b. *Amorgius indicus* Kirkaldy, *Entomologist*, **34** : 51.

*Distribution* : (1) Andaman & Nicobar Islands; (2) Andhra Pradesh; (3) Arunachal Pradesh; (4) Assam; (5) Bihar; (6) Chandigarh; (7) Delhi; (8) Goa; (9) Gujarat; (10) Himachal Pradesh;

(11) Jammu & Kashmir; (12) Karnataka; (13) Kerala; (14) Madhya Pradesh ; (15) Manipur; (16) Maharashtra; (17) Meghalaya; (18) Mizoram; (19) Orissa ; (20) Pondicherry ; (21) Punjab ; (22) Rajasthan ; (23) Tamilnadu ; (24) Tripura ; (25) Uttar Pradesh; (26) West Bengal.

30. *Lethocerus patruelis* (Stål, 1854)

1854. *Belostoma patruelis* Stål, *Ofversigt af Kongl Vet. Akad. For.*, **11** : 241.

1863. *Belostoma pruinosum* Dufour, *Ann. Soc. Entomol. France*, (4) **3** : 381.

1995. *Lethocerus patruelis* (Stål) : Polhemus, *et al.*, *Cat. Het. Palaerctic region*, **1** : 23.

*Distribution* : Sikkim.

Superfamily OCHTEROIDEA Kirkaldy, 1906

Family GELASTOCORIDAE Kirkaldy, 1897

Subfamily NERTHRINAE Kirkaldy, 1906

Genus *Nerthra* Say, 1832

31. *Nerthra arunachalensis* Thirumalai, 1997

1997. *Nerthra arunachalensis* Thirumalai, *Rec. zool., Surv. India*, **96** : 190.

*Distribution* : Arunachal Pradesh.

32. *Nerthra asiatica* (Horvath, 1892)

1892. *Mononyx asiaticus* Horvath, *Termesztetrajzi Fuzeten*, **15** : 136.

1906. *Mononyx grossus* Montandon : Distant, *Fauna Brit. India*, **3** : 16.

1909. *Nerthra asiaticus* (Horvath) : Oshanin, *Ann. Mus. Zool. Acad. St. Petersburg*, **14** : 956.

1955. *Nerthra asiatica* (Horvath) : Todd, *Kans. Univ. Sci. Bull.*, **36** : 410.

1995. *Nerthra asiatica* (Horvath) : Polhemus *et al.*, *Cat. Heteroptera Palaearctic region*, **1** : 24.

2003. *Nerthra asiatica* (Horvath) : Bal & Basu, *Zool. Surv. India, State Fauna Series*, **9** : 543.

1899. *Mononyx grossus* Montandon, *Bull. Soc. Sci. Bucarest*, **8** : 398.

*Distribution* : (1) Arunachal Pradesh; (2) Sikkim; (3) West Bengal.

33. *Nerthra indica* (Atkinson, 1888)

1888. *Mononyx indicus* Atkinson, *J. Asiat. Soc. Bengal*, **57** : 345.

1899. *Nerthra indicus* (Atkinson) : Montandon, *Bull. Soc. Sci. Bucarest*, **8** : 397.

1906. *Mononyx indicus* Atkinson : Distant, *Fauna Brit. India*, **3** : 15.

1910. *Mononyx turgidulus* Distant, *Fauna Brit. India*, **5** : 311.

1919b. *Mononyx indicus* Atkinson : Paiva, *Rec. Indian Mus.*, **16** : 372.

1955. *Nerthra indica* (Atkinson) : Todd, *Kans. Univ. Sci. Bull.*, **36** : 405.

1955. *Nerthra turgidula* (Distant) : Todd, *Kans. Univ. Sci. Bull.*, **36** : 406.  
 1995. *Nerthra indica* (Atkinson) : Polhemus *et al* *Cat. Heteroptera Palaearctic region*, **1** : 24.  
 1997. *Nerthra indica* (Atkinson) : Thirumalai, *Rec. zool., Surv. India*, **96** : 189.  
 2003. *Nerthra indica* (Atkinson) : Bal & Basu, *Zool. Surv. India, State Fauna Series*, **9** : 544.  
 2003. *Nerthra turgidula* (Distant) : Bal & Basu, *Zool. Surv. India, State Fauna Series*, **9** : 544.  
 1910. *Mononyx projectus* Distant, *Fauna Brit. India*, **5** : 310.

*Distribution* : (1) Assam; (2) Meghalaya; (3) Sikkim; (4) Tamilnadu; (5) West Bengal.

34. *Nerthra spissa* (Distant, 1910)

1910. *Mononyx spissus* Distant, *Fauna Brit. India*, **5** : 312.  
 1955. *Nerthra spissa* (Distant) : Todd, *Kans. Univ. Sci. Bull.*, **36** : 412.  
 1997. *Nerthra spissa* (Distant) : Thirumalai, *Rec. zool., Surv. India*, **96** : 190.

*Distribution* : (1) Arunachal Pradesh; (2) Assam.

Family OCHTERIDAE Kirkaldy, 1906

Genus *Ochterus* Latreille, 1807

Subgenus *Ochterus* Latreille, 1807

35. *Ochterus marginatus marginatus* (Latreille, 1804)

1804. *Acanthia marginata* Latreille, *Hist. Nat. Crust. Ins. Paris*, **12** : 242.  
 1807. *Pelogonus marginatus* Latreille, *Gen. Crust. Ins. Paris*, **3** : 143.  
 1906. *Pelogonus marginatus* (Latreille) : Distant, *Fauna British India*, **3** : 14.  
 1910. *Pelogonus marginatus* (Latreille) : Distant, *Fauna British India*, **5** : 310.  
 1919a. *Pelogonus marginatus* (Latreille) : Paiva, *Rec. Indian Mus.*, **16** : 154.  
 1919b. *Pelogonus marginatus* (Latreille) : Paiva, *Rec. Indian Mus.*, **16** : 372  
 1934. *Ochterus marginatus marginatus* (Latreille) : Jaczewski, *Ann. Mag. nat. Hist.*, **13** : 602.  
 1971. *Ochterus marginatus* (Latreille) : Kormilev, *Pac. Ins.*, **13** : 433.  
 1989. *Ochterus marginatus marginatus* (Latreille) : Thirumalai, *Rec. zool, Surv. India, Occ. Pap. No.*, **118** : 9.  
 1995. *Ochterus marginatus marginatus* (Latreille) : Polhemus *et al*, *Cat. Het. Palaerctic region*, **1** : 23.  
 2001. *Ochterus marginatus marginatus* (Latreille) : Thirumalai, *Fauna Conservation Area Series*, **11** : 113.  
 2004. *Ochterus marginatus* (Latreille) : Bal & Basu, *State Fauna Series*, **10** : 295.  
 1874. *Pelogonus flavomarginatus* Scott, *Ann. Mag. nat. Hist.*, **14** : 446.  
 1915. *Pelogonus formosanus* Matsumura, *Ent. Mag. Kyoto*, **1** : 103.

*Distribution* : (1) Assam; (2) Bihar; (3) Kerala ; (4) Madhya Pradesh; (5) Maharashtra; (6) Manipur; (7) Meghalaya; (8) Orissa; (9) Pondicherry; (10) Tamilnadu; (11) Uttar Pradesh; (12) West Bengal.

**Note** : Mahner (1993) proposed *Palaeochterus* for the Old world species *Ocheterus* with the same type species as the nominotypical subgenus.

Superfamily CORIXOIDEA Leach, 1815

Family CORIXIDAE Leach, 1815

Subfamily CORIXINAE Leach, 1815

Tribe **Agraptocorixini** Hungerford, 1948

Genus **Agraptocorixa** Kirkaldy, 1898

### 36. *Agraptocorixa hyalinipennis hyalinipennis* (Fabricius, 1803)

1803. *Sigara hyalinipennis* Fabricius, *Syst. Rhyn Brusvigae*, 105.
1926. *Agraptocorixa hyalinipennis* (Fabricius) : Jaczewski, *Ann. Zool. Mus. Polon. Warsaw*, **5** : 18.
- 1929b. *Agraptocorixa hyalinipennis* (Fabricius) : Lundblad, *Arch. Hydrbiol. Stuttgart*, **20** : 297.
1933. *Agraptocorixa hyalinipennis* (Fabricius) : Hutchinson, *Rec. Indian Mus.*, **35** : 401.
1934. *Agraptocorixa hyalinipennis* (Fabricius) : Lundblad, *Arch Hydrbiol. Suppl.*, **12** : 678.
1940. *Agraptocorixa (Agraptocorixa) hyalinipennis* (Fabricius) : Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 411.
1989. *Agraptocorixa (Agraptocorixa) hyalinipennis* (Fabricius) : Thirumalai, *Rec. zool. Surv. India, Occ. Pap. No.*, **18** : 11.
1994. *Agraptocorixa (Agraptocorixa) hyalinipennis* (Fabricius) : Thirumalai, *Rec. zool. Surv. India, Occ. Pap. No.*, **165** : 8.
1995. *Agraptocorixa hyalinipennis* (Fabricius) : Polhemus *et al*, *Cat. Het. Palaerctic region*, **1** : 36.
2002. *Agraptocorixa hyalinipennis* (Fabricius) : Thirumalai, Metha & Sharma, *Res. Bull. Panjab Univ.*, **52** : 157.
2004. *Agraptocorixa hyalinipennis* (Fabricius) : Thirumalai, Sureshkumar & Sharma, *Zool. Surv. India, Conservation area Series*, **20** : 243.
1918. *Corixa unicolor* Paiva, *Rec. Indian Mus.*, **14** : 30.
1922. *Corixa paivana* Dover in Paiva & Dover, *Rec. Indian Mus.*, **24** : 333.

*Distribution* : (1) Andhra Pradesh; (2) Arunachal Pradesh; (3) Assam; (4) Chandigarh; (5) Delhi; (6) Gujarat; (7) Himachal Pradesh; (8) Karnataka; (9) Kerala; (10) Maharashtra; (11) Manipur; (12) Orissa; (13) Pondicherry; (14) Punjab; (15) Rajasthan; (16) Tamilnadu; (17) Uttar Pradesh; (18) West Bengal.

Tribe **Corixini** Leach, 1815

Genus **Callicorixa** B-White, 1873

37. **Callicorixa gebleri** (Fieber, 1848)

1848. *Corisa gebleri* Fieber, *Bull. Soc. Nat. Mosc.*, **21** : 522.  
 1909. *Callicorixa gebleri* (Fieber) : Oshanin, *Ann. Mus. Zool. Acad. St. Petersburg*, **14** : 996.  
 1927. *Callicorixa gebleri* (Fieber) : Lundblad, *Ent. Tidskr.*, **48** : 77.  
 1933. *Sigara gebleri* ( Fieber) : Jaczewski, *Ann. Mag. Nat. Hist. Soc.*, **12** : 588.  
 1940. *Corixa (Callicorixa) gebleri* ( Fieber) : Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 421.  
 1948. *Callicorixa gebleri* (Fieber) : Hugerford, *Kans. Univ. Sci. Bull.*, **32** : 462.  
 1995. *Callicorixa gebleri* (Fieber) : Polhemus *et al*, *Cat. Het. Palaerctic region*, **1** : 38.  
 2003. *Corixa (Callicorixa) gebleri* (Fieber) : Bal & Basu, *Zool. Surv. India, State Fauna Series*, **9** : 545.

*Distribution* : (1) Himachal Pradesh; (2) Sikkim.

Genus **Corixa** Geoffroy, 1762

38. **Corixa affinis** Leach, 1818

1818. *Corixa affinis* Leach, *Trans. Linn. Soc. London*, **12** : 18.  
 1897b. *Corixa affinis* Leach : Kirkaldy, *Entomologist.*, **30** : 259.  
 1927. *Corixa affinis* Leach : Jaczewski, *Bull. ent. Pologne*, **5** : 121.  
 1940. *Corixa (Corixa) affinis* Leach : Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 418.  
 1995. *Corixa affinis* Leach : Polhemus *et al*, *Cat. Het. Palaerctic region*, **1** : 39.

*Distribution* : Jammu & Kashmir.

39. **Corixa punctata** (Illiger, 1807)

1807. *Sigara punctata* Illiger, *Fauna Etrus ca sistens Insecta*, 354.  
 1844a. *Micronecta punctata* Fieber, *Entomologische Monographien Leipzig*, 15.  
 1869. *Corixa (Macrocorisa) geoffroyi* Leach : Thomson, *Opuscula entomologica*, **1** : 28.  
 1910. *Macrocorisa geoffroyi* Leach : Distant, *Fauna British India*, **5** : 339.  
 1940. *Corixa (Corixa) punctata* (Illiger) : Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 417.  
 1995. *Corixa punctata* (Illiger) : Polhemus *et al*, *Cat. Het. Palaerctic region*, **1** : 40.  
 1818. *Corixa geoffroyi* Leach, *Trans. Linn. Soc. London*, **12** : 17.

*Distribution* : Himachal Pradesh.

Genus **Hesperocorixa** Kirkaldy, 1908

40. **Hesperocorixa oculata** (Lundblad, 1929)

- 1929a. *Sigara oculata* Lundblad, *Ent. Medd. Kobenhavn*, **16** : 300.  
 1940. *Corixa (Anticorixa) oculata* (Lundblad) : Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 420.

1995. *Hesperocorixa oculata* (Lundblad) : Polhemus *et al.*, *Cat. Het. Palaerctic region*, **1** : 43.

*Distribution* : (1) Jammu & Kashmir.

Genus *Sigara* Fabricius, 1775

Subgenus *Sigara* Fabricius, 1775

41. *Sigara seistanensis* (Distant, 1920)

1920. *Corixa seistanensis* Distant, *Rec. Indian Mus.*, **18** : 206.

1933. *Sigara seistanensis* f. *randana* (Distant) : Hutchinson, *Rec. Indian Mus.*, **35** : 401.

1940. *Corixa (Sigara) seistanensis* (Distant) : Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 425.

1959. *Sigara seistanensis* (Distant) : Baid, *J. Bombay nat. Hist.*, **56** : 362.

1959. *Sigara substriata* Uhler : Baid, *J. Bombay nat. Hist.*, **56** : 362.

1995. *Sigara seistanensis* (Distant) : Polhemus *et al.*, *Cat. Het. Palaerctic region*, **1** : 50.

2003. *Corixa (Sigara) seistanensis* (Distant) : Bal & Basu, *Zool. Surv. India, State Fauna Series*, **9** : 545.

1910. *Corixa substriata* Uhler : Distant, *Fauna British India*, **5** : 340.

1920. *Corixa randana* Distant, *Rec. Indian Mus.*, **18** : 206.

*Distribution* : (1) Himachal Pradesh; (2) Rajasthan; (3) Sikkim; (4) West Bengal.

*Note* : Hutchinson (1940) considered *C. substriata* (Uhler) referred by Distant (1910) as *S. seistanensis* (Distant) and *C. substriata* is a Japanese species.

Subgenus *Tropocorixa* Hutchinson, 1940

42. *Sigara distorta* (Distant, 1910)

1910. *Corixa distorta* Distant, *Fauna British India*, **5** : 343.

1933. *Sigara distorta* (Distant) : Hutchinson, *Rec. Indian Mus.*, **35** : 403.

1940. *Corixa (Tropocorixa) distorta* Distant : Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 440.

1947. *Corixa (Tropocorixa) distorta* Distant : Hafiz & Pradhan, *Rec. Indian Mus.*, **45** : 356.

1947. *Corixa (Tropocorixa) prox distorta* Distant : Hafiz & Pradhan, *Rec. Indian Mus.*, **45** : 357.

1977. *Corixa distorta* Distant : Julka, *Oriental Insects*, **11** : 141.

1995. *Sigara distorta* (Distant) : Polhemus *et al.*, *Cat. Het. Palaerctic region*, **1** : 54.

1997. *Corixa (Tropocorixa) distorta* Distant : Bal & Basu, *Zool. Surv. India, State Fauna Series*, **6** : 265.

2004. *Corixa (Tropocorixa) distorta* Distant : Bal & Basu, *Zool. Surv. India, State Fauna Series*, **10** : 297.

2004. *Corixa (Tropocorixa) distorta* Distant : Nahar, *State Fauna Series*, **11** : 207.

1910. *Corixa affinis* Distant, *Fauna British India*, **5** : 341.

1910. *Corixa verecunda* Distant, *Fauna British India*, **5** : 344.

*Distribution* : (1) Bihar; (2) Delhi; (3) Himachal Pradesh; (4) Madhya Pradesh; (5) Maharashtra; (6) Manipur; (7) Punjab; (8) West Bengal.

43. *Sigara graveleyi* (Hutchinson, 1940)

1940. *Corixa (Tropocorixa) graveleyi* Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 453.  
 1989. *Corixa (Tropocorixa) graveleyi* Hutchinson : Thirumalai, *Rec. zool, Surv. India, Occ. Pap. No.*, **118** : 12.  
 2001. *Sigara (Tropocorixa) graveleyi* Hutchinson : Thirumalai, *Fauna Conservation area*, **11** : 113.  
 2005. *Sigara (Tropocorixa) graveleyi* Hutchinson : Thirumalai & Sharma, *Zool. Surv. India, Conservation area Series*, **24** : 351.  
 1910. *Corixa lima* Distant, *Fauna British India*, **5** : 342.

*Distribution* : (1) Goa; (2) Madhya Pradesh; (3) Maharashtra; (4) Tamilnadu.

44. *Sigara hoggarica* Poisson, 1929

1929. *Sigara (Arctocorisa) hoggarica* Poisson, *Bull. Soc. Hist. nat. Afr. N., Algiers*, **20** : 91.  
 1995. *Sigara (Tropocorixa) hoggarica* Poisson : Polhemus *et al.*, *Cat. Het. Palaerctic region*, **1** : 54.  
 1940. *Corixa (Tropocorixa) choprai* Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 456.  
 2000b. *Corixa (Tropocorixa) choprai* Hutchinson : Bal & Basu, *Wetland Ecosystem Series*, **2** : 93.

*Distribution* : (1) Himachal Pradesh; (2) Punjab.

45. *Sigara horana* (Hutchinson, 1940)

1940. *Corixa (Tropocorixa) horana* Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 435.  
 2001. *Sigara (Tropocorixa) horana* Hutchinson : Thirumalai, *Fauna Conservation area*, **11** : 113.

*Distribution* : Tamilnadu.

46. *Sigara indica* (Hutchinson, 1940)

1940. *Corixa (Tropocorixa) indica* Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 445.  
 1994. *Corixa (Tropocorixa) indica* Hutchinson : Thirumalai, *Rec. zool, Surv. India, Occ. Pap. No.*, **165** : 8.  
 1999b. *Sigara (Tropocorixa) Indica* (Hutchinson) : Thirumalai, *Zoos' print J.*, **1-10** : 132.

*Distribution* : (1) Tamilnadu; (2) West Bengal.

47. *Sigara nilgirica* (Hutchinson, 1940)

1940. *Corixa (Tropocorixa) nilgirica* Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 450.  
 1999b. *Sigara (Tropocorixa) nilgirica* (Hutchinson) : Thirumalai, *Zoos' Print J.*, **1-10** : 132.  
 2001. *Sigara (Tropocorixa) nilgirica* (Hutchinson) : Thirumalai, *Fauna conservation area*, **11** : 114.

*Distribution* : Tamilnadu.

48. *Sigara paivai* Lundblad, 1928

1928. *Sigara paivai* Lundblad, *Entomol. Tidskr.*, **48** : 241.  
 1933. *Sigara paivai* Lundblad : Hutchinson, *Rec. Indian. Mus.*, **35** : 407.  
 1922. *Corixa dubia* Paiva & Dover, *Rec. Indian Mus.*, **24** : 332. (*nec* Douglas & Scott, 1869), *Entom. Mon. Mag* **5** : 266.

1916. *Arctocorisa dubia* Abbott, *Entom. News Philad.*, **27** : 342.  
 1934. *Sigara connexa* Lundblad, *Arch. Hydrobiol. Suppl.*, **12** : 83.  
 1940. *Corixa connexa* (Lundblad) : Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 440.  
 1940. *Corixa (Tropocorixa) paivai* (Lundblad) : Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 458.  
 1995. *Sigara paivai* Lundblad : Polhemus *et al*, *Cat. Het. Palaerctic region*, **1** : 54.

*Distribution* : (1) Assam; (2) West Bengal.

#### 49. *Sigara promontoria* (Distant, 1910)

1910. *Corixa promontoria* Distant, *Fauna Brit. India*, **5** : 341.  
 1933. *Sigara promontoria* (Distant) : Hutchinson, *Rec. Indian. Mus.*, **35** : 404.  
 1938. *Corixa promontoria* Distant : Hafiz & Mathai, *Rec. Indian. Mus.*, **40** : 210.  
 1940. *Corixa (Tropocorixa) promontoria* Distant : Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 437.  
 1947. *Corixa (Tropocorixa) promontoria* Distant : Hafiz & Pradhan, *Rec. Indian. Mus.*, **45** : 360.  
 1988. *Corixa promontoria* Distant : Roy *et al*, *Rec. zool. Surv. India*, **85** : 52.  
 1997. *Corixa (Tropocorixa) promontoria* Distant : Bal & Basu, *Zool. Surv. India, State Fauna Series*, **6** : 265.  
 2002. *Sigara (Tropocorixa) promontoria* (Distant) : Thirumalai & Ramakrishna, *Rec. zool. Surv. India*, **100** : 107.  
 2004. *Sigara (Tropocorixa) promontoria* (Distant) : Thirumalai, *Rec. zool. Surv. India*, **102** : 68.  
 1922. *Corixa ribeiroi* Paiva & Dover, *Rec. Indian. Mus.*, **24** : 333.

*Distribution* : (1) Bihar; (2) Delhi; (3) Karnataka; (4) Orissa; (5) Punjab; (6) Rajasthan; (7) Uttar Pradesh; (8) West Bengal.

#### 50. *Sigara pruthiana* (Hutchinson, 1940)

1940. *Corixa (Tropocorixa) pruthiana* Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 447.  
 1989. *Corixa (Tropocorixa) pruthiana* Hutchinson : Thirumalai, *Rec. zool. Surv. India, Occ. Pap. No.*, **118** : 13.  
 1999b. *Sigara (Tropocorixa) pruthiana* (Hutchinson) : Thirumalai, *Zoos Print J.* : **1-10** : 132.  
 2001. *Sigara (Tropocorixa) pruthiana* (Hutchinson) : Thirumalai, *Fauna conservation area*, **11** : 114.  
 2004. *Sigara (Tropocorixa) pruthiana* (Hutchinson) : Thirumalai, *Rec. zool. Surv. India*, **102** : 68.

*Distribution* : (1) Karnataka; (2) Tamilnadu ; (3) Uttar Pradesh.

#### Subgenus *Vermicorixa* Walton, 1940

#### 51. *Sigara kempi* (Hutchinson, 1940)

1940. *Corixa (Vermicorixa) kempi* Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 432.  
 1995. *Sigara (Vermicorixa) kempi* (Hutchinson) : Polhemus *et al*, *Cat. Het. Palaerctic region*, **1** : 56.  
 1988. *Corixa kempi* Hutchinson : Bisht, *Recent Adv. Fish Ecol. Limnology & Conservation*, 124.  
 2002. *Sigara (Vermicorixa) kempi* (Hutchinson) : Thirumalai, *Vistas Entomological Research New Millenium*, 25.  
 2003. *Corixa (Vermicorixa) kempi* Hutchinson : Bal & Basu, *Zool. Surv. India, State Fauna Series*, **9** : 545.

*Distribution* : (1) Arunachal Pradesh; (2) Himachal Pradesh; (3) Meghalaya; (4) Sikkim; (5) Uttar Pradesh; (6) West Bengal.

52. *Sigara lateralis* (Leach, 1818)

1818. *Corixa lateralis* Leach, *Trans. Linn. Soc. London*, **12** : 17.  
 1833. *Corixa hieroglyphica* Dufour, *Acad. Sci. Fr. Paris*, **4** (3) : 86.  
 1898b. *Corixa hieroglyphica* Dufour : Kirkaldy, *Entomologist*, **31** : 3.  
 1906. *Corixa hieroglyphica* Dufour : Distant, *Fauna British India*, **3** : 49.  
 1919a. *Corixa hieroglyphica* Dufour : Paiva, *Rec. Indian. Mus.*, **16** : 156.  
 1940. *Corixa (Vermicorixa) lateralis lateralis* Leach : Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 427.  
 1988. *Corixa hieroglyphica* Dufour : Bisht, *Recent Adv. Fish Ecol. Linnology & Conservation*, 124.  
 1988. *Corixa hieroglyphica* Dufour : Roy *et al.* *Rec. zool. Surv. India*, **85** : 52.  
 1995. *Corixa hieroglyphica* Dufour : Varshney, *Zool. Surv. India, Fauna Western Himalaya*, **1** : 53  
 1995. *Sigara lateralis* (Leach) : Polhemus *et al.*, *Cat. Het. Palaerctic region*, **1** : 56.  
 1920. *Corixa affinis* Distant, *Rec. Indian Mus.*, **18** : 205.

*Distribution* : (1) Assam; (2) Jammu & Kashmir; (3) Maharashtra; (4) Meghalaya; (5) Uttar Pradesh; (6) West Bengal.

**Position of the following species are not clear**

53. \**Sigara annandalei* (Paiva and Dover, 1922)

- 1922 *Corixa annandalei* Paiva & Dover, *Rec. Indian. Mus.*, **24** : 332.  
 1933. *Sigara annandalei* (Paiva & Dover) : Hutchinson, *Rec. Indian. Mus.*, **35** : 406.

*Distribution* : Orissa.

54. \**Sigara rambhaensis* (Paiva and Dover, 1922)

- 1922 *Corixa rambhaensis* Paiva, *Rec. Indian. Mus.*, **24** : 331.  
 1933. *Sigara rambhaensis* (Paiva & Dover) : Hutchinson, *Rec. Indian. Mus.*, **35** : 405.

*Distribution* : Orissa.

\*The subgeneric assignment of the above species is not possible due to lack of material, as they were described based on single specimen. Their status can be confirmed only after study of additional specimens.

Subfamily CYMATINAE Walton, 1940

Genus *Cymatia* Flor, 1860

55. *Cymatia apparens* (Distant, 1910)

1910. *Corixa apparens* Distant, *Fauna Brit. India*, **5** : 343.  
 1919a. *Corixa hieroglyphica* Dufour : Paiva, *Rec. Indian Mus.*, **16** : 156.  
 1928. *Cymatia apparens* (Distant) : Jaczewski, *Ann. Mus. Zool. Polon*, **7** : 107.

1934. *Cymatia apparens* (Distant) : Lundblad, *Arch. Hydrobiol. Suppl.*, **12** : 76.  
 1940. *Cymatia apparens* (Distant) : Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 405.  
 1959. *Corixa hieroglyphica* Dufour : Tonapi, *Proc. Nat. Inst. Sci. India*, **25** : 326.  
 1988. *Corixa hieroglyphica* Dufour : Bisht, *Recent Adv. Fish Ecol. Limnology & Conservation*, 124.  
 1995. *Cymatia apparens* (Distant) : Polhemus *et al.*, *Cat. Het. Palaearctic region*, **1** : 35.  
 1995. *Corixa hieroglyphica* Dufour : Varshney, *Zool. Surv. India Himalayan Ecosystem Series*, (Part-1) : 53.  
 2000. *Corixa hieroglyphica* Dufour : Ramakrishna, *Rec. zool. Surv. India*, **98** : 183.  
 2002b. *Cymatia apparens* (Distant) : Thirumalai & Sharma, *Zool. Surv. India, Wetland Ecosystem series*, **3** : 108.  
 2004. *Cymatia apparens* (Distant) : Thirumalai, *Rec. Zool. Surv. India*, **102** (1-2) : 68.  
 2004. *Cymatia apparens* (Distant) : Bal & Basu, *Zool. Surv. India, State Fauna*, **10** : 297.  
 1879. *Corixa hieroglyphica* Distant, *Rhynchota*, **2** : 13. (part)

*Distribution* : (1) Andhra Pradesh; (2) Bihar; (3) Gujarat; (4) Jammu & Kashmir; (5) Karnataka; (6) Maharashtra; (7) Manipur; (8) Uttar Pradesh; (9) West Bengal.

Subfamily MICRONECTINAE Jaczewski, 1924

Genus *Micronecta* Kirkaldy, 1897

Subgenus *Basilonecta* Hutchinson, 1940

**56. *Micronecta scutellaris scutellaris* (Stål, 1858)**

1858. *Sigra scutellaris* Stål, *Vetens akad. Forh.*, **15** : 319.  
 1940. *Micronecta* (*Basilonecta*) *scutellaris scutellaris* (Stål) : Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 365.  
 1940. *Micronecta scutellaris pseudostriata* Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 371.  
 1947. *Micronecta* (*Basilonecta*) *scutellaris scutellaris* (Stål) : Hafiz and Pradhan, *Rec. Indian. Mus.*, **45** : 354.  
 1959. *Micronecta proba* Distant : Baid, *J. Bombay nat. Hist.*, **56** : 362.  
 1962. *Micronecta* (*Basilonecta*) *scutellaris* (Stål) : Wróblewski, *Bull. Acad. Polon. Sci., CI II*, **10** : 176.  
 1972. *Micronecta scutellaris* (Stål) : Wróblewski, *Bull. Entomol. Pologne.*, **42** : 25.  
 1977. *Micronecta. scutellaris* (Stål) : Julka, *Oriental Insects*, **11** : 141.  
 1988. *Micronecta scutellaris* (Stål) : Roy *et al.*, *Rec. zool. Surv. India*, **85** : 52.  
 1988. *Micronecta proba* Distant : Roy *et al.*, *Rec. zool. Surv. India*, **85** : 52.  
 1989. *Micronecta* (*Basilonecta*) *scutellaris scutellaris* (Stål) : Thirumalai, *Rec. zool, Surv. India, Occ. Pap. No.*, **118** : 15.  
 1989. *Micronecta proba* Distant : Ghosh, *et al.*, *State Fauna Series*, **1** : 209.  
 1994. *Micronecta* (*Basilonecta*) *scutellaris scutellaris* (Stål) : Thirumalai, *Rec. zool, Surv. India, Occ. Pap. No.*, **165** : 9.  
 1995. *Micronecta* (*Basilonecta*) *scutellaris scutellaris* (Stål) : Polhemus *et al.*, *Cat. Het. Palaearctic region*, **1** : 27.  
 1997. *Micronecta* (*Basilonecta*) *scutellaris scutellaris* (Stål) : Bal & Basu, *Zool. Surv. India, State Fauna Series*, **6** : 264.

1997. *Micronecta scutellaris* (Stål) : Sarala & Venkatesan, *Hexapoda*, **9** : 41.
1999. *Micronecta scutellaris* (Stål) : Thirumalai & Radhakrishnan, *Rec. zool. Surv. India*, **97** : 138.
1999. *Micronecta scutellaris* (Stål) : Nieser, *Amemboa*, **3** : 11.
- 1999b. *Micronecta scutellaris scutellaris* (Stål) : Thirumalai, *Zoos' Print J.* **1-10** : 132.
2001. *Micronecta scutellaris* (Stål) : Thirumalai, *Fauna conservation area*, **11** : 113.
2002. *Micronecta (Basilonecta) scutellaris scutellaris* (Stål) : Thirumalai & Ramakrishna, *Rec. zool. Surv. India*, **100** : 107.
2002. *Micronecta scutellaris scutellaris* (Stål) : Thirumalai et al., *Res. Bull. Punjab Univ.*, **52** : 157.
2004. *Micronecta (Basilonecta) scutellaris scutellaris* (Stål) : Thirumalai, *Rec. zool. Surv. India*, **102** : 68.
2004. *Micronecta (Basilonecta) scutellaris scutellaris* (Stål) : Bal & Basu, *Zool. Surv. India, State Fauna Series*, **10** : 296.
2004. *Micronecta (Basilonecta) scutellaris scutellaris* (Stål) : Nahar, *Zool. Surv. India, State Fauna Series*, **11** : 207.
2005. *Micronecta (Basilonecta) scutellaris scutellaris* (Stål) : Thirumalai & Sharma, *Zool. Surv. India, Fauna of Melghat Tiger Reserve, Conservation area Series*, **24** : 352.
1908. *Micronecta malabarica* Kirkaldy, *Canad. Ent.*, **40** : 209.
1910. *Micronecta dione* Distant, *Fauna Brit. India*, **5** : 348.
1910. *Micronecta malabarica* Kirkaldy : Distant, *Fauna Brit. India*, **5** : 347.
1910. *Micronecta proba* Distant, *Fauna Brit. India*, **5** : 348.

*Distribution* : (1) Andhra Pradesh; (2) Assam; (3) Bihar; (4) Chandigarh; (5) Delhi; (6) Gujarat; (7) Himachal Pradesh; (8) Karnataka; (9) Kerala; (10) Madhya Pradesh; (11) Maharashtra; (12) Manipur; (13) Orissa; (14) Punjab; (15) Rajasthan; (16) Tamilnadu; (17) Uttar Pradesh; (18) West Bengal.

### 57. *Micronecta siva* (Kirkaldy, 1897)

- \*1844a. *Sigara striata* Fieber, *Entomologische Monographien* Leipzig, 14.
- 1897a. *Sigara siva* Kirkaldy, *Entomologist*, **30** : 240.
1906. *Micronecta striata* (Fieber) : Distant, *Fauna Brit. India*, **3** : 50.
1934. *Micronecta striata* (Fieber) : Lundblad, *Arch. Hydrobiol. Suppl.*, **12** : 101.
1940. *Micronecta (Basilonecta) siva* (Kirkaldy) : Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 371.
1972. *Micronecta siva* (Kirkaldy) : Wróblewski, *Bull. Entomol. Pologne.*, **42** : 26.
1988. *Micronecta striata* (Fieber) : Roy et al., *Rec. zool. Surv. India*, **85** : 52.
1988. *Micronecta siva* (Kirkaldy) : Bisht, *Recent Adv. Fish Ecol. Limnology & Conservation*, 124.
1995. *Micronecta (Basilonecta) siva* (Kirkaldy) : Polhemus et al., *Cat. Het. Palaerctic region*, **1** : 29.
- 1999b. *Micronecta (Basilonecta) siva* (Kirkaldy) : Thirumalai, *Zoos' Print J.*, **1-10** : 132.
- 1999a. *Micronecta siva* (Kirkaldy) : Nieser, *Amemboa*, **3** : 11.
2000. *Micronecta (Sigmonecta) striata* (Fieber) : Ramakrishna, *Rec. zool. Surv. India*, **98** : 183.

2002. *Micronecta siva* (Kirkaldy) : Nieser, *Raffles Bull. Zoology*, **50** : 270.

2004. *Micronecta (Basilonecta) siva* (Kirkaldy) : Thirumalai, *Rec. zool. Surv. India*, **102** : 69.

*Distribution* : (1) Andhra Pradesh; (2) Assam; (3) Karnataka; (4) Orissa; (5) Tamilnadu; (6) Uttar Pradesh; (7) West Bengal.

**\*Note** : *Sigara striata* Fieber, 1884b is a primary homonym of *Sigara striata* (Linnaeus, 1758) and so must be suppressed. Kirkaldy (1897a) introduced the name *siva* as a substitute for *striata* Fieber without any taxonomic discussion of the species (Hutchinson, 1940).

#### Subgenus *Dichaetonecta* Hutchinson, 1940

##### 58. *Micronecta albifrons* (Motschoulsky, 1863)

1863. *Corixa albifrons* Motschoulsky, *Bull. Soc. Nat. Moscou*, **36** : 94.

1897a. *Sigara albifrons* (Motschoulsky) : Kirkaldy, *Entomologist*, **30** : 240.

1898b. *Corixa albifrons* Motschoulsky : Kirkaldy, *Entomologist*, **31** : 3.

1940. *Micronecta (Dichaetonecta) albifrons* (Motschoulsky) : Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 379.

1940. *Micronecta (Dichaetonecta) albifrons albifrons* (Motschoulsky) : Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 380.

1940. *Micronecta (Dichaetonecta) albifrons albifrons* trans ad *striatella* Lundblad : Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 381.

1940. *M. albifrons striatella* Lundblad : Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 382.

1960. *Micronecta albifrons* (Motschoulsky) : Chen, *J. Kans. ent. Soc.*, **33** : 116.

1968. *Micronecta albifrons* (Motschoulsky) : Wróblewski, *Bull. Entomol. Pologne.*, **38** : 763.

1977. *Micronecta albifrons* (Motschoulsky) : Julka, *Oriental Insects*, **11** : 141.

1985. *Corixa albifrons* Motschoulsky : Kerzhner & Janssson, *Annales Entomologici Fennici*, **51** : 35.

1995. *Micronecta (Dichaetonecta) albifrons* (Motschoulsky) : al, *Cat. Het. Palaerctic region*, **1** : 29.

1999b. *Micronecta (Dichaetonecta) albifrons* (Motschoulsky) : Thirumalai, *Zoos Print J.*, **1-10** : 132.

1999. *Micronecta albifrons* (Motschoulsky) : Nieser, *Amemboa*, **3** : 11.

1910. *Micronecta lucina* Distant, *Fauna Brit. India*, **5** : 345.

1960. *Micronecta fascioclavus* Chen, *J. Kans. ent. Soc.*, **33** : 108.

*Distribution* : (1) Assam; (2) Kerala; (3) Madhya Pradesh; (4) Orissa; (5) Tamilnadu; (6) Uttar Pradesh; (7) West Bengal.

**Note** : Wróblewski (1968) considered *Micronecta albifrons* (Motschoulsky) and *Micronecta ludibunda* Breddein may be treated in future a separate subgenus.

##### 59. *Micronecta desertana desertana* Distant, 1920

1920. *Micronecta desertana* Distant, *Rec. Indian Mus.*, **18** : 206.

1933. *Micronecta desertana* Distant : Hutchinson, *Rec. Indian. Mus.*, **35** : 398.

1940. *Micronecta (Dichaetonecta) desertana dravida* Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 392.

1940. *Micronecta (Dichaetonecta) desertana concanensis* Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 390.
1940. *Micronecta (Dichaetonecta) desertana dravida* trans. ad. *conconensis* Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 394.
1960. *Micronecta desertana* Distant : Chen, *J. Kans. ent. Soc.*, **33** : 104.
1972. *Micronecta desertana* Distant : Wróblewski, *Bull. Entomol. Pologne.*, **42** : 42.
1995. *Micronecta (Dichaetonecta) desertana desertana* Distant : Polhemus *et al*, *Cat. Het. Palaerctic region*, **1** : 29.
- 1999a. *Micronecta desertana* Distant : Nieser, *Amemboa*, **3** : 11.
- 1999b. *Micronecta desertana* Distant : Nieser, *J. New York Entomol. Soc.*, **107** : 286.
- 1999b. *Micronecta (Dichaetonecta) desertana desertana* Distant : Thirumalai, *Zoos Print J.*, **1-10** : 132.
2001. *Micronecta desertana dravida* Hutchinson : Thirumalai, *Fauna conservation area*, **11** : 114.
2004. *Micronecta desertana dravida* Hutchinson : Thirumalai, *Rec. zool. Surv. India*, **102** : 69.
- Distribution* : (1) Assam; (2) Karnataka; (3) Maharashtra; (4) Punjab; (5) Tamilnadu.

#### 60. *Micronecta eucosmeta* Hutchinson, 1940

1940. *Micronecta (Dichaetonecta) eucosmeta* Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 382.
1999. *Micronecta (Dichaetonecta) eucosmeta* Hutchinson : Thirumalai, *Zoos' Print J.*, **1-10** : 132.
- Distribution* : Tamilnadu.

#### 61. *Micronecta janssoni* Thirumalai, 1989

1989. *Micronecta (Dichaetonecta) janssoni* Thirumalai, *Misc. Occ. Pap. Rec. zool. Surv. India*, **118** : 16.
- 1999b. *Micronecta (Dichaetonecta) janssoni* Thirumalai, *Zoos' Print J.* **1-10** : 133.
2001. *Micronecta (Dichaetonecta) janssoni* Thirumalai, *Fauna conservation area*, **11** : 114.
- Distribution* : Tamilnadu.

#### 62. *Micronecta flavens* Wróblewski, 1960

1960. *Micronecta flavens* Wróblewski, *Ann. Zool. Polon. Warszaw*, **18** : 317.
1972. *Micronecta flavens* Wróblewski : Wróblewski, *Bull. Entomol. Pologne.*, **42** : 17.
- 1999b. *Micronecta (Dichaetonecta) flavens* Wróblewski : Thirumalai, *Zoos Print J.*, **1-10** : 133.
2001. *Micronecta (Dichaetonecta) flavens* Wróblewski : Thirumalai, *Fauna conservation area*, **11** : 114.
- Distribution* : Tamilnadu.

#### 63. *Micronecta prashadana* Hutchinson, 1940

1940. *Micronecta (Dichaetonecta) prashadana* Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 387.
1950. *Micronecta (Dichaetonecta) prashadana* Hutchinson : Pradhan, *Rec. Indian Mus.*, **48** : 102.
1972. *Micronecta prashadana* Hutchinson : Wróblewski, *Bull. Entomol. Pologne.*, **42** : 16.
1989. *Micronecta (Dichaetonecta) prashadana* Hutchinson : Thirumalai, *Rec. zool. Surv. India, Occ. Pap. No.*, **118** : 15.

- 1999b. *Micronecta (Dichaetonecta) prashadana* Hutchinson : Thirumalai, *Zoos Print J.*, **1-10** : 133.  
 2001. *Micronecta (Dichaetonecta) prashadana* Hutchinson : Thirumalai, *Fauna conservation area*, **11** : 114.  
 2004. *Micronecta (Dichaetonecta) prashadana* Hutchinson : Thirumalai, *Rec. zool. Surv. India*, **102** : 69.

*Distribution* : (1) Karnataka; (2) Madhya Pradesh; (3) Tamilnadu; (4) Uttar Pradesh.

#### 64. *Micronecta sanctae-catherine* Hutchinson, 1940

1940. *Micronecta (Dichaetonecta) sanctae-catherine* Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 384.  
 2004. *Micronecta (Dichaetonecta) sanctae-catherine* Hutchinson : Thirumalai, *Rec. zool. Surv. India*, **102** : 69.

*Distribution* : (1) Goa; (2) Karnataka; (3) Maharashtra.

#### 65. *Micronecta* sp. (could turnout new to science)

*Distribution* : Tamilnadu.

#### Subgenus *Indonectella* Hutchinson, 1940

#### 66. *Micronecta grisea* (Fieber, 1844)

- 1844a. *Sigara grisea* Fieber, *Entomol. Mono. Leipzig*, **14**.  
 1897a. *Sigara grisea* Fieber : Kirkaldy, *Entomologist*, **30** : 240.  
 1940. *Micronecta (Indonectella) thyesta* Distant : Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 363.  
 1960. *Micronecta (Indonectella) thyesta* Distant : Chen, *J. Kans. ent. Soc.*, **33** : 117.  
 1962. *Micronecta (Indonectella) thyesta* Distant : Wróblewski, *Bull. Acad. Polon. Sci., CI II*, **10** : 177.  
 1968. *Micronecta (Indonectella) thyesta* Distant : Wróblewski, *Bull. Entomol. Pologne.*, **38** : 772.  
 1968. *Micronecta (Indonectella) grisea* (Fieber) : Wróblewski, *Bull. Entomol. Pologne.*, **38** : 773.  
 1972. *Micronecta grisea* (Fieber) : Wróblewski, *Bull. Entomol. Pologne.*, **42** : 23.  
 1977. *Micronecta thyesta* Distant : Julka, *Oriental Insects*, **11** : 141.  
 1989. *Micronecta (Indonectella) thyesta* Distant : Thirumalai, *Rec. zool. Surv. India, Occ. Pap. No.*, : **118** : 13.  
 1994. *Micronecta (Indonectella) thyesta* Distant : Thirumalai, *Rec. zool. Surv. India, Occ. Pap. No.*, **165** : 8.  
 1995. *Micronecta (Indonectella) grisea* (Fieber) : Polhemus *et al*, *Cat. Het. Palaerctic region*, **1** : 30.  
 1999a. *Micronecta grisea* (Fieber) : Nieser, *Amemboa*, **3** : 11.  
 2001. *Micronecta (Indonectella) thyesta* Distant : Thirumalai, *ZSI. Fauna Conservation area*, **11** : 115.  
 2002. *Micronecta grisea* (Fieber) : Nieser, *Raffles Bull. Zoology*, **50** : 267.  
 2004. *Micronecta (Indonectella) grisea* (Fieber) : Thirumalai, *Rec. zool. Surv. India*, **102** : 69.  
 1910. *Micronecta thyesta* Distant, *Fauna Brit. India*, **5** : 349.

*Distribution* : (1) Andhra Pradesh; (2) Assam; (3) Bihar; (4) Karnataka; (5) Madhya Pradesh; (6) Orissa; (7) Tamilnadu; (8) West Bengal.

Subgenus *Unguincta*, Nieser, Chen, and Yang. 2005.

67. *Micronecta khasiensis* Hutchinson, 1940

1940. *Micronecta (Mesonecta) khasiensis* Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 396.  
 1960. *Micronecta khasiensis* Hutchinson : Chen, *J. Kans. ent. Soc.*, **33** : 102.  
 1999a. *Micronecta khasiensis* Hutchinson : Nieser, *Amemboa*, **3** : 11.  
 2005. *Micronecta (Unguincta) khasiensis* Hutchinson : Nieser *et. al.*, *Raffles Bull. Zoology*, **53** : 200.  
*Distribution* : (1) Assam; (2) Meghalaya.

68. *Micronecta waltoniana* Hutchinson, 1940

1940. *Micronecta (Mesonecta) waltoniana* Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 396.  
 1960. *Micronecta waltoniana* Hutchinson : Chen, *J. Kans. ent. Soc.*, **33** : 102.  
 1999a. *Micronecta waltoniana* Hutchinson : Nieser, *Amemboa*, **3** : 11.  
 2005. *Micronecta (Unguincta) waltoniana* Hutchinson : Nieser *et. al.*, *Raffles Bull. Zoology*, **53** : 201.  
*Distribution* : Meghalaya.

Subgenus *Micronecta* Kirkaldy, 1897

69. *Micronecta anatolica anatolica* Lindberg, 1922

1922. *Micronecta anatolica* Lindberg, *Not. Ent. Helsingfors*, **2** : 116.  
 1962. *Micronecta anatolica* Lindberg : Wróblewski, *Bull. Acad. Polon. Sci., CI II*, **10** : 33.  
 1968. *Micronecta anatolica* Lindberg : Wróblewski, *Bull. Entomol. Pologne*, **38** : 754.  
 1995. *Micronecta (Micronecta) anatolica anatolica* Lindberg : Polhemus *et al.*, *Cat. Het. Palaerctic region*, **1** : 31.  
 1988. *Micronecta wui* Lundblad : Bisht, *Recent Adv. Fish Ecol. Limnology & Conservation*, 124.  
 1999a. *Micronecta anatolica* Lindberg : Nieser, *Amemboa*, **3** : 11.  
 2002. *Micronecta anatolica* Lindberg : Thirumalai, *Vistas Entomological Research New Millenium*, 25.  
 1940. *Micronecta (Micronecta). wui kashmirica* Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 356.  
 1940. *Micronecta (Micronecta). wui wui* trans. ad. *kashmirica* Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 358.  
 1940. *Micronecta (Micronecta) cf. wui. kashmirica* and *poweri* Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 359.  
*Distribution* : (1) Arunachal Pradesh; (2) Assam; (3) Jammu & Kashmir; (4) Madhya Pradesh; (5) Uttar Pradesh; (6) West Bengal.

70. *Micronecta decorata* Lundblad, 1934

1934. *Micronecta decorata* Lundblad, *Arch. Hydrobiol. Suppl.*, **12** : 93.  
 2002. *Micronecta decorata* Lundblad : Nieser, *Raffles Bull. Zoology*, **50** : 266.  
 2006. *Micronecta decorata* Lundblad : Thirumalai, *Rec. zool. Surv. India*, **106** : 93.  
*Distribution* : Himachal Pradesh.

71. *Micronecta daedala* Distant, 1910

1910. *Micronecta daedala* Distant, *Fauna Brit. India*, **5** : 352.  
 1933. *Micronecta daedala* Distant : Hutchinson, *Rec. Indian. Mus.*, **35** : 399.  
 1940. *Micronecta (Micronecta) daedala* Distant : Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 361.  
 1940. *Micronecta (Micronecta) daedala singhpruthii* Lundblad: Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 362.  
 1960. *Micronecta daedala* Distant : Chen, *J. Kans. ent. Soc.*, **33** : 116.  
 1968. *Micronecta daedala* Distant: Wróblewski, *Bull. Entomol. Pologne*, **38** : 755.  
 1933b. *Micronecta singhpruthii* Lundblad, *Ent. Tidskr.*, **3-4** : 217.

*Distribution* : (1) Punjab; (2) Tamilnadu; (3) West Bengal.

72. *Micronecta* sp. (prox *wui* & *anatolica*)

*Distribution* : Arunachal Pradesh.

Subgenus *Pardanecta* Wroblewski, 196273. *Micronecta punctata* Horvath, 1904

- 1904\*. *Micronecta haliploides* Horvath, *Ann. Hist. Nat. Mus. Hung.*, **2** : 594.  
 1934. *Micronecta haliploides* Horvath : Lundblad, *Arch. Hydrobiol. Suppl.*, **12** : 104.  
 1939. *Micronecta (Dichaetonecta) haliploides* Horvath : Hafiz & Riberio, *Rec. Indian. Mus.*, **41** : 435.  
 1940. *Micronecta (Dichaetonecta) haliploides* Horvath : Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 377.  
 1947. *Micronecta (Dichaetonecta) haliploides* Horvath : Hafiz & Pradhan, *Rec. Indian. Mus.*, **45** : 355.  
 1960. *Micronecta punctata* Fieber : Chen, *J. Kans. ent. Soc.*, **33** : 117.  
 1962. *Micronecta (Pardanecta) punctata* Fieber : Wróblewski, *Bull. Acad. Polon. Sci., CI II*, **10** : 177.  
 1972. *Micronecta punctata* (Fieber) : Wróblewski, *Bull. Entomol. Pologne*, **42** : 48.  
 1977. *Micronecta haliploides* Horvath : Julka, *Oriental Insects*, **11** : 141.  
 1983. *Micronecta. merope* Distant, Bisht & Das, *Proc. Wkshp. High Alt. Ent. & Wildl. Ecol. Zool. Surv. India*, **2**.  
 1988. *Micronecta. merope* Distant : Bisht, *Recent Adv. Fish Ecol. Limnology & Conservation*, **124**.  
 1988. *Micronecta. merope* Distant : Roy *et al.*, *Rec. zool. Surv. India*, **85** : 52.  
 1999a. *Micronecta (Pardanecta) haliploides* Horvath : Nieser, *Amemboa*, **3** : 9.  
 1999b. *Micronecta haliploides* Horvath : Nieser, *J. New York Entomol. Soc.*, **107** : 285.  
 2000a. *Micronecta (Dichaetonecta) haliploides* Horvath : Bal & Basu, *Zool. Surv. India, State Fauna Series*, **7** : 430.  
 2002. *Micronecta haliploides* Horvath : Nieser, *Raffles Bull. Zoology*, **50** : 267.  
 2002. *Micronecta (Pardanecta) punctata* Fieber : Thirumalai, *Vistas Entomological Research New Millenium*, **25**.  
 2004. *Micronecta (Dichaetonecta) haliploides* Horvath : Bal & Basu, *Zool. Surv. India, State Fauna Series*, **10** : 296.

1905. *Micronecta inflatula* Breddin, *Soc. Ent. Zurich*, **20** : 57.

1905. *Micronecta pardalina* Breddin, *Soc. Ent. Zurich*, **20** : 57.

1910. *Micronecta merope* Distant, *Fauna Brit. India*, **5** : 351.

**Distribution** : (1) Arunachal Pradesh; (2) Assam; (3) Bihar; (4) Kerala; (5) Madhya Pradesh; (6) Manipur; (7) Meghalaya; (8) Orissa; (9) Tripura; (10) Uttar Pradesh; (11) West Bengal.

**\*Note** : Fieber, 1844 described *Micronecta punctata* in *Sigara* Illiger, 1807 described what is now *Corixa punctata* in *Sigara* so the epitheton *punctata* is not available for *M. punctata* and the next available name should be used i.e. *H. haliploides* Horvath, 1904 (Nieser, Personal communication, 2006).

#### 74. *Micronecta (Dichaetonecta?) punctinotum* Chen, 1960

1960. *Micronecta punctinotum* Chen, *J. Kans. ent. Soc.*, **33** : 112.

2002. *Micronecta crinita* Chen et al. *Tijdschrift Voor Entomologie*, **145** : 195.

2004. *Micronecta crinita* Chen et al. *Tijdschrift Voor Entomologie*, **147** : 38.

**Distribution** : Assam.

**Note** : Nieser (Personal communication, 2006) considered different subgeneric allocation.

#### Subgenus *Sigmonecta* Wróblewski, 1962

#### 75. *Micronecta altera* Wróblewski 1972

1972. *Micronecta altera* Wróblewski : Wróblewski, *Bull. Entomol. Pologne*, **42** : 33.

**Note** : Based on the shaft shape of the right paramere, Wróblewski (1972) erected *Micronecta altera* from the closely allied species, *Micronecta quadririgata* Breddin 1905 and remarked that the striking differences can be made out from Hutchinson's (1940) figure 105 of *Micronecta quadririgata*. The geographical range of *M. altera* Wróblewski includes India also (Nieser, Personal communication, 2006).

#### 76. *Micronecta quadririgata* Breddin, 1905

1905. *Micronecta quadririgata* Breddin, *Soc. Ent. Zurich*, **20** : 57.

1934. *Micronecta quadririgata* Breddin : Lundblad, *Arch. Hydrobiol. Supp.*, **12** : 87.

1939. *Micronecta quadririgata* Breddin : Hafiz & Ribeiro, *Rec. Indian. Mus.*, **41** : 435.

1940. *Micronecta (Basileonecta) quadririgata* Breddin : Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 376.

1947. *Micronecta (Basilonecta) quadririgata* Breddin : Hafiz and Pradhan, *Rec. Indian. Mus.*, **45** : 355.

1959. *Micronecta minthe* Distant, : Tonapi, *Proc. Nat. Inst. Sci. India*, **25** : 326.

1962. *Micronecta (Sigmonecta) quadririgata* Breddin : Wróblewski, *Bull. Acad. Pol. Sc. II. Warszawa*, **10** : 176.

1972. *Micronecta (Sigmonecta) quadririgata* Breddin : Wróblewski, *Bull. Entomol. Pologne*, **42** : 29.

1977. *Micronecta quadririgata* Breddin : Julka, *Oriental Insects*, **11** : 141.

1983. *Micronecta quadristrigata* Breddin : Rupavathi & Radhakrishna, *J. Aqua. Biol.*, **1** : 66.
1994. *Micronecta (Sigmonecta) quadristrigata* Breddin : Thirumalai, *Rec. zool. Surv. India, Occ. Pap. No.*, **165** : 8.
1995. *Micronecta (Sigmonecta) quadristrigata* Breddin : Polhemus *et al*, *Cat. Het. Palaerctic region*, **1** : 34.
- 1999a. *Micronecta (Sigmonecta) quadristrigata* Breddin : Nieser, *Amemboa*, **3** : 11.
2000. *Micronecta (Sigmonecta) quadristrigata* Breddin : Ramakrishna, *Rec. zool. Surv. India*, **98** : 183.
2002. *Micronecta (Sigmonecta) quadristrigata* Breddin : Nieser, *Raffles Bull. Zoology*, **50** : 269.
2002. *Micronecta (Sigmonecta) quadristrigata* Breddin : Thirumalai, *Rec. zool. Surv. India*, **100** : 108.
2002. *Micronecta (Sigmonecta) quadristrigata* Breddin : Thirumalai, *Vistas Entomological Research New Millenium*, **25**.
2002. *Micronecta quadristrigata* Breddin : Thirumalai, Metha & Sharma, *Res. Bull. Panjab Univ.*, **52** : 157.
2004. *Micronecta (Sigmonecta) quadristrigata* Breddin : Thirumalai, *Rec. zool. Surv. India*, **102** : 70.
2006. *Micronecta (Sigmonecta) quadristrigata* Breddin : Thirumalai & Sureshkumar, *ZSI. Fauna of Biligiri Rangaswamy Temple Wildlife Sanctuary, Conservation Area Series*, **27** : 71.
1910. *Micronecta minthe* Distant, *Fauna Brit. India*, **5** : 347.

**Distribution** : (1) Andhra Pradesh; (2) Arunachal Pradesh; (3) Assam; (4) Bihar; (5) Chandigarh; (6) Gujarat; (7) Karnataka; (8) Kerala; (9) Madhya Pradesh; (10) Maharashtra; (11) Orissa; (12) Punjab; (13) Rajasthan; (14) Tamilnadu; (15) West Bengal.

Polhemus *et al.*, 1995 regarded *M. minthe* Distant as a separate species. However, certain forms of *minthe* are *M. quadristrigata*. *M. minthe* is known from Srilanka.

### Position of the subgenera of the following species are not clear

#### 77. *Micronecta fieberi* Wróblewski, 1968

1968. *Micronecta fieberi* Wróblewski, *Bull. Entomol. Pologne*, **38** : 768.

**Distribution** : Kerala.

**Note** : *M. fieberi* having close affinities with *Micronecta ovivora* Westwood, 1871, *Micronecta flavens* Wróblewski, 1960 and *Micronecta (Dichaetonecta) prashadana* Hutchinson, 1940. Wróblewski (1968) suggested their placement under a separate subgenus.

#### 78. *Micronecta fulva* Paiva, 1918

1918. *Micronecta fulva* Paiva, *Rec. Indian. Mus.*, **14** : 32.
1940. *Micronecta (Dichaetonecta?) fulva* Paiva, : Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 378.
1960. *Micronecta fulva* Paiva : Chen, *J. Kans. ent. Soc.*, **33** : 104.
1968. *Micronecta fulva* Paiva : Wróblewski, *Bull. Entomol. Pologne*, **38** : 754.

**Distribution** : Uttar Pradesh.

#### 79. *Micronecta ludibunda ludibunda* Breddin, 1905

1905. *Micronecta ludibunda* Breddin, *Soc. Ent. Zurich*, **20** : 57.
1934. *Micronecta ludibunda* Breddin : Lundblad, *Arch. Hydrobiol. Supp.*, **12** : 95.

1960. *Micronecta ludibunda* Breddin : Chen, *J. Kans. ent. Soc.*, **33** : 115.  
 1968. *Micronecta ludibunda* Breddin : Wróblewski, *Bull. Entomol. Pologne*, **38** : 765.  
 1972. *Micronecta ludibunda* Breddin : Wróblewski, *Bull. Entomol. Pologne*, **42** : 41.  
 1999a. *Micronecta ludibunda ludibunda* Nieser, *Amemboa*, **3** : 11.  
 1999b. *Micronecta ludibunda ludibunda* Breddin : Nieser, *J. New York Entomol. Soc.*, **107** : 287.  
 2002. *Micronecta ludibunda* Breddin : Nieser, *Raffles Bull. Zoology*, **50** : 268.  
 1934. *Micronecta inconspicua* Lundblad, *Arch. Hydrobiol. Supp.*, **12** : 65.  
 1934. *Micronecta striatella* Lundblad, *Arch. Hydrobiol. Supp.*, **12** : 98.

*Distribution* : Assam.

**Note** : Wróblewski (1968) found *Micronecta ludibunda ludibunda* Breddin in S. India but did not mention the exact localities of collection. Nieser (1999a, 2002) stated *Micronecta ludibunda* Breddin to be very widely distributed from India and Sri Lanka through SE Asia and Indonesia to New Guinea and Solomon Islands, Peninsular Malaysia, Singapore and Thailand.

#### 80. *Micronecta ludibunda langkana*, Wróblewski 1968

1968. *Micronecta ludibunda langkana* Wróblewski, *Bull. Entomol. Pologne*, **38** : 767.  
 1972. *Micronecta ludibunda langkana* Wróblewski : Wróblewski, *Bull. Entomol. Pologne*, **42** : 41.  
 1999b. *Micronecta ludibunda langkana* Wróblewski : Nieser, *J. New York Entomol. Soc.*, **107** : 285.

*Distribution* : Kerala.

**Note** : Refer note above *Micronecta ludibunda ludibunda* Breddin.

#### 81. *Micronecta ovivora* (Westwood, 1871)

1871. *Corixa ovivora* Westwood, *Proc. Ent. Soc.*, 1871 : iv.  
 1897a. *Sigara ovivora* (Westwood) : Krikaldy, *Entomologist*, **30** : 238.  
 1898b. *Micronecta ovivora* (Westwood) : Krikaldy, *Entomologist*, **31** : 3.  
 1940. *Micronecta ovivora* (Westwood) : Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 365.

*Distribution* : Karnataka.

**Note** : Refer *Micronecta fieberi* Westwood.

#### 82. *Micronecta tarsalis* Chen, 1960

1960. *Micronecta tarsalis* Chen, *J. Kans. ent. Soc.*, **33** : 114.  
 1968. *Micronecta tarsalis* Chen : Wróblewski, *Bull. Entomol. Pologne*, **38** : 761.  
 1972. *Micronecta tarsalis* Chen : Wróblewski, *Bull. Entomol. Pologne*, **42** : 40.  
 2002. *Micronecta tarsalis* Chen : Nieser, *Raffles Bull. Zoology*, **50** : 270.

*Distribution* : Madhya Pradesh (New record to India).

**Note** : Nieser (Personal communication, 2006) remarked *M. tarsalis* as ‘apparently’ identified by Wróblewski (1968, 1972) from S. India without providing details of exact localities

of collection. Wróblewski (1972) has suggested the placement of the species under a separate subgenus. Nieser (2002) further stated that *M.tarsalis* is a wide spread from S. India and Sri Lanka through SE Asia to Sulawesi. The author has recently collected *M.tarsalis* from Achanakmar-Amarkantak Biosphere Reserve in Madhya Pradesh (now in Chattisgarh state), India.

Genus *Synaptonecta* Lundblad, 1934

83. *Synaptonecta issa* (Distant, 1910)

1910. *Micronecta issa* Distant, *Fauna Brit. India*, **5** : 350.  
 1933. *Micronecta issa* Distant, Hutchinson, *Rec. Indian. Mus.*, **35** : 398.  
 1934. *Micronecta issa* Distant, Lundblad, *Arch. Hydrobiol. Supp.*, **12** : 100.  
 1940. *Synaptonecta issa* (Distant) : Hutchinson, *Trans. Connecticut Acad. Art. Sci.*, **33** : 398.  
 1960. *Synaptonecta issa* (Distant) : Chen, *J. Kans. ent. Soc.*, **33** : 102.  
 1967. *Micronecta (Synaptonecta) issa* (Distant) : Wróblewski, *Bull. Entomol. Pologne*, **37** : 243.  
 1972. *Synaptonecta issa* (Distant) : Wróblewski, *Bull. Entomol. Pologne*, **42** : 7.  
 1997. *Synaptonecta issa* (Distant) : Polhemus, J. T. & R. P. Rutter, *Ent. news*, **108** : 301.  
 1999a. *Synaptonecta issa* (Distant) : Nieser, *Amemboa*, **3** : 11.  
 1999b. *Synaptonecta issa* (Distant) : Nieser, *J. New York Entomol. Soc.*, **107** : 285.  
 2002. *Synaptonecta issa* (Distant) : Nieser, *Raffles Bull. Zoology*, **50** : 266.  
 1934. *Synaptonecta breddini*, Lundblad, *Arch. Hydrobiol. Supp.*, **12** : 109.

*Distribution* : (1) Assam; (2) Kerala; (3) West Bengal.

Superfamily NAUCOROIDEA Leach, 1815

Family APHELOCHEIRIDAE Fieber, 1851

Genus *Aphelocheirus* Westwood, 1833

Subgenus *Aphelocheirus* Westwood, 1833

84. *Aphelocheirus boukali* Zettel, 2000

2000. *Aphelocheirus boukali* Zettel, *Z. Arb. Gem. Öst. Ent.*, **52** : 11.

*Distribution* : (1) Karnataka; (2) Kerala.

85. *Aphelocheirus nathani* La Rivers, 1971

- 1971a. *Aphelocheirus nathani* La Rivers, *Bull. South. Calif. Acad. Sci.*, **70** : 70.  
 1988. *Aphelocheirus (Aphelocheirus) nathani* La Rivers : Polhemus & Polhemus, *Raffles Bull. Zoology*, **36** : 233.  
 2000. *Aphelocheirus (Aphelocheirus) nathani* La Rivers : Zettel, *Z. Arb. Gem. Öst. Ent.*, **52** : 14.

*Distribution* : Kerala, Tamilnadu.

86. *Aphelocheirus pradhanae* Zettel, 1998.

1998. *Aphelocheirus pradhanae* Zettel, *Ann. Naturhist. Mus. Wien*, **100** : 81.

*Distribution* : Sikkim.

Subgenus *Micraphelocheirus* Hoberlandt & Stys, 1979

87. *Aphelocheirus pygmaeus* LaRivers, 1971

1971a. *Aphelocheirus pygmaeus* La Rivers, *Bull. South. Calif. Acad. Sci.*, **70** : 69.

1988. *Aphelocheirus (Micraphelocheirus) pygmaeus* LaRivers : Polhemus & Polhemus, *Raffles Bull. Zoology*, **36** : 248.

*Distribution* : Assam.

88. *Aphelocheirus signatus* Zettel, 1998

1998. *Aphelocheirus signatus* Zettel, *Ann. Naturhist. Mus. Wien*, **100** : 91.

*Distribution* : Meghalaya.

Family NAUCORIDAE Leach, 1815

Subfamily CHEIROCHELINAЕ Montandon, 1897

Genus *Cheirochela* Hope, 1840

89. *Cheirochela assamensis* Hope, 1841

1841. *Cheirochela assamensis* Hope, *Trans Linn. Soc.*, **18** : 442.

1906. *Cheirochela assamensis* Hope : Distant, *Fauna British India*, **3** : 26.

1971b. *Cheirochela assamensis* Hope : La Rivers, *Biol. Soc. Nev. Mem.*, **2** : 80.

1897a. *Cheirochela birmaniensis* Montandon, *Ann. Mus. Civ. Gen.*, **37** : 369.

*Distribution* : Assam.

Genus *Gestroiella* Montandon, 1897

90. *Gestroiella insignis* Distant, 1910

1910. *Gestroiella insignis* Distant, *Fauna British India*, **5** : 318.

1971b. *Gestroiella insignis* Distant : La Rivers, *Biol. Soc. Nev. Mem.*, **2** : 80.

2004. *Gestroiella insignis* Distant : Bal & Basu, *State Fauna Series*, **10** : 303.

*Distribution* : (1) Assam; (2) Manipur.

Subfamily LACCOCORINAE Stål, 1876

Genus *Diaphorocoris* Montandon, 1897

91. *Diaphorocoris dubreuii* Montandon, 1908

1908. *Diaphorocoris dubreuii* Montandon, *Ann. Mus. Nat. Hung.*, **6** : 300.

1910. *Diaphorocoris dubreuii* Montandon : Distant, *Fauna British India*, **5** : 319.

*Distribution* : Tamilnadu.

Genus *Heleocoris* Stål, 1876

Subgenus *Heleocoris* Stål, 1876

92. *Heleocoris acutus* (Spinola, 1837)

1837. *Naucoris actua* Spinola, *Lib. Acad. Roy. Med.*, 55.

1906. *Heleocoris actus* (Spinola) : Distant, *Fauna British India*, **3** : 32.

1971b. *Heleocoris actus* (Spinola) : La Rivers, *Biol. Soc. Nev. Mem.*, **2** : 78.

*Distribution* : Maharashtra.

**93. *Heleocoris bengalensis bengalensis* Montandon, 1910**

1910a. *Heleocoris bengalensis* Montandon, *Bull. Soc. Sci. Bucarest*, **19** : 653.

1910. *Heleocoris bengalensis* Montandon : Distant, *Fauna British India*, **5** : 323.

1950. *Heleocoris bengalensis* Montandon : Pradhan, *Rec. Indian Mus.*, **48** : 102.

1971b. *Heleocoris bengalensis bengalensis* Montandon : La Rivers, *Biol. Soc. Nev. Mem.*, **2** : 78.

*Distribution* : (1) Madhya Pradesh; (2) Uttar Pradesh; (3) West Bengal.

**94. *Heleocoris bergrothi* Montandon, 1897**

1897b. *Heleocoris bergrothi* Montandon, *Verh. Z-b. Ges. Wien*, **47** : 448.

1906. *Heleocoris bergrothi* Montandon : Distant, *Fauna British India*, **3** : 30.

1971b. *Heleocoris bergrothi* Montandon : La Rivers, *Biol. Soc. Nev. Mem.*, **2** : 78.

*Distribution* : (1) Karnataka; (2) Kerala; (3) Tamilnadu.

**95. *Heleocoris breviceps* Montandon, 1897**

1897c. *Heleocoris breviceps* Montandon, *Ann. Soc. Ent. Belg.*, **41** : 55.

1906. *Heleocoris breviceps* Montandon : Distant, *Fauna British India*, **3** : 29.

1910. *Heleocoris breviceps* Montandon : Distant *Fauna British India*, **5** : 320.

1989. *Heleocoris breviceps* Montandon : Thirumalai, *Rec. zool. Surv. India, Occ. Pap. No.*, **118** : 33.

1971b. *Heleocoris breviceps* Montandon : La Rivers, *Biol. Soc. Nev. Mem.*, **2** : 78.

2000. *Heleocoris breviceps* Montandon : Ramakrishna, *Rec. zool. Surv. India*, **100** : 184.

2002. *Heleocoris breviceps* Montandon : Thirumalai & Sharma, *Zool. Surv. India, Wetland Ecosystem series*, **3** : 112.

2002. *Heleocoris breviceps* Montandon : Thirumalai *et. al.*, *Bionotes*, **4** : 85.

2005. *Heleocoris breviceps* Montandon : Thirumalai & Sharma, *Zool. Surv. India, Fauna of Melghat Tiger Reserve, Fauna Conservation area Series*, **24** : 350.

*Distribution* : (1) Andhra Pradesh; (2) Himachal Pradesh; (3) Maharashtra; (4) Tamilnadu.

**96. *Heleocoris elongatus* Montandon, 1897**

1897c. *Heleocoris elongatus* Montandon, *Ann. Soc. Ent. Belg.*, **41** : 59.

1906. *Heleocoris elongatus* Montandon : Distant, *Fauna British India*, **3** : 31.

1910. *Heleocoris elongatus* Montandon : Distant, *Fauna British India*, **5** : 324.

1919a. *Heleocoris elongatus* Montandon : Paiva, *Rec. Indian Mus.*, **16** : 154.

1971b. *Heleocoris elongatus* Montandon : La Rivers, *Biol. Soc. Nev. Mem.*, **2** : 78.

*Distribution* : (1) Bihar; (2) Madhya Pradesh; (3) Maharashtra; (4) West Bengal.

97. *Heleocoris indicus* Montandon, 1897

- 1897b. *Heleocoris indicus* Montandon, *Verh. Z-b. Ges. Wien*, **47** : 450.  
 1906. *Heleocoris indicus* Montandon : Distant, *Fauna British India*, **3** : 31.  
 1971b. *Heleocoris indicus* Montandon : La Rivers, *Biol. Soc. Nev. Mem.*, **2** : 78.  
 2002b. *Heleocoris indicus* Montandon : Thirumalai & Sharma, *Zool. Surv. India, Wetland Ecosystem series*, **3** : 112.

*Distribution* : (1) Andhra Pradesh; (2) Maharashtra.

98. *Heleocoris majusculus* Montandon, 1908

1908. *Heleocoris majusculus* Montandon, *Annl. Mus. Nat. Hung.*, **6** : 301.  
 1910. *Heleocoris majusculus* Montandon : Distant, *Fauna British India*, **5** : 324.  
 1971b. *Heleocoris majusculus* Montandon : La Rivers, *Biol. Soc. Nev. Mem.*, **2** : 78.

*Distribution* : Tamilnadu.

99. *Heleocoris obliquatus* (Spinola, 1837)

1837. *Naucoris obliquatus* Spinola, *Lib. Acad. Roy. Med.*, 54.  
 1876. *Heleocoris obliquatus* (Spinola) : Stal. *Enum. Hemipt.*, 146.  
 1906. *Heleocoris obliquatus* (Spinola) : Distant, *Fauna British India*, **3** : 31.  
 1910. *Heleocoris obliquatus* (Spinola) : Distant, *Fauna British India*, **5** : 322.  
 1919a. *Heleocoris obliquatus* (Spinola) : Paiva, *Rec. Indian Mus.*, **16** : 155.  
 1974. *Heleocoris obliquatus* (Spinola) : La Rivers, *Occ. Pap. Biol. Soc. Nevada*, **38** : 12.  
 1995. *Heleocoris obliquatus* (Spinola) : Varshney, *Zool. Surv. India, Himalayan Ecosystem Series Part 1* : 53.  
 2005. *Heleocoris obliquatus* (Spinola) : Thirumalai & Sharma, *Zool. Surv. India, Fauna of Melghat Tiger Reserve, Fauna Conservation area Series*, **24** : 351.

*Distribution* : (1) Maharashtra; (2) Meghalaya; (3) Uttar Pradesh.

100. *Heleocoris rotundatus* Montandon, 1908

1908. *Heleocoris rotundatus* Montandon, *Ann. Mus. Nat. Hung.*, **6** : 302.  
 1910. *Heleocoris rotundatus* Montandon : Distant, *Fauna British India*, **5** : 321.  
 1974. *Heleocoris rotundatus* Montandon : La Rivers, *Occ. Pap Biol. Soc Nevada*, **38** : 12.

*Distribution* : (1) Kerala; (2) Tamilnadu.

101. *Heleocoris strabus* Montandon, 1897

- 1897a. *Heleocoris strabus* Montandon, *Ann. Mus. Civ. Gen.*, **37** : 372.  
 1906. *Heleocoris strabus* Montandon : Distant, *Fauna British India*, **3** : 29.  
 1971b. *Heleocoris strabus* Montandon : La Rivers, *Biol. Soc. Nev. Mem.*, **2** : 78.  
 2004. *Heleocoris strabus* Montandon : Bal & Basu, *Zool. Surv. India, State Fauna Series*, **10** : 303.

*Distribution* : Manipur.

102. *Heleocoris vicinus* Montandon, 1910

- 1910a. *Heleocoris vicinus* Montandon, *Bull. Soc. Sci. Bucarest*, **19** : 655.  
 1910. *Heleocoris vicinus* Montandon : Distant, *Fauna British India*, **5** : 322.  
 1938. *Heleocoris vicinus* Montandon : Hafiz and Mathai, *Rec. Indian Mus.*, **40** : 209.  
 1939. *Heleocoris vicinus* Montandon : Hafiz and Ribeiro, *Rec. Indian Mus.*, **41** : 431.  
 1971b. *Heleocoris vicinus* Montandon : La Rivers, *Biol. Soc. Nev. Mem.*, **2** : 78.  
 1988. *Heleocoris vicinus* Montandon : Bisht, *Recent Adv. Fish Ecol. Limnology & Conservation*, : 125.  
 1999. *Heleocoris vicinus* Montandon : Thirumalai & Radhakrishnan, *Rec. zool. Surv. India*, **97** : 138.  
 2002b. *Heleocoris vicinus* Montandon : Thirumalai & Sharma, *Zool. Surv. India, Wetland Ecosystem series*, **3** : 112.

*Distribution* : (1) Assam; (2) Bihar; (3) Kerala; (4) Maharashtra; (5) Uttar Pradesh; (6) West Bengal.

**Note** : *Heleocoris oreatus* (Montandon) recorded by Varshney (1995) from Western Himalaya is doubtful.

Subfamily NAUCORINAE Leach, 1815

Tribe **Naucorini** Leach, 1815

Genus *Naucoris* Geoffroy, 1762

103. *Naucoris scutellaris* Stål, 1859

1859. *Naucoris scutellaris* Stål, *Kongl. Svenska. Sugenises*, **4** : 266.  
 1910. *Naucoris scutellaris* Stål : Distant, *Fauna British India*, **5** : 325.  
 1919a. *Naucoris scutellaris* Stål : Paiva, *Rec. Indian Mus.*, **16** : 155.  
 1934. *Naucoris scutellaris* Stål : Lundblad, *Arch. Hydro Biol. Suppl.*, **12** : 63.  
 1971b. *Naucoris scutellaris* Stål : La Rivers, *Biol. Soc. Nev. Mem.*, **2** : 72.  
 1991. *Naucoris scutellaris* Stål : Nieser & Chen, *Tijds., Entomol.*, **134** : 53.  
 1999. *Naucoris scutellaris* Stål : Thirumalai & Radhakrishnan, *Rec. zool. Surv. India*, **97** : 138.  
 2002b. *Naucoris scutellaris* Stål : Thirumalai & Sharma, *Zool. Surv. India, Wetland Ecosystem series*, **3** : 112.  
 2005. *Naucoris scutellaris* Stål : Thirumalai & Suresh Kumar, *Rec. zool. Surv. India*, **105** : 13.  
 1904. *Thurselius greeni* Distant, *Entomologist*, **37** : 259.  
 1910. *Thurselius clathratus* Distant, *Fauna British India*, **5** : 327.  
 1910. *Naucoris sordidus* Distant, *Fauna British India*, **5** : 325.  
 1910. *Naucoris vividus* Distant, *Fauna British India*, **5** : 326.

*Distribution* : (1) Kerala; (2) Maharashtra; (3) Pondicherry; (4) Uttar Pradesh; (5) West Bengal.

Genus *Nanonaucoris* Zettel, 2001

104. *Nanonaucoris boukali* Zettel, 2001

2001. *Nanonaucoris boukali* Zettel, *Linzer boil. Beitr.*, **33** : 1088.

*Distribution* : Tamilnadu.

105. *Nanonaucoris minimus* Zettel, 2001

2001. *Nanonaucoris boukali* Zettel, *Linzer boil. Beitr.*, **33** : 1087.

*Distribution* : Kerala.

Superfamily NOTONECTOIDAE Latreille, 1802

Family NOTONECTIDAE Latreille, 1802

Subfamily ANISOPINAE Hutchinson, 1929

Tribe **Anisopini** Hutchinson, 1929

Genus *Anisops* Spinola, 1837

106. *Anisops barbatus* Brooks, 1951

1951. *Anisops barbata* Brooks, *Kan. Univ. Sci. Bull.*, **34** : 387.

1994. *Anisops barbata* Brooks : Thirumalai, *Rec. zool. Surv. India, Occ. Pap. No.*, **165** : 13.

1995. *Anisops barbatus* Brooks : Polhemus *et al. Cat. Heteroptera Palaearctic region 1* : 64.

2004. *Anisops barbatus* Brooks : Thirumalai, *Rec. zool. Surv. India*, **102** (1-2) : 65.

2004. *Anisops barbatus* Brooks : Nieser, *Raff. Bull. Zoology*, **52** : 84.

*Distribution* : (1) Andhra Pradesh; (2) Bihar; (3) Chandigarh; (4) Haryana; (5) Himachal Pradesh; (6) Karnataka; (7) Madhya Pradesh; (8) Maharashtra; (9) Orissa; (10) Rajasthan; (11) Tamilnadu; (12) Uttar Pradesh; (13) West Bengal.

107. *Anisops bouvieri* Kirkaldy, 1904

1904. *Anisops bouvieri* Kirkaldy, *Wiener Ent. Zeit.*, **23** : 116.

1951. *Anisops bouvieri* Kirkaldy : Brooks, *Kans Univ. Sci. Bull.*, **34** : 430.

1995. *Anisops bouvieri* Kirkaldy : Polhemus *et al. Cat. Heteroptera Palaearctic region, 1* : 64.

2004. *Anisops bouvieri* Kirkaldy : Thirumalai, *Rec. zool. Surv. India*, **102** (1-2) : 65.

2004. *Anisops bouvieri* Kirkaldy : Nieser, *Raff. Bull. Zoology*, **52** : 85.

*Distribution* : (1) Andaman & Nicobar Islands; (2) Andhra Pradesh; (3) Arunachal Pradesh; (4) Assam; (5) Bihar; (6) Karnataka; (7) Kerala; (8) Madhya Pradesh; (9) Maharashtra; (10) Orissa; (11) Pondicherry; (12) Rajasthan; (13) Tamilnadu; (14) Uttar Pradesh; (15) West Bengal.

108. *Anisops breddini* Kirkaldy, 1901

1901a. *Anisops breddini* Kirkaldy, *Entomologist*, London, **34** : 5.

1951. *Anisops breddeni* Kirkaldy : Brooks, *Kans univ. Sci. Bull.*, **34** : 429.

1962. *Anisops breddini* Kirkaldy : Leong & Fernando, *J. Bombay nat. Hist.*, **59** : 518.  
 1964. *Anisops kempfi* Brooks : Lansbury, *Ann. Zool. Warszawa*, **22** : 215.  
 1991. *Anisops breddini* Kirkaldy : Polhemus, *J. Kans. Entomol. Soc.*, **64** : 442.  
 1994. *Anisops kempfi* Brooks : Bal & Basu, *Zool. Surv. India, State Fauna Series*, **3** (5) : 549.  
 1997. *Anisops breddini* Kirkaldy : Bal & Basu, *Zool. Surv. India, State Fauna Series*, **6** : 273.  
 2004. *Anisops breddini* Kirkaldy : Nieser, *Raff. Bull. Zoology*, **52** : 85.  
 1951. *Anisops kempfi* Brooks, *Kans. Univ. Sci. Bull.*, **34** : 441.  
 2004. *Anisops kempfi* Brooks : Nieser, *Raff. Bull. Zoology*, **52** : 85.

*Distribution* : (1) Andhra Pradesh; (2) Assam; (3) Bihar; (4) Delhi; (5) Kerala; (6) Madhya Pradesh; (7) Orissa; (8) Tamilnadu; (9) Tripura; (10) Uttar Pradesh; (11) West Bengal.

#### 109. *Anisops campbelli* Brooks, 1951

1951. *Anisops campbelli* Brooks, *Kans univ. Sci. Bull.*, **34** : 322.  
 1964. *Anisops campbelli* Brooks : Lansbury, *Ann. Zool. Warszawa*, **22** : 213.  
 2001. *Anisops campbelli* Brooks : Thirumalai, *Fauna conservation area*, **11** : 117.  
 2004. *Anisops campbelli* Brooks : Thirumalai, *Rec. zool. Surv. India*, **102** (1-2) : 65.

*Distribution* : (1) Chandigarh; (2) Gujarat; (3) Harayana; (4) Himachal Pradesh; (5) Karnataka; (6) Maharashtra; (7) Punjab; (8) Rajasthan; (9) Tamilnadu; (10) Uttar Pradesh; (11) West Bengal.

#### 110. *Anisops cavifrons* Brooks, 1951

1951. *Anisops cavifrons* Brooks, *Kans. Univ. Sci. Bull.*, **34** : 418.  
 1994. *Anisops cavifrons* Brooks : Thirumalai, *Rec. zool. Surv. India, Occ. Pap. No.*, **165** : 16.  
 2004. *Anisops cavifrons* Brooks : Thirumalai, *Rec. zool. Surv. India*, **102** (1-2) : 65.

*Distribution* : (1) Bihar; (2) Chandigarh; (3) Gujarat; (4) Himachal Pradesh; (5) Karnataka; (6) Kerala; (7) Madhya Pradesh; (8) Maharashtra; (9) Pondicherry; (10) Punjab; (11) Rajasthan; (12) Tamilnadu; (13) Uttar Pradesh; (14) West Bengal.

#### 111. *Anisops crinitus* Brooks, 1951

1951. *Anisops crinitus* Brooks, *Kans. Univ. Sci. Bull.*, **34** : 443.  
 1995. *Anisops crinitus* Brooks : Polhemus *et al.* *Cat. Heteroptera Palaearctic region*, **1** : 64.  
 1994. *Anisops crinitus* Brooks : Bal & Basu, *Zool. Surv. India, State Fauna Series*, **3** (5) : 548.  
 1996. *Anisops crinitus* Brooks : Nieser, *Ent. Ber., Amst.* **56** : 107.  
 1966. *Anisops marazanofi* Poisson, *Vie et Milieu*, **17** : 775.

*Distribution* : (1) Orissa; (2) West Bengal.

#### 112. *Anisops exiguus* Horvath, 1919

1919. *Anisops exigua* Horvath, *Abhandl. Senckenberg. Naturf. Gesell.*, **35** : 314.  
 1951. *Anisops exigera* Horvath : Brooks, *Univ. Kans. Sci. Bull.*, **34** : 447.

1991. *Anisops exigua* Horvath : Polhemus, *J. Kans. Ento. Soc.*, **64** : 442.  
 1994. *Anisops exigera* Horvath : Thirumalai, *Rec. zool, Surv. India, Occ. Pap. No.*, **165** : 16.  
 1995. *Anisops exiguus* Horvath : Polhemus *et al.*, *Cat. Het. Palaearctic region*, **1** : 65.  
 2001. *Anisops exigua* Horvath : Thirumalai, *Fauna conservation area*, **11** : 117.  
 2002. *Anisops exiguus* Horvath : Thirumalai *et. al.*, *Res. Bull. Panjab Univ.*, **52** : 156.  
 2004. *Anisops exiguus* Horvath : Nieser, *Raff. Bull. Zoology*, **52** : 86.

*Distribution* : (1) Andhra Pradesh; (2) Chandigarh; (3) Kerala; (4) Himachal Pradesh; (5) Madhya Pradesh; (6) Maharashtra; (7) Punjab; (8) Tamilnadu.

**113. *Anisops extendofrons* Brooks, 1951**

1951. *Anisops extendofrons* Brooks, *Kans. Univ. Sci. Bull.*, **34** : 432.  
 1962. *Anisops extendofrons* Brooks : Leong & Fernando, *J. Bombay nat. Hist.*, **59** : 516.

*Distribution* : (1) Andhra Pradesh; (2) Kerala; (3) Maharashtra; (4) Tamilnadu.

**114. *Anisops kuroiwae* Matsumura, 1915**

1915. *Anisops kuroiwae* Matsumura *Ent. Mag. Kyoto*, **1** : 109.  
 1951. *Anisops batillifrons* Lundblad : Brooks, *Kans. Univ. Sci. Bull.*, **34** : 420.  
 1995. *Anisops kuroiwae* Matsumura : Polhemus *et al.*, *Cat. Het. Palaearctic region*, **1** : 65.  
 2004. *Anisops kuroiwae* Matsumura : Nieser, *Raff. Bull. Zoology*, **52** : 86.  
 2005. *Anisops kuroiwae* Matsumura : Nieser, Chen & Young, *Raff. Bull. Zoology*, **53** : 205.  
 1933a, *Anisops batillifrons* Lundblad, *Ann. Mag. Nat. Hist.*, **12** : 463.  
 2004. *Anisops batillifrons* Lundblad : Bal & Basu, *Zool. Surv. India, State Fauna Series*, **10** : 300.

*Distribution* : (1) Arunachal Pradesh; (2) Assam; (3) Delhi; (4) Manipur; (5) Sikkim; (6) Tripura; (7) Uttar Pradesh; (8) West Bengal.

**115. *Anisops lipovskyi* Brooks, 1951**

1951. *Anisops lipovskyi* Brooks, *Kans. Univ. Sci. Bull.*, **34** : 379.  
 1994. *Anisops lipovskyi* Brooks : Bal & Basu, *Zool. Surv. India, State Fauna Series*, **3** (5) : 546.

*Distribution* : West Bengal.

**116. *Anisops naustus* Fieber, 1851**

1851. *Anisops nausta* Fieber, *Abhandl. Konigl. bohm. Ges. Wiss.*, **7** : 484-485.  
 1934. *Anisops nausta* Fieber : Lundblad, *Arch. Hydrobiol. Suppl.*, **12** : 168.  
 1947. *Anisops nausta* Fieber : Hafiz, and Pradhan *Rec. Indian. Mus.*, **45** : 352.  
 1951. *Anisops nausta* Fieber : Brooks, *Kans. Univ. Sci. Bull.*, **34** : 416.  
 1994. *Anisops nausta* Fieber : Agarker *et al.*, *Bionature* **14** : 79.  
 1995. *Anisops nausta* Fieber : Polhemus *et al.*, *Cat. Het. Palaearctic region*, **1** : 65.

2004. *Anisops naustus* Fieber : Nieser, Raff. Bull. Zoology, **52** : 87.

1906. *Anisops fieberi* Kirkaldy : Distant, Fauna British India, **3** : 46.

*Distribution* : (1) Assam; (2) Andhra Pradesh; (3) Madhya Pradesh; (4) Orissa; (5) West Bengal.

#### 117. *Anisops nigrolineatus* Lundblad, 1934

1934. *Anisops nigrolineata* Lundblad, Arch. Hydrobiol. Suppl., **12** : 160.

1951. *Anisops nigrolineata* Lundblad : Brooks, Kans. Univ. Sci. Bull., **34** : 409.

1995. *Anisops nigrolineatus* Lundblad : Polhemus et al, Cat. Het. Palaerctic region, **1** : 65.

2002. *Anisops nigrolineatus* Lundblad : Thirumalai, Vistas Entomological Research New Millennium, **24**.

2004. *Anisops nigrolineatus* Lundblad : Thirumalai, Rec. zool. Surv. India, **102** (1-2) : 65.

2004. *Anisops nigrolineatus* Lundblad : Nieser, Raff. Bull. Zoology, **52** : 88.

*Distribution* : (1) Arunachal Pradesh; (2) Assam; (3) Bihar; (4) Chandigarh; (5) Himachal Pradesh; (6) Karnataka; (7) Madhya Pradesh; (8) Maharashtra; (9) Punjab; (10) Tamilnadu; (11) Uttar Pradesh; (12) West Bengal.

**Note** : Specimens in Indian Museum, ZSI, Kolkatta from Bansloi River, near Amrapara Dak Bungalow, Santal Parganas, Bihar identified as *Anisops (Anisops) varia* belongs to *A. nigrolineatus* (2 males and 1 female)

#### 118. *Anisops niveus* (Fabricius, 1775)

1775. *Notonecta nivea* Fabricius, Systema Entomologiae, Flensburgi et Lipsiae, 690

1851. *Anisops niveus* (Fabricius) : Fieber, Abhandl. Konigl. bohm. Ges. Wiss., **7** : 484.

1928. *Anisops niveus* (Fabricius) : Dover, J. Bombay nat. Hist. Soc., **32** : 615.

1934. *Anisops nivea* (Fabricius) : Lundblad, Arch. Hydrobiol. Suppl., **12** : 163.

1947. *Anisops (Anisops) nivea* (Fabricius) : Hafiz & Pradhan, Rec. Indian Mus., **45** : 353.

1951. *Anisops nivea* (Fabricius) : Brooks, Kans. Univ. Sci. Bull., **34** : 373.

1995. *Anisops niveus* (Fabricius) : Varshney, Zool. Surv. India, Fauna Western Himalaya, **1** : 53.

2001. *Anisops nivea* (Fabricius) : Thirumalai, Fauna conservation area, **11** : 117.

2001. *Anisops niveus* (Fabricius) : Nieser, Raff. Bull. Zoology, **52** : 88.

*Distribution* : (1) Andaman & Nicobar Islands; (2) Assam; (3) Bihar; (4) Kerala; (5) Madhya Pradesh; (6) Maharashtra; (7) Orissa; (8) Tamilnadu; (9) Uttar Pradesh; (10) West Bengal.

#### 119. *Anisops paranigrolineatus* Brooks, 1951

1951. *Anisops paranigrolineata*, Brooks, Kans. Univ. Sci. Bull., **34** : 407.

2001. *Anisops paranigrolineata*, Brooks : Thirumalai, ZSI, Fauna of Conservation Area, **11** : 117.

*Distribution* : (1) Kerala; (2) Maharashtra; (3) Tamilnadu; (4) Uttar Pradesh.

120. *Anisops sardeus sardeus* Herrich – Shaffer, 1850

1850. *Anisops sardeus* Herrich-Shaffer, *Die wanzenartigen Insecten*, **9** : 41.  
 1906. *Anisops sardeus* Herrich-Shaffer : Distant, *Fauna British India*, **3** : 45.  
 1918. *Anisops sardeus* Herrich-Shaffer : Pavia, *Rec. Indian Mus.*, **14** : 28.  
 1951. *Anisops sardeus* Herrich-Shaffer : Brooks., *Univ. Kans. Sci. Bull.*, **34** : 423.  
 1989. *Anisops sardea* Herrich-Shaffer : Thirumalai, *Rec. zool, Surv. India, Occ. Pap. No.*, **118** : 26.  
 1995. *Anisops sardeus sardeus* Herrich-Shaffer : Polhemus, *Cat. Het. Palaerctic region*, **1** : 66.

*Distribution* : (1) Andaman & Nicobar Islands; (2) Andhra Pradesh; (3) Bihar; (4) Chandigarh; (5) Delhi; (6) Himachal Pradesh; (7) Karnataka; (8) Madhya Pradesh; (9) Maharashtra; (10)-Manipur; (11) Orissa; (12) Punjab; (13) Rajasthan; (14) Tamilnadu; (15) Tripura; (16) Uttar Pradesh; (17) West Bengal.

121. *Anisops stali* Kirkaldy, 1904

1904. *Anisops stali* Kirkaldy, *Wiener Ent. Zeit.*, **23** : 113.  
 1951. *Anisops stali* Kirkaldy : Brooks., *Univ. Kans. Sci. Bull.*, **34** : 319.  
 1989. *Anisops stali* Kirkaldy : Thirumalai, *Misc. Occ. Pap. Rec. Zool. Surv. India*, **118** : 26.

*Distribution* : Tamilnadu.

122. *Anisops tahitiensis* Lundblad, 1934

1934. *Anisops tahitiensis* Lundblad, *Bull. Bishop. Mus. Honolulu*, **113** : 121.  
 1951. *Anisops tahitiensis* Lundblad : Brooks, *Univ. Kans. Sci. Bull.*, **34** : 376.  
 1995. *Anisops tahitiensis* Lundblad : Polhemus *et al*, *Cat. Het. Palaerctic region*, **1** : 67.  
 2004. *Anisops tahitiensis* Lundblad : Nieser, *Raff. Bull. Zoology*, **52** : 90.  
 2005. *Anisops tahitiensis* Lundblad : Nieser, Chen & Young, *Raff. Bull. Zoology*, **53** : 206.

*Distribution* : (1) Andaman & Nicobar Islands.

123. *Anisops varius* Fieber, 1851

1851. *Anisops varius* Fieber, *Abhandl. Konigl. bohm. Ges. Wiss.*, **7** : 484-485.  
 1910. *Anisops varius* Fieber : Distant, *Fauna British India*, **5** : 332.  
 1951. *Anisops varia* Fieber : Brooks, *Univ. Kans. Sci. Bull.*, **34** : 376.  
 1995. *Anisops varius* Fieber : Polhemus *et al*, *Cat. Het. Palaerctic region*, **1** : 67.

*Distribution* : Kerala.

**Note** : Brooks (1951) states that the Asian forms belong to another species.

124. *Anisops waltairensis* Brooks, 1951

1951. *Anisops waltairensis* Brooks, *Univ. Kans. Sci. Bull.*, **34** : 457.  
 1994. *Anisops waltairensis* Brooks : Thirumalai, *Rec. zool, Surv. India, Occ. Pap. No.*, **165** : 19.

2002. *Anisops waltirensis* Brooks : Thirumalai Mehta & Sharma, *Res. Bull. Panjab Univ.*, **52** : 156.

*Distribution* : (1) Andhra Pradesh; (2) Chandigarh; (3) Himachal Pradesh; (4) Punjab; (5) Tamilnadu.

125. *Anisops* sp. Polhemus & Starmuhlner, 1990

*Distribution* : (1) Andaman & Nicobar Islands.

Subfamily NOTONECTINAE Latreille, 1802

Tribe Notonectini Latreille, 1802

Genus *Enithares* Spinola, 1837

126. *Enithares ciliata* (Fabricius, 1798)

1798. *Notonecta ciliata* Fabricius, *Suppl. Ent. Syst.*, 524.

1906. *Enithares indica* Spinola : Distant, *Fauna British India*, **3** : 42.

1938. *Enithares abbreviata* (Kirby) : Hafiz and Mathai. *Rec. Indian Mus.*, **40** : 210.

1959. *Enithares ciliata* (Fabricius) : Baid, *J. Bombay nat. Hist.*, **56** : 362.

1968. *Enithares ciliata* (Fabricius) : Lansbury, *Pacific Insects*, **10** : 413.

1995. *Enithares ciliata* (Fabricius) : Polhemus *et al*, *Cat. Het. Palaerctic region*, **1** : 67.

2001. *Enithares ciliata* (Fabricius) : Thirumalai, *Fauna conservation area*, **11** : 115.

2004. *Enithares ciliata* (Fabricius) : Thirumalai, *Rec. zool. Surv. India*, **102** (1-2) : 65.

1891. *Notonecta abbreviata* Kirby, *J. Linn. Soc. London*, **24** : 126.

1910. *Enithares paviana* Distant, *Fauna British India*, **5** : 329.

1919a. *Enithares laceta* Paiva, *Rec. Indian Mus.*, **16** : 155.

*Distribution* : (1) Andaman & Nicobar Islands; (2) Andhra Pradesh; (3) Assam; (4) Bihar; (5) Goa; (6) Karnataka; (7) Kerala; (8) Madhya Pradesh; (9) Maharashtra; (10) Manipur; (11) Meghalaya; (12) Rajasthan; (13) Tamilnadu; (14) Tripura; (15) Uttar Pradesh; (16) West Bengal.

127. *Enithares fusca* Brooks, 1948

1948. *Enithares fusca* Brooks, *J. Kans. Ent. Soc.*, **21** : 46.

1968. *Enithares fusca* Brooks : Lansbury, *Pacif. Insects*, **10** : 412.

2001. *Enithares fusca* Brooks : Thirumalai, *ZSI. Fauna Conservation area*, **11** : 115.

2004. *Enithares fusca* Brooks : Thirumalai, *Rec. zool. Surv. India*, **102** (1-2) : 65.

*Distribution* : (1) Karnataka; (2) Kerala; (3) Madhya Pradesh; (4) Tamilnadu.

128. *Enithares hungerfordi* Brooks, 1948

1948. *Enithares hungerfordi* Brooks, *J. Kans. Ent. Soc.*, **21** : 41.

2001. *Enithares hungerfordi* Brooks : Thirumalai, *ZSI, Fauna of Conservation Area*, **11** : 115.

*Distribution* : (1) Karnataka; (2) Kerala; (3) Tamilnadu.

129. *Enithares intha*\* Paiva, 19181918. *Enithares intha* Paiva, *Rec. Indian Mus.*, **14** : 27.1933. *Enithares intha* Paiva : Hutchinson, *Rec. Indian Mus.*, **35** : 396.*Distribution* : Meghalaya.**\*Personnal Communication Polhemus (1998)**130. *Enithares lineatipes* Horvath, 18891889. *Enithares lineatipes* Horvath, *Termesz. Fuz.*, **12** : 39.1904. *Enithares lineatipes* Horvath : Kirkaldy, *Wien. Ent. Zeit.*, **23** : 98.1906. *Enithares lineatipes* Horvath : Distant, *Fauna British. India*, **3** : 43.1933. *Enithares lineatipes* Horvath : Hutchinson, *Rec. Indian Mus.*, **35** (4) : 395.1968. *Enithares lineatipes* Horvath : Lansbury, *Pacif. Insects*, **10** : 418.1995. *Enithares lineatipes* Horvath : Polhemus *et al.*, *Cat. Het. Palaearctic region*, **1** : 65.2002. *Enithares lineatipes* Horvath : Thirumalai, *et. al.*, *Res. Bull. Panjab Univ.*, **52** : 156.1919a. *Enithares templetonii* Kirby *ex parte*; Paiva : In : Annandale, *Rec. Indian Mus.*, **16** : 156.*Distribution* : (1) Himachal Pradesh; (2) Jammu & Kashmir; (3) Maharashtra; (4) Punjab; (5) Uttar Pradesh.131. *Enithares mandalayensis* Distant, 19101910. *Enithares mandalayensis* Distant, *Fauna British India*, **5** : 330.1968. *Enithares mandalayensis* Distant : Lansbury, *Pacif. Insects*, **10** : 380.*Distribution* : (1) Assam; (2) Manipur.132. *Enithares rogersi* Distant, 19101910. *Enithares rogersi* Distant, *Fauna British. India, Rhynchota*, **5** : 330.1968. *Enithares rogersi* Distant : Lansbury, *Pacif. Insects*, **10** : 432.1990. *Enithares rogersi* Distant : Polhemus & Starmuhlner, *Ann. Naturhist. Mus. Wien*, **91** : 45.*Distribution* : (1) Andaman & Nicobar Islands.133. *Enithares triangularis* (Guérin-Méneville, 1844)1844. *Notonecta triangularis* Guérin-Méneville, *Icon. Reg. Anim. G. Cuvier*; 354.1906. *Enithares triangularis* (Guérin-Méneville) : Distant, *Fauna British India*, **3** : 44.1928. *Enithares triangularis* (Guérin-Méneville) : Dover, *J. Bombay nat. Hist. Soc.*, **32** : 615.1968. *Enithares triangularis* (Guérin-Méneville) : Lansbury, *Pacif. Insects*, **10** : 369.1994. *Enithares triangularis* (Guérin-Méneville) : Thirumalai, *Rec. zool. Surv. India, Occ. Pap. No.*, **165** : 13.2001. *Enithares triangularis* (Guérin-Méneville) : Thirumalai, *Fauna conservation area*, **11** : 116.*Distribution* : (1) Kerala; (2) Tamilnadu; (3) West Bengal.

Genus *Notonecta* Linnaeus, 1758

Subgenus *Notonecta* Linnaeus, 1758

134. *Notonecta viridis* Delcourt, 1909

1909. *Notonecta viridis* Delcourt, *Bull. Sci. France de Belgique*, **XLIII** : 379.  
 1928. *Notonecta viridis mediterranea* Hutchinson, *Ent. Mon. Mag.*, **LXIV** : 35.  
 1933. *Notonecta viridis kashmiriana* Hungerford, *Kans. Univ. Sci. Bull.*, **21** : 65.  
 1933. *Notonecta viridis viridis* Delcourt : Hungerford, *Kans. Univ. Sci. Bull.*, **21** : 60.  
 1995. *Notonecta viridis* Delcourt : Polhemus *et al.*, *Cat. Het. Palaearctic region*, **1** : 72.

*Distribution* : (1) Arunachal Pradesh; (2) Jammu & Kashmir.

135. *Notonecta montandoni* Kirkaldy, 1897

*Distribution* : India (Doubtful).

Tribe *Nychini* Hungerford, 1934

Genus *Nychia* Stål, 1860

136. *Nychia sappho* Kirkaldy, 1901

- 1901c. *Nychia marshalli sappho* Kirkaldy, *Ann. Mus. Genova*, **20** : 809.  
 1910. *Nychia marshalli* (Scott, 1872) : Distant, *Fauna British India*, **5** : 334.  
 1991. *Nychia sappho* Kirkaldy : Niesser & Chen, *Tijdschrift Voor Entomol.*, **134** : 64.  
 1994. *Nychia marshalli* (Scott) : Bal & Basu, *Fauna of West Bengal, State Fauna Series*, **3** : (Part-5) : 550.  
 2001. *Nychia prox marshalli* (Scott) : Thirumalai, *Fauna conservation area*, **11** : 116.  
 2004. *Nychia sappho* Kirkaldy : Nieser, *Raff. Bull. Zoology*, **52** : 94.  
 2005. *Nychia sappho* Kirkaldy : Nieser, *Raff. Bull. Zoology*, **53** : 207.  
 1933. *Nychia malayana* Lundblad, *Arch. Hydrobiol. Suppl.*, **12** : 148.  
 1985. *Nychia sappho* Kirkaldy : Lansbury, *Beagle*, **2** : 4.

*Distribution* : (1) Pondicherry; (2) Tamilnadu; (3) West Bengal.

Superfamily PLEOIDEA Fieber, 1851

Family PLEIDAE Fieber, 1851

Genus *Paraplea* Esaki & China, 1928

137. *Paraplea buenoi* Kirkaldy, 1904

1904. *Plea buenoi* Kirkaldy, *Wien. Ent. Zeit.*, **23** : 128.  
 1910. *Plea buenoi* Kirkaldy : Distant, *Fauna British India*, **5** : 48.  
 1934. *Plea buenoi* Kirkaldy : Lundblad, *Arch. Hydrobiol. Suppl.*, **12** : 126.  
 1985. *Plea buenoi* Kirkaldy : Bhargava, *Proc. Nat. Sympos. Eualu. Environ*, **1981** : 319.

2002. *Paraplea buenoi* Kirkaldy : Thirumalai & Ramakrishna. *Rec. zool. Surv. India*, **100** : 106.

2005. *Paraplea buenoi* Kirkaldy : Thirumalai & Suresh Kumar, *Rec. zool. Surv. India*, **105** : 9.

*Distribution* : (1) Pondicherry; (2) Rajasthan.

138. *Paraplea frontalis* (Fieber, 1844)

1844b. *Ploa frontalis* Fieber. *Entomologische Monographien, Leipzig* : 18.

1898a. *Plea frontalis* Fieber : Kirkaldy, *Wien. ent. Zeit.*, **17** : 141.

1906. *Plea frontalis* (Fieber) : Distant, *Fauna British India*, **3** : 48.

1934. *Plea (Paraplea) frontalis* (Fieber) : Lundblad, *Arch. Hydrobiol. Suppl.*, **12** : 138.

1939. *Plea (Paraplea) frontalis* (Fieber) : Hafiz & Ribeiro, *Rec. Indian Mus.*, **41** : 434.

1947. *Plea (Paraplea) frontalis* (Fieber) : Hafiz & Pradhan, *Rec. Indian Mus.*, **45** : 349.

1969. *Plea frontalis* (Fieber) : Julka, *Entomologist*, **81** : 175.

1989. *Plea frontalis* (Fieber) : Thirumalai, *Rec. zool. Surv. India, Occ. Pap. No.*, **118** : 19.

1988. *Plea frontalis* (Fieber) : Roy *et al.*, *Rec. zool. Surv. India*, **85** : 52.

1989. *Plea frontalis* (Fieber) : Benzie, *Hydrobiologia*. **179** : 157.

1995. *Paraplea frontalis* (Fieber) : Polhemus *et al*, *Cat. Het. Palaerctic region*, **1** : 74.

1999. *Paraplea frontalis* (Fieber) : Thirumalai. *IAAB*, **7** : 34.

2000. *Plea frontalis* (Fieber) : Ramakrishna, *Rec. zool. Surv. India*, **98** : 183.

2002. *Paraplea frontalis* (Fieber) : Thirumalai & Ramakrishna, *Rec. zool. Surv. India*, **100** : 107.

2002. *Paraplea quinque maculata* Lundblad : Thirumalai, *Proc. Vista Entomolo. Research*, : 25.

2004. *Paraplea frontalis* (Fieber) : Thirumalai, *Rec. zool. Surv. India*, **102** : 67.

2005. *Paraplea frontalis* (Fieber) : Nieser, *Raff. Bull. Zoology*, **52** : 82.

2006. *Paraplea frontalis* (Fieber) : Thirumalai & Sureshkumar, *Rec. zool. Surv. India*, **105** : 9.

1910. *Plea pelopea* Distant, *Fauna British India*, **5** : 336.

1934. *Plea (Paraplea) quinque maculata* Lundblad, *Arch. Hydrobiol. Suppl.*, **12** : 135.

*Distribution* : (1) Andaman & Nicobar Islands; (2) Andhra Pradesh; (3) Arunachal Pradesh; (4) Bihar; (5) Chandigarh; (6) Karnataka; (7) Madhya Pradesh; (8) Maharashtra; (9) Orissa; (10) Pondicherry; (11) Punjab; (12) Tamilnadu; (13) Uttar Pradesh; (14) West Bengal.

139. *Paraplea indistinguenda* (Matsumura, 1905)

1905. *Plea indistinguenda* Matsumura, *J. Sapporo Coll. Agri.*, **2** : 59.

?1906. *Plea pallescens* Distant, *Fauna British India*, **3** : 48.

1939. *Plea (Paraplea) pallescens* Distant : Hafiz & Ribeiro, *Rec. Indian Mus.*, **41** : 434.

1947. *Plea indistinguenda* Matsumura : Hafiz & Pradhan, *Rec. Indian Mus.*, **45** : 347.

1994. *Plea indistinguenda* Matsumura : Bal & Basu, *State Fauna Series*, **3** : 551.

1995. *Paraplea indistinguenda* (Matsumura) : Polhemus *et al*, *Cat. Het. Palaerctic region*, **1** : 74.

2000. *Plea pallescens* Distant : Ramakrishna, *Rec. zool. Surv. India*, **98** : 183.

2004. *Paraplea indistinguenda* (Matsumura) : Nahar, *State Fauna Series*, **11** : 210.

1910. *Plea pallescens* Distant, *Fauna British India*, **5** : 336.

*Distribution* : (1) Andhra Pradesh; (2) Bihar; (3) Kerala; (4) Orissa; (5) Uttar Pradesh; (6) West Bengal.

**Note** : Lundblad (1934) could not decide whether or not *Paraplea indistinguenda* (Matsumura 1905) is synonymous with *Paraplea liturata* (Fieber, 1844). Polhemus (1995) is of the opinion that if the synonymy is established then *P. liturata* is the senior synonym and *P. metiadusa* (Distant, 1910), *P. rufontata* (Distant, 1914), *P. faciata* (Horvath, 1918a) and *P. quinqueotata* (Paiva, 1918) are possible junior synonyms (Polhemus, 1995).

#### 140. *Paraplea liturata* (Fieber, 1844)

1844b. *Plea frontalis* Fieber, *Entomologische Monographien*, Leipzig : 19.

1904. *Plea frontalis* Kirkaldy, *Wien. Ent. Zeit.*, **23** : 129.

1906. *Plea liturata* (Fieber) : Distant, *Fauna British India*, **3** : 47.

1910. *Plea metiadusa* Distant, *Fauna British India*, **5** : 337.

1934. *Paraplea liturata* (Fieber) : Lunblad, *Arch. Hydrobiol. Suppl.*, **12** : 129.

1994. *Paraplea liturata* (Fieber) : Agarker *et al Bionature* **14** : 78.

1997. *Plea liturata* (Fieber) : Bal & Basu, *Zool. Surv. India, State Fauna Series*, **6** : 271.

2000a. *Plea liturata* (Fieber) : Bal & Basu, *Zool. Surv. India, State Fauna Series*, **7** : 433.

2004. *Paraplea liturata* (Fieber) : Nahar, *Zool. Surv. India, State Fauna Series*, **11** : 211.

*Distribution* : (1) Bihar; (2) Delhi; (3) Madhya Pradesh; (4) Tripura; (5) West Bengal.

Family HELOTREPHIDAE Esaki & China, 1927

Subfamily HELOTREPHINAE Esaki & China, 1927

Tribe **Limnotrephini** Polhemus, 1990

Genus *Limnotrephes* Esaki & China, 1928

#### 141. *Limnotrephes campbelli* Esaki & China, 1928

1928. *Limnotrephes campbelli* Esaki & China, *Eos. Revta. Esp. Entomol.*, **4** : 161.

1990. *Limnotrephes campbelli* Esaki & China : Polhemus, *Acta. Entomol. Bohemoslov*, **87** : 61.

1997b. *Limnotrephes campbelli* Esaki & China : Zettel, *Ann. Naturhist. Mus. Wien*, **99** : 83.

2004. *Limnotrephes campbelli* Esaki & China : Thirumalai, *Rec. zool. Surv. India*, **102** (1-2) : 67.

2003. *Limnotrephes campbelli* Esaki & China : Papàček and Zettel, *Tijdschrift Voor Entomol.*, **146** : 221.

2004. *Limnotrephes campbelli* Esaki & China : Papàček and Zettel, *Acta Soc. Zool. Bohem.*, **68** : 104.

*Distribution* : (1) Karnataka.

Genus *Mixotrephes* Papàček, Stys et Tonner, 1989

#### 142. *Mixotrephes bengalensis* Papàček & Zettel, 2003

2003. *Mixotrephes bengalensis* Papàček & Zettel, *Tijdschrift voor Entomologie*, **146** : 227.

2004. *Mixotrephes bengalensis* Papàček and Zettel, *Acta Soc. Zool. Bohem.*, **68** : 104.

*Distribution* : West Bengal.

143. *Mixotrephes heissi* Papàček & Zettel, 20032003. *Mixotrephes heissi* Papàček & Zettel, *Tijdschrift voor Entomologie*, **146** : 228.2004. *Mixotrephes heissi* Papàček and Zettel, *Acta Soc. Zool. Bohem.*, **68** : 104.*Distribution* : West Bengal.144. *Mixotrephes kumaonis* (Polhemus, 1990)1990. *Limnotrephes kumaonis* Polhemus, *Acta. Entomol. Bohemoslov*, **87** : 51.1995. *Limnotrephes kumaonis* Polhemus : Zettel, *Ann. Nat. hist. Mus. Wien*, **97** : 167.2003. *Mixotrephes kumaonis* (Polhemus) : Papàček and Zettel, *Tijdschrift Voor Entomol.*, **146** : 226.2004. *Mixotrephes kumaonis* (Polhemus) : Papàček and Zettel, *Acta Soc. zool. Bohem.*, **68** : 104.*Distribution* : Uttar Pradesh.Genus *Nanotrephes* Papàček & Zettel, 2001145. *Nanotrephes boukali* Papàček & Zettel, 20012001. *Nanotrephes boukali* Papàček & Zettel, *Ann. Naturhist. Mus. Wien*, **103B** : 292.2004. *Nanotrephes boukali* Papàček & Zettel : Papàček & Zettel, *Acta Soc. Zool. Bohem.*, **68** : 104.*Distribution* : Karnataka.146. *Nanotrephes duplicaturus* Papàček & Zettel, 20012001. *Nanotrephes duplicaturus* Papàček & Zettel, *Ann. Naturhist. Mus. Wien*, **103B** : 296.2004. *Nanotrephes duplicaturus* Papàček & Zettel : Papàček, & Zettel, *Acta Soc. Zool. Bohem.*, **68** : 104.*Distribution* : Kerala.147. *Nanotrephes idiomorphus* Papàček & Zettel, 20012001. *Nanotrephes idiomorphus* Papàček & Zettel, *Ann. Naturhist. Mus. Wien*, **103B** : 294.2004. *Nanotrephes idiomorphus* Papàček & Zettel : Papàček & Zettel, *Acta Soc. Zool. Bohem.*, **68** : 104.*Distribution* : Kerala.148. *Nanotrephes minutissimus* (Zettel, 1997)1997a. *Limnotrephes minutissimus* Zettel, *Linzer, boil. Beitr.*, **29** : 684.2001. *Nanotrephes minutissimus* (Zettel) : Papàček & Zettel, *Ann. Naturhist. Mus. Wien*, **103B** : 290.2004. *Nanotrephes minutissimus* (Zettel) : Papàček & Zettel, *Acta Soc. Zool. Bohem.*, **68** : 104.*Distribution* : Kerala.149. *Nanotrephes tuberculatus* Papàček & Zettel, 20012001. *Nanotrephes tuberculatus* Papàček & Zettel, *Ann. Naturhist. Mus. Wien*, **103B** : 294.2004. *Nanotrephes tuberculatus* Papàček & Zettel : Papàček & Zettel, *Acta Soc. Zool. Bohem.*, **68** : 104.*Distribution* : Kerala.

Genus *Tiphotrephes* Esaki & China, 1928150. *Tiphotrephes indicus* (Distant, 1910)

1910. *Helotrephes indicus*, Distant, *Fauna British India*, **5** : 338.  
 1928. *Tiphotrephes indicus* (Distant) : Esaki & China, *Eos. Revta. Esp. Entomol.*, **4** : 153.  
 1990. *Tiphotrephes indicus* (Distant) : Polhemus, *Acta. Entomol. Bohemoslov*, **87** : 61.  
 1994. *Helotrephes indicus*, Distant : Bal & Basu, *State Fauna Series*, **3** : 552.  
 1995. *Tiphotrephes indicus* (Distant) : Zettel, *Ann. Naturhist. Mus. Wien*, **97** : 168.  
 2003. *Tiphotrephes indicus* (Distant) : Papàček & Zettel, *Tijdschrift voor Entomologie*, **146** : 230.  
 2004. *Tiphotrephes indicus* (Distant) : Papàček and Zettel, *Acta Soc. Zool. Bohem.*, **68** : 104.  
*Distribution* : (1) Maharashtra; (2) Uttar Pradesh; (3) West Bengal.

## Subfamily FISCHEROTREPHINAE Zettel, 1994

Genus *Fischerotrephes* Zettel, 1994151. *Fischerotrephes indicus* Zettel, 1997

- 1997b. *Fischerotrephes indicus* Zettel, *Ann. Naturhist. Mus. Wien*, **99** : 85.  
 2001. *Fischerotrephes indicus* Zettel : Papàček & Zettel, *Ann. Naturhist. Mus. Wien*, **103B** : 286.  
 2004. *Fischerotrephes indicus* Zettel : Papàček & Zettel, *Acta Soc. Zool. Bohem.*, **68** : 100.  
*Distribution* : (1) Karnataka; (2) Kerala; (3) Tamilnadu.

## Subfamily IDIOCORINAE Esaki &amp; China, 1927

Genus *Indotrephes* Zettel, 1997152. *Indotrephes bufula* Zettel, 1997

- 1997b. *Indotrephes bufula* Zettel, *Ann. Natur. hist. Mus. Wien*, **99** : 88.  
 2001. *Indotrephes bufula* Zettel : Papàček & Zettel, *Ann. Naturhist. Mus. Wien*, **103B** : 286.  
 2004. *Indotrephes bufula* Zettel : Papàček & Zettel, *Acta Soc. Zool. Bohem.*, **68** : 103.  
*Distribution* : Kerala.

153. *Indotrephes latus* Papàček & Zettel, 2001

2001. *Indotrephes latus* Papàček & Zettel, *Ann. Naturhist. Mus. Wien*, **103B** : 287.  
 2004. *Indotrephes latus* Papàček & Zettel : Papàček & Zettel, *Acta Soc. Zool. Bohem.*, **68** : 103.  
*Distribution* : Tamilnadu.

## DISCUSSION

The distribution of nepomorphan bugs so far known from the recognised 32 political divisions in the Indian Union (recent division of Bihar, Madhya Pradesh and Uttar Pradesh into various States not taken into consideration) is presented in the Table 1. Out of 153 species so far recorded, the highest number, 59 species, accommodated in 20 genera under 10 families occurs

in Tamilnadu followed by West Bengal which harbours 59 species accommodated in 19 genera under 9 families (Table 2). There is no record of *Nepomorpha* from Dadra & Nagar Haveli, Daman & Diu and Lakshadweep Islands. The present work updates information on the species diversity of *Nepomorpha* pertaining to states falling in the two biodiversity threatened hot spot areas namely Eastern Himalaya and Western Ghats.

Hitherto 153 species accommodated in 34 genera and 10 families are reported from India (Map 1 & 2). Of these 100 species accommodated in 23 genera and 9 families are recorded from Himalayan states within Indian territory (20 species, under 11 genera and 6 families from Arunachal Pradesh; 9 species under 7 genera and 5 families from Sikkim; 59 species under 19 genera and 9 families from West Bengal (all Eastern Himalayan States and 45 species under 17 genera and 8 families from Uttar Pradesh; 27 species under 13 genera and 5 families from Himachal Pradesh; 12 species under 11 genera and 4 families from Jammu & Kashmir- all Northern Himalayan states.

The country's southern states of Goa, Karnataka, Kerala, Maharashtra and Tamilnadu, through which the Western Ghats, the second hotspot of the country traverses, harbours 91 species accommodated in 26 genera and 10 families (5 species under 5 genera and 3 families from Goa; 35 species under 17 genera and 8 families from Karnataka; 46 species under 19 genera and 9 families from Kerala; 42 species under 15 genera and 8 families from Maharashtra and 59 species under 20 genera and 10 families from Tamilnadu (Fig. 2).

The presence of *Micronecta decorata* Lundblad from Pong Dam of Himachal Pradesh, the southern most belt of the Himalayan range (Shiwaliks), occurring in Indonesia, Malaysia and Singapore, indicates intrusion of Malayan derivatives westwards (Mani, 1974, Thirumalai, 2006). The distribution of the bugs in the Himalayan states is given in Fig. 1.

Necessity for generating as well as updating database of the species diversity of local and provincial areas of the biodiversity threatened 'hotspots' such as Western Ghats and Eastern Himalaya of the country is of immense significance in biodiversity studies (Daniels, 1977). The present work provides the base line database of the species diversity of *Nepomorpha* occurring in the biodiversity hot spots of India.

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**Table 1 : Distribution of Nepomorpha in India States**

S. No.	NAME OF THE SPECIES	A N	A P	A R	A S	B I	C H	D N	D D	D E	G O	G U	H A	H P	J K	K A	K E	L I	M P	M R	M I	M G	M Z	N A	O R	P O	P U	R A	S I	T N	T R	U P	W B	
1	<i>Agraptocorixa hyalinipennis</i>		P	P	P		P			P		P		P	P				P	P					P	P	P	P		P		P	P	
2	<i>Anisops barbatus</i>		P			P	P						P	P		P			P	P					P			P		P		P	P	
3	<i>Anisops bouvieri</i>	P	P	P	P	P										P	P		P	P					P	P		P		P		P	P	
4	<i>Anisops breddini</i>		P		P	P				P							P		P						P				P	P	P	P		
5	<i>Anisops campbelli</i>						P					P	P	P		P										P	P		P		P	P		
6	<i>Anisops cavifrons</i>					P	P					P		P		P	P		P	P						P	P	P		P		P	P	
7	<i>Anisops crinitus</i>																								P								P	
8	<i>Anisops exiguus</i>		P				P							P		P		P	P	P						P			P					
9	<i>Anisops extendofrons</i>		P														P			P										P				
10	<i>Anisops kuroi wae</i>			P	P					P																			P	P	P	P		
11	<i>Anisops lipovskyi</i>																																P	
12	<i>Anisops naustus</i>		P		P														P						P								P	
13	<i>Anisops nigrolineatus</i>			P	P	P	P							P	P				P	P						P			P		P	P	P	
14	<i>Anisops niveus</i>	P			P	P													P	P	P				P				P	P	P	P		
15	<i>Anisops paranigrolineatus</i>																P			P									P		P	P		
16	<i>Anisops sardeus sardeus</i>	P	P			P	P			P				P	P				P	P	P				P		P	P	P	P	P	P		
17	<i>Anisops sp.</i>	P																																
18	<i>Anisops stali</i>																														P			
19	<i>Anisops tahitiensis</i>	P																																
20	<i>Anisops varius</i>																P																	
21	<i>Anisops waltirensis</i>		P				P							P													P		P					
22	<i>Aphelocheirus boukali</i>															P	P																	
23	<i>Aphelocheirus nathani</i>																P													P				





S. No.	NAME OF THE SPECIES	A N	A P	A R	A S	B I	C H	D N	D D	D E	G O	G U	H A	H P	J K	K A	K E	L I	M P	M R	M I	M G	M Z	N A	O R	P O	P U	R A	S I	T N	T R	U P	W B				
70	<i>Laccotrephes ruber</i>		P	P	P	P	P			P	P			P	P	P	P		P	P	P	P		P	P		P		P	P	P	P	P	P			
71	<i>Lethocerus deyrolli</i>			?	P																																
72	<i>Lethocerus indicus</i>	P	P	P	P	P	P			P	P	P		P	P	P	P		P	P	P	P	P		P	P	P	P		P	P	P	P	P			
73	<i>Lethocerus patruelis</i>																												P								
74	<i>Limnotrephes campbelli</i>															P																					
75	<i>Micronecta albifrons</i>				P												P	P						P					P		P	P	P				
76	<i>Micronecta altera*</i>																																				
77	<i>Micronecta anatolica anatolica</i>				P	P									P				P													P	P				
78	<i>Micronecta daedala</i>																									P			P				P				
79	<i>Micronecta decorata</i>													P																							
80	<i>Micronecta desertana desertana</i>					P										P				P							P			P							
81	<i>Micronecta eucosmeta</i>																													P							
82	<i>Micronecta fieberi</i>																P																				
83	<i>Micronecta flavens</i>																														P						
84	<i>Micronecta fulva</i>																															P					
85	<i>Micronecta grisea</i>		P		P	P										P			P					P					P					P			
86	<i>Micronecta janssoni</i>																													P							
87	<i>Micronecta khasiensis</i>				P																		P														
88	<i>Micronecta lundibunda lankana</i>																																				
89	<i>Micronecta lundibunda lundibunda</i>				P																																
90	<i>Micronecta ovivora</i>															P																					

S. No.	NAME OF THE SPECIES	A N	A P	A R	A S	B I	C H	D N	D D	D E	G O	G U	H A	H P	J K	K A	K E	L I	M P	M R	M I	M G	M Z	N A	O R	P O	P U	P A	R I	S I	T N	T R	U P	W B		
91	<i>Micronecta prashadana</i>															P			P													P		P		
92	<i>Micronecta punctata</i>			P	P	P											P		P		P	P			P								P	P	P	
93	<i>Micronecta punctinotum</i>				P																															
94	<i>Micronecta quadristrigata</i>		P	P	P	P	P					P				P	P		P	P					P		P	P		P					P	
95	<i>Micronecta sanctae-catherine</i>										P					P				P																
96	<i>Micronecta scutellaris scutellaris</i>		P		P	P	P			P		P		P		P	P		P	P	P				P		P	P		P			P	P	P	
97	<i>Micronecta siva</i>		P		P											P									P						P		P	P		
98	<i>Micronecta tarsalis</i>																		P																	
99	<i>Micronecta sp.</i>																															P				
100	<i>Micronecta sp.</i>			P																																
101	<i>Micronecta waltoniana</i>																						P													
102	<i>Mixotrepes bengalensis</i>																																			P
103	<i>Mixotrepes heissi</i>																																			P
104	<i>Mixotrepes kumaonis</i>																																	P		
105	<i>Montonepa erutus</i>																						P													
106	<i>Nanonaucoris boukali</i>																																P			
107	<i>Nanonaucoris minimus</i>																P																			
108	<i>Nanotrepes boukali</i>															P																				
109	<i>Nanotrepes duplicaturus</i>																P																			
110	<i>Nanotrepes idiomorphus</i>																P																			
111	<i>Nanotrepes minutissimus</i>																P																			
112	<i>Nanotrepes tuberculatus</i>																P																			
113	<i>Naucoris scutellaris</i>																P			P						P								P	P	

S. No.	NAME OF THE SPECIES	A N	A P	A R	A S	B I	C H	D N	D D	D E	G O	G U	H A	H P	J K	K A	K E	L I	M P	M R	M I	M G	M Z	N A	O R	P O	P U	R A	S I	T N	T R	U P	W B		
114	<i>Nerthra arunachalensis</i>			P																															
115	<i>Nerthra asiatica</i>			P																									P					P	
116	<i>Nerthra spissa</i>			P	P																														
117	<i>Nerthra indica</i>				P																	P							P	P				P	
118	<i>Notonecta montandoni</i>																																		
119	<i>Notonecta viridis</i>			P											P																				
120	<i>Nychia sappho</i>																								P				P					P	
121	<i>Ochterus marginatus marginatus</i>				P	P											P		P	P	P	P			P	P			P		P	P	P		
122	<i>Paraplea buenoi</i>																								P		P								
123	<i>Paraplea frontalis</i>	P	P	P		P	P								P				P	P					P	P	P		P		P	P	P		
124	<i>Paraplea indistinguenda</i>		P			P										P									P							P	P		
125	<i>Paraplea liturata</i>					P				P									P																P
126	<i>Ranatra chinensis @</i>																																		
127	<i>Ranatra digitata</i>					P							P	P					P															P	
128	<i>Ranatra distanti</i>	P																																	
129	<i>Ranatra elongata</i>		P	P		P	P			P			P	P	P	P			P	P					P	P	P	P		P	P	P	P	P	
130	<i>Ranatra feana</i>				P								P																						
131	<i>Ranatra filiformis</i>		P	P	P	P	P			P	P		P		P	P			P	P	P	P			P	P	P	P		P	P	P	P	P	
132	<i>Ranatra gracilis</i>		P		P																														
133	<i>Ranatra longipes thai</i>				P	P																											P	P	
134	<i>Ranatra parmata</i>	P																																	
135	<i>Ranatra titilaensis</i>					P													P																

S. No.	NAME OF THE SPECIES	A N	A P	A R	A S	B I	C H	D N	D D	D E	G O	G U	H A	H P	J K	K A	K E	L I	M P	M R	M I	M G	M Z	N A	O R	P O	P U	R A	S I	T N	T R	U P	W B
136	<i>Ranatra varipes atropa</i>				P	P									P				P						P				P				
137	<i>Ranatra varipes varipes</i>					P													P	P	P				P	P			P		P	P	
138	<i>Sigara annandalei</i>																							P									
139	<i>Sigara distorta</i>					P				P				P					P	P	P					P							P
140	<i>Sigara graveleyi</i>										P								P	P										P			
141	<i>Sigara hoggarica</i>													P												P							
142	<i>Sigara horana</i>																													P			
143	<i>Sigara indica</i>																												P				P
144	<i>Sigara kempi</i>			P										P														P			P	P	
145	<i>Sigara lateralis</i>				P										P				P	P											P	P	
146	<i>Sigara nilgirica</i>																													P			
147	<i>Sigara paivai</i>				P																												P
148	<i>Sigara promontoria</i>					P			P						P									P		P	P				P	P	
149	<i>Sigara pruthiana</i>														P														P		P		
150	<i>Sigara rambhaensis</i>																							P									
151	<i>Sigara seistanensis</i>													P															P				P
152	<i>Synptonecta issa</i>				P											P																	P
153	<i>Tiphotrephes indicus</i>																				P											P	P

\* India (Exact localities not known: see note below *Micronecta altera*.)

# Doubtful; @ India;

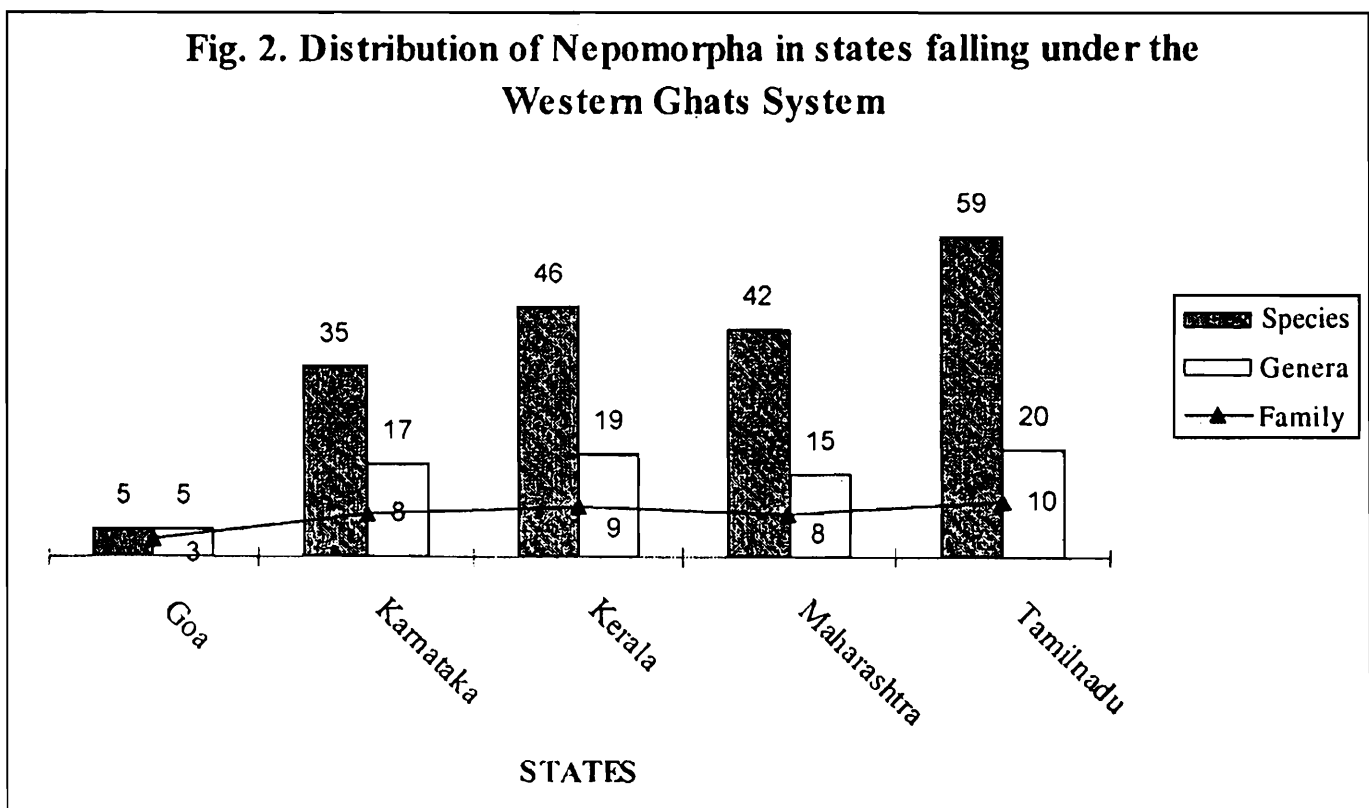
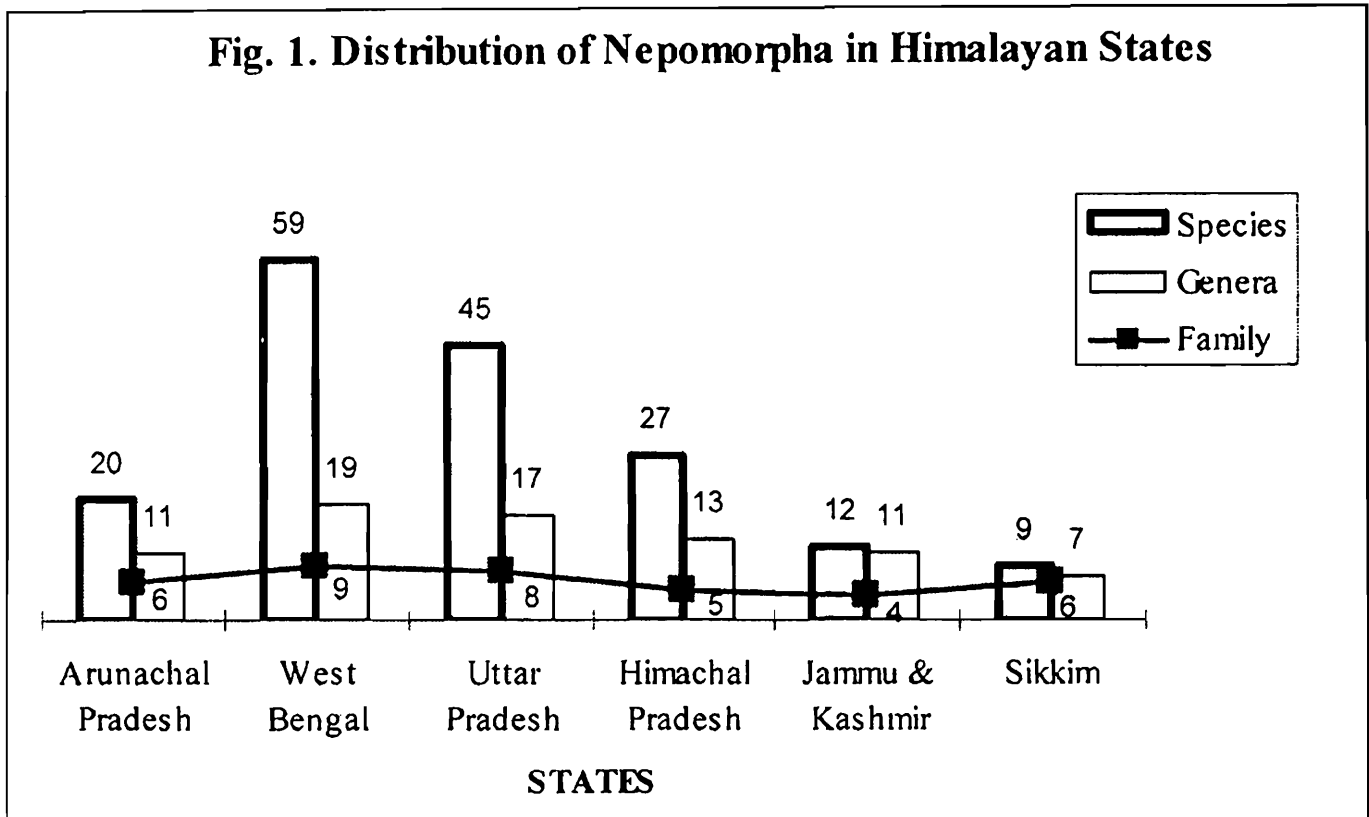
AN-Andaman & Nicobar Islands; AP-Andhra Pradesh; Ar-Arunachal Pradesh; As-Assam; Bi-Bihar; CH-Chandigarh; DN-Dadra & Nagar Haveli; DD-Daman & Diu; DE-Delhi; GO-Goa; GU-Gujarat; HA-Haryana; HP-Himachal Pradesh; JK-Jammu & Kashmir; KA-Karnataka; KE-Kerala; LI-Lakshadweep Islands; MP-Madhya pradesh; MR-Maharashtra; MI-Manipur; MG-Meghalaya; MZ-Mizoram; NA-Nagaland; OR-Orissa; PO-Pondicherry; PU-Punjab; RA-Rajasthan; SI-Sikkim; TN-Tamilnadu; TR-Tripura; UP-Uttar Pradesh; WB-West Bengal.

**Table 2 : Statewise Distribution of Nepomorpha of India**

States	Genera	Species	Family (ies)
Andaman & Nicobar	66	12	4 Belostomatidae, Nepidae, Notonectidae, Pleidae
Andhra Pradesh	11	28	6 Belostomatidae, Corixidae, Naucoridae, Nepidae, Notonectidae, Pleidae
Arunachal Pradesh	11	20	6 Belostomatidae, Corixidae, Gelastocoridae, Nepidae, Notonectidae, Pleidae
Assam	17	43	8 Aphelocheiridae, Belostomatidae, Corixidae, Gelastocoridae, Naucoridae, Nepidae, Notonectidae, Ochteridae
Bihar	13	35	7 Belostomatidae, Corixidae, Naucoridae, Nepidae, Notonectidae, Ochteridae, Pleidae
Chandigarh	8	19	5 Belostomatidae, Corixidae, Nepidae, Notonectidae, Pleidae
Dadra & Nagar Haveli	—	—	No Report
Daman & Diu	—	—	No Report
Delhi	10	17	5 Belostomatidae, Corixidae, Nepidae, Notonectidae, Pleidae
Goa	5	5	3 Belostomatidae, Corixidae, Notonectidae
Gujarat	8	12	4 Belostomatidae, Corixidae, Nepidae, Notonectidae
Harayana	2	4	2 Notonectidae, Nepidae
Himachal Pradesh	13	27	5 Belostomatidae, Corixidae, Naucoridae, Nepidae, Notonectidae.
Jammu & Kashmir	11	12	4 Belostomatidae, Corixidae, Nepidae, Notonectidae
Karnataka	17	35	8 Aphelocheiridae, Belostomatidae, Corixidae, Helotrephidae, Naucoridae, Nepidae, Notonectidae, Pleidae

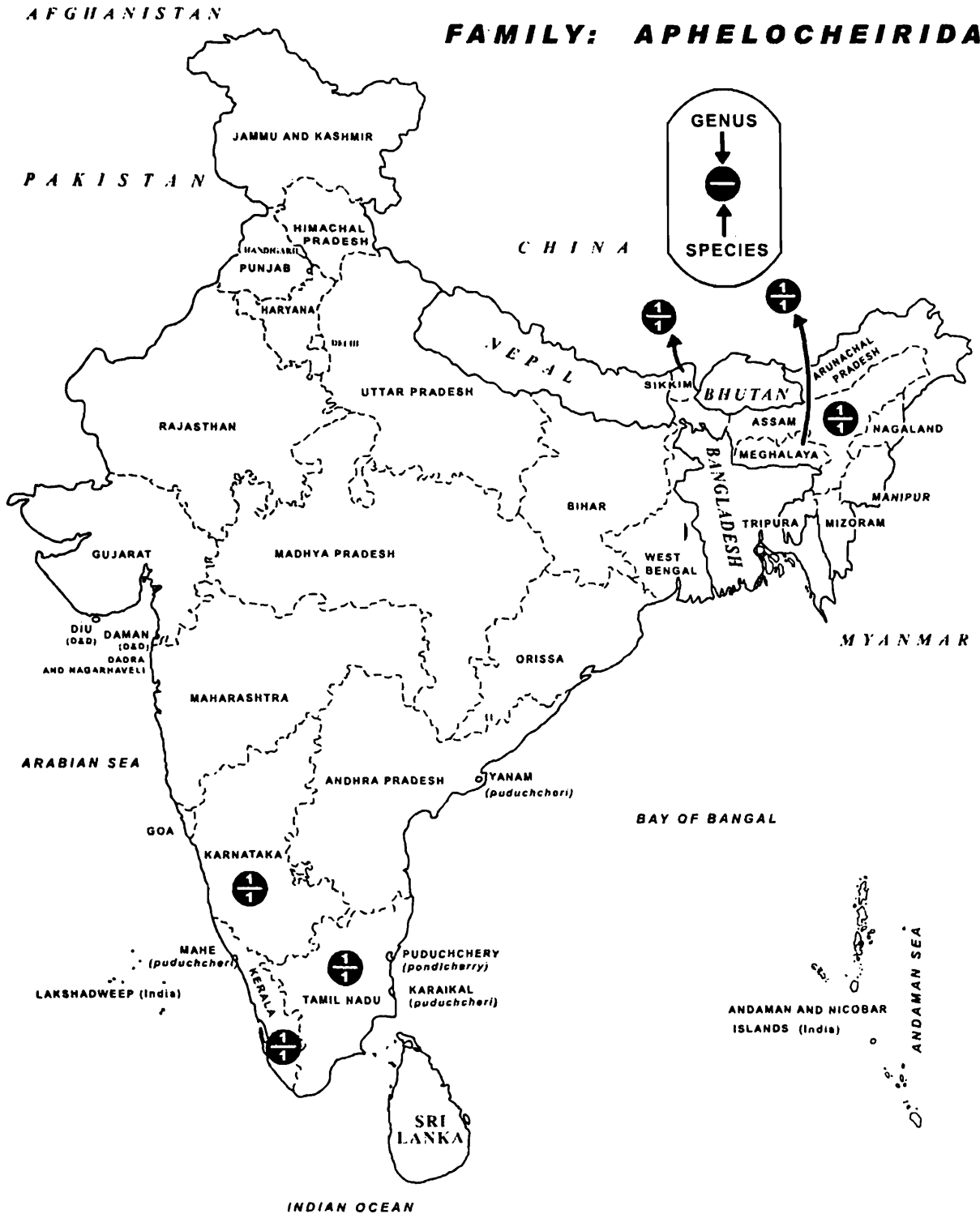
States	Genera	Species	Family (ies)
Kerala	19	46	9 Aphelocheiridae, Belostomatidae, Corixidae, Helotrephidae, Naucoridae, Nepidae, Notonectidae, Ochteridae, Pleidae
Lakshadweep Islands	—	—	No Report
Madhya Pradesh	12	39	7 Belostomatidae, Corixidae, Naucoridae, Nepidae, Notonectidae, Ochteridae, Pleidae
Maharashtra	15	42	8 Belostomatidae, Corixidae, Helotrephidae Naucoridae, Nepidae, Notonectidae, Ochteridae, Pleidae
Manipur	13	20	6 Belostomatidae, Corixidae, Naucoridae, Nepidae, Notonectidae, Ochteridae
Meghalaya	13	21	8 Aphelocheiridae, Belostomatidae, Corixidae, Gelastocorida, Naucoridae, Nepidae Notonectidae, Ochteridae
Mizoram	1	1	1 Belostomatidae
Nagaland	1	3	1 Nepidae
Orissa	10	29	6 Belostomatidae, Corixidae, Nepidae, Notonectidae, Ochteridae, Pleidae
Pondicherry	10	15	7 Belostomatidae, Corixidae, Naucoridae, Nepidae, Notonectidae, Ochteridae, Pleidae
Punjab	11	25	5 Belostomatidae, Corixidae, Nepidae, Notonectidae, Pleidae
Rajasthan	10	18	5 Belostomatidae, Corixidae, Nepidae, Notonectidae, Pleidae
Sikkim	7	9	6 Aphelocheiridae, Belostomatidae, Corixidae, Gelastocoridae, Nepidae, Notonectidae

States	Genera	Species	Family (ies)
Tamilnadu	20	59	10 Aphelocheiridae, Belostomatidae, Corixidae, Gelastocoridae, Helotrephidae, Naucoridae, Nepidae, Notonectidae, Ochteridae, Pleidae
Tripura	7	12	4 Belostomatidae, Corixidae, Nepidae, Notonectidae
Uttar Pradesh	17	45	8 Belostomatidae, Corixidae, Helotrephidae, Naucoridae, Nepidae, Notonectidae, Ochteridae, Pleidae
West Bengal	19	59	9 Belostomatidae, Corixidae, Gelastocoridae, Helotrephidae, Naucoridae, Nepidae, Notonectidae, Ochteridae, Pleidae



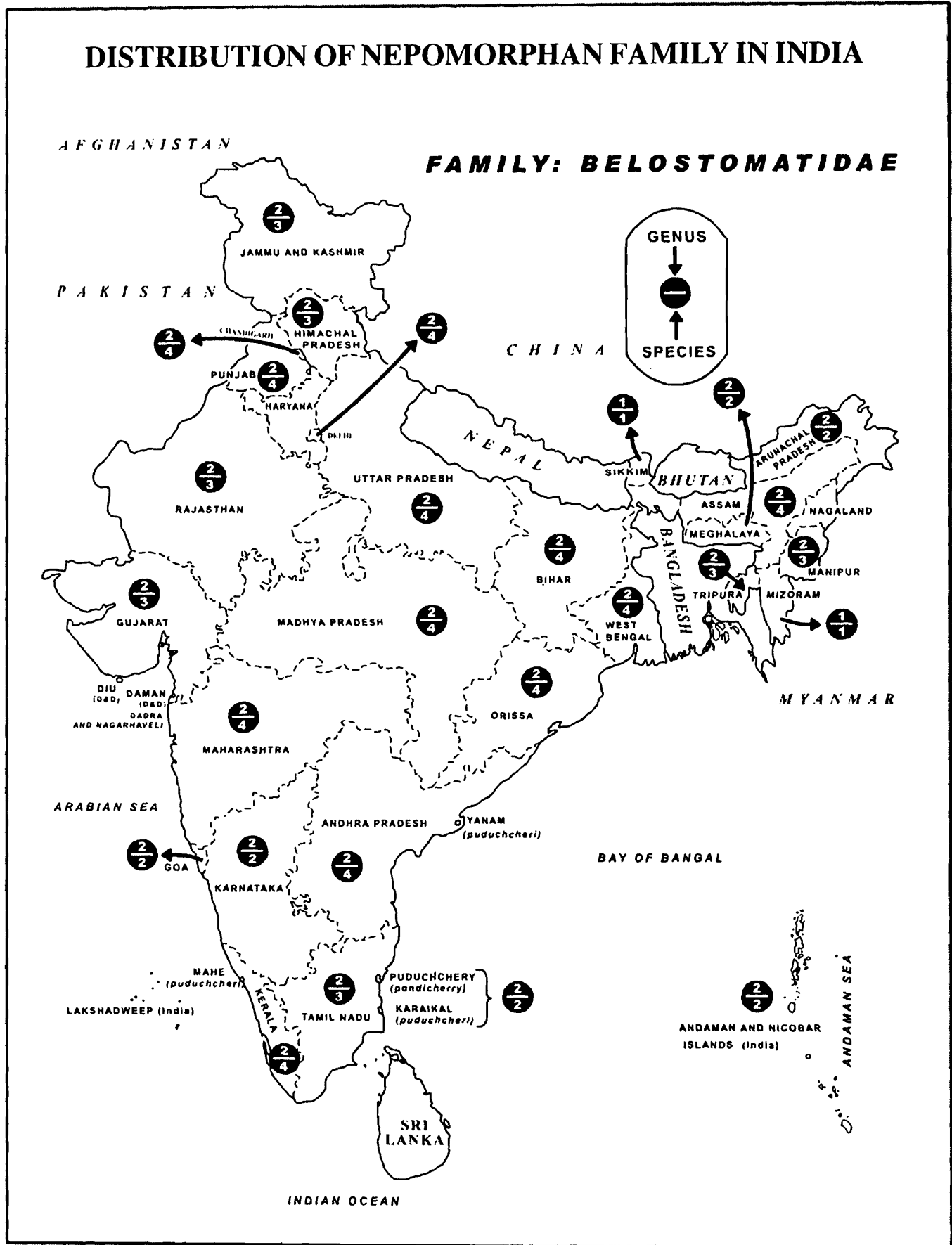
## DISTRIBUTION OF NEPOMORPHAN FAMILY IN INDIA

**FAMILY: APHELOCHEIRIDAE**



# DISTRIBUTION OF NEPOMORPHAN FAMILY IN INDIA

## FAMILY: BELOSTOMATIDAE



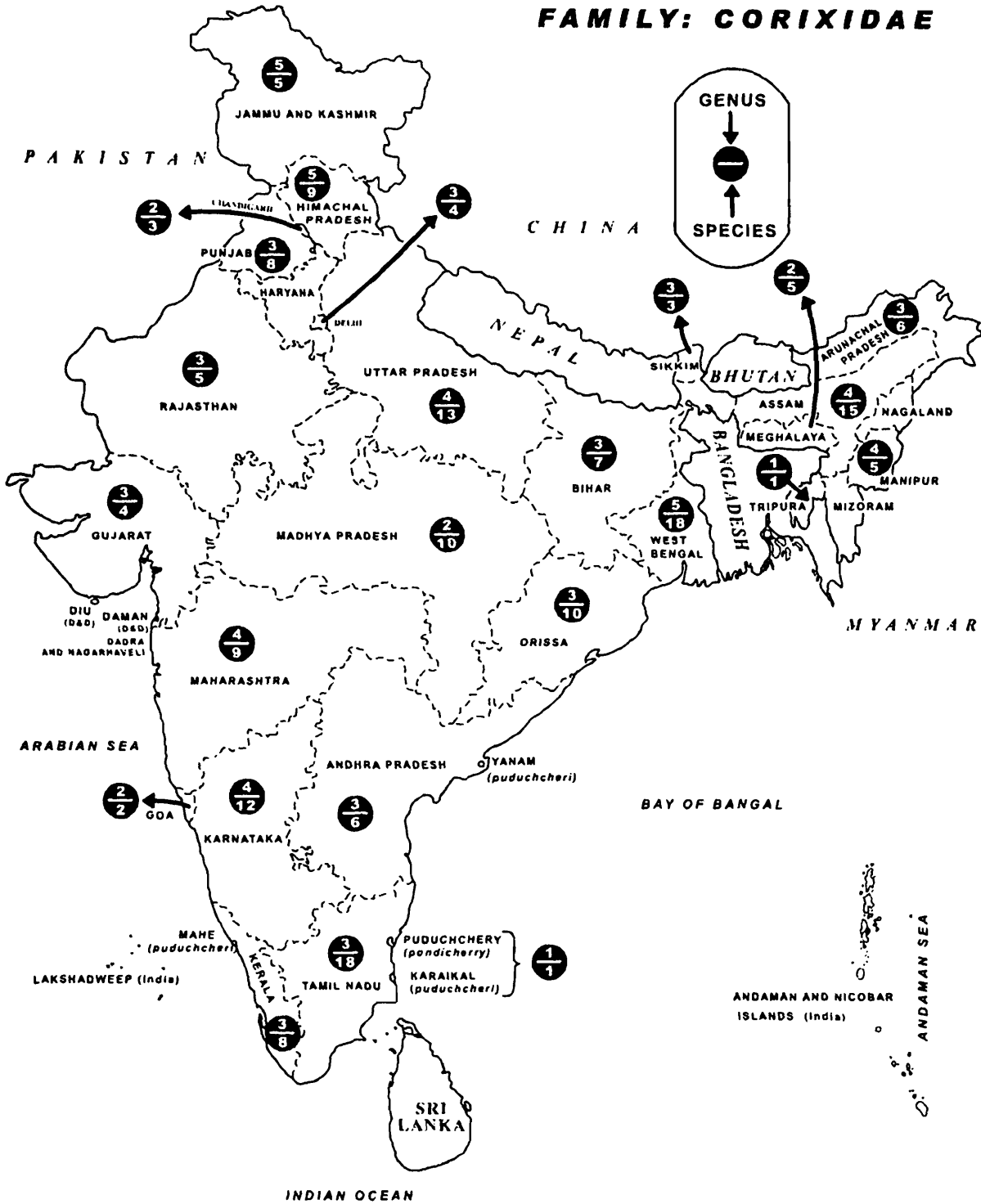
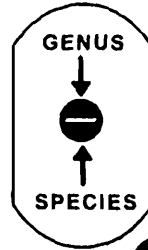
## DISTRIBUTION OF NEPOMORPHAN FAMILY IN INDIA

AFGHANISTAN

FAMILY: CORIXIDAE

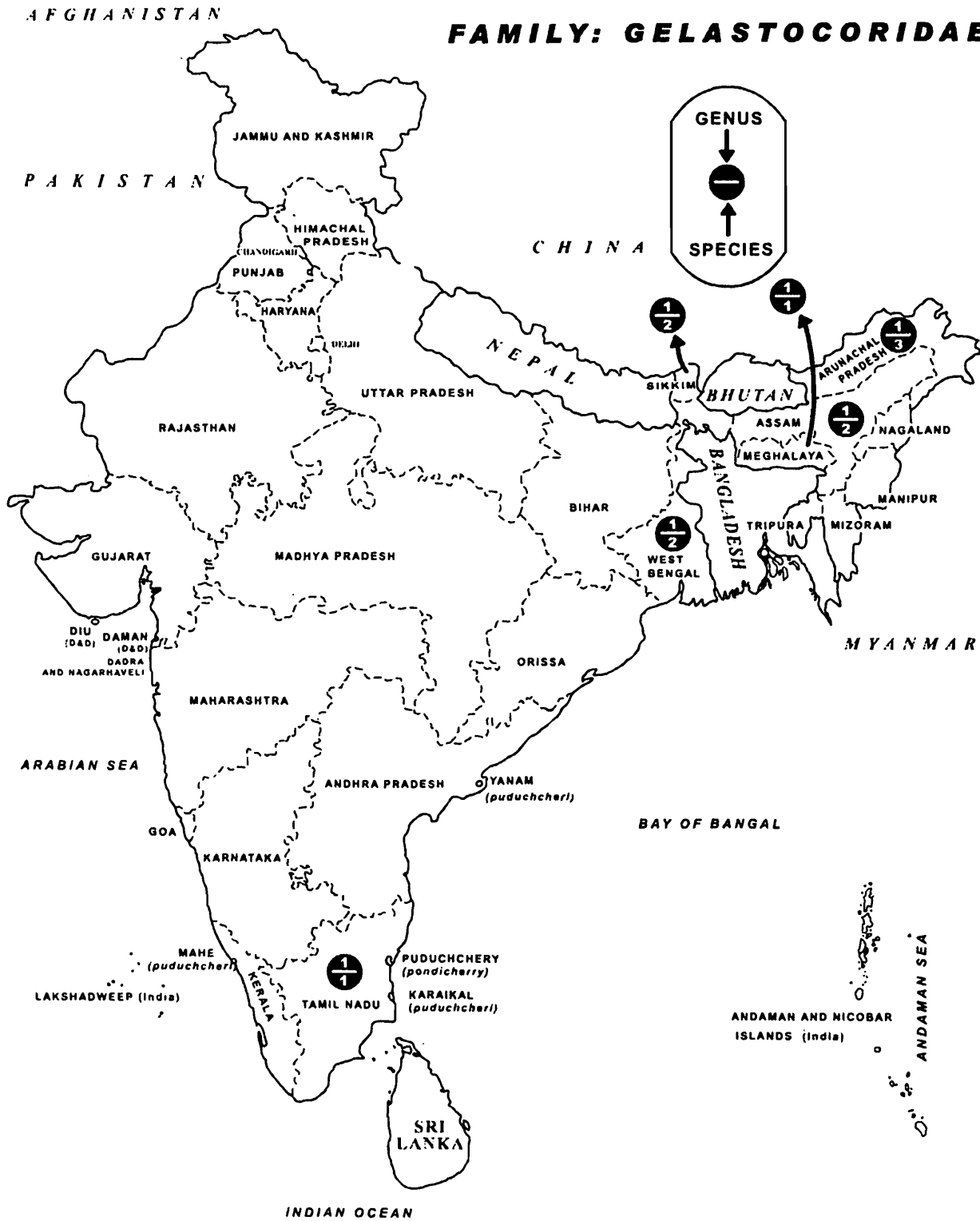
PAKISTAN

CHINA



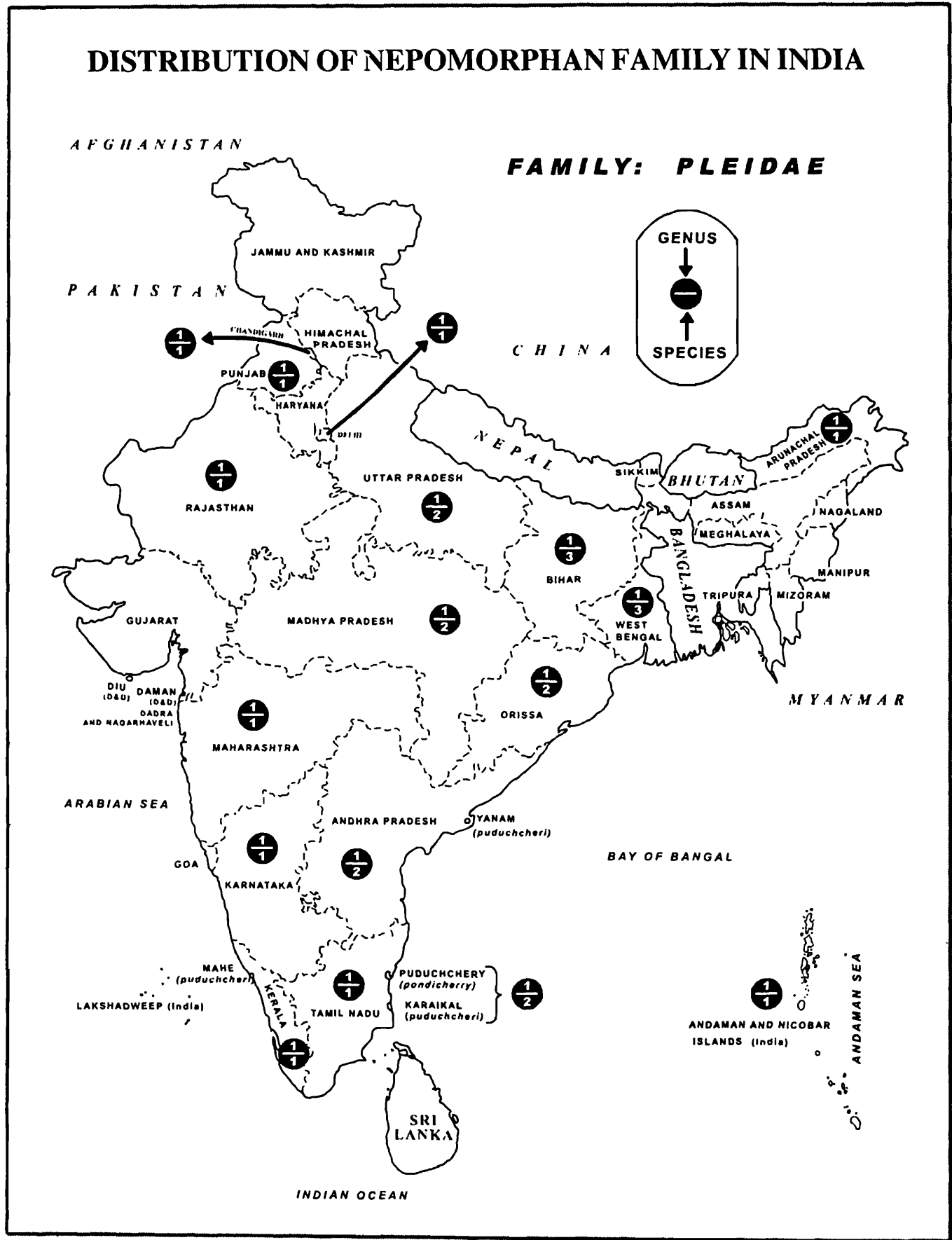
# DISTRIBUTION OF NEPOMORPHAN FAMILY IN INDIA

## FAMILY: GELASTOCORIDAE

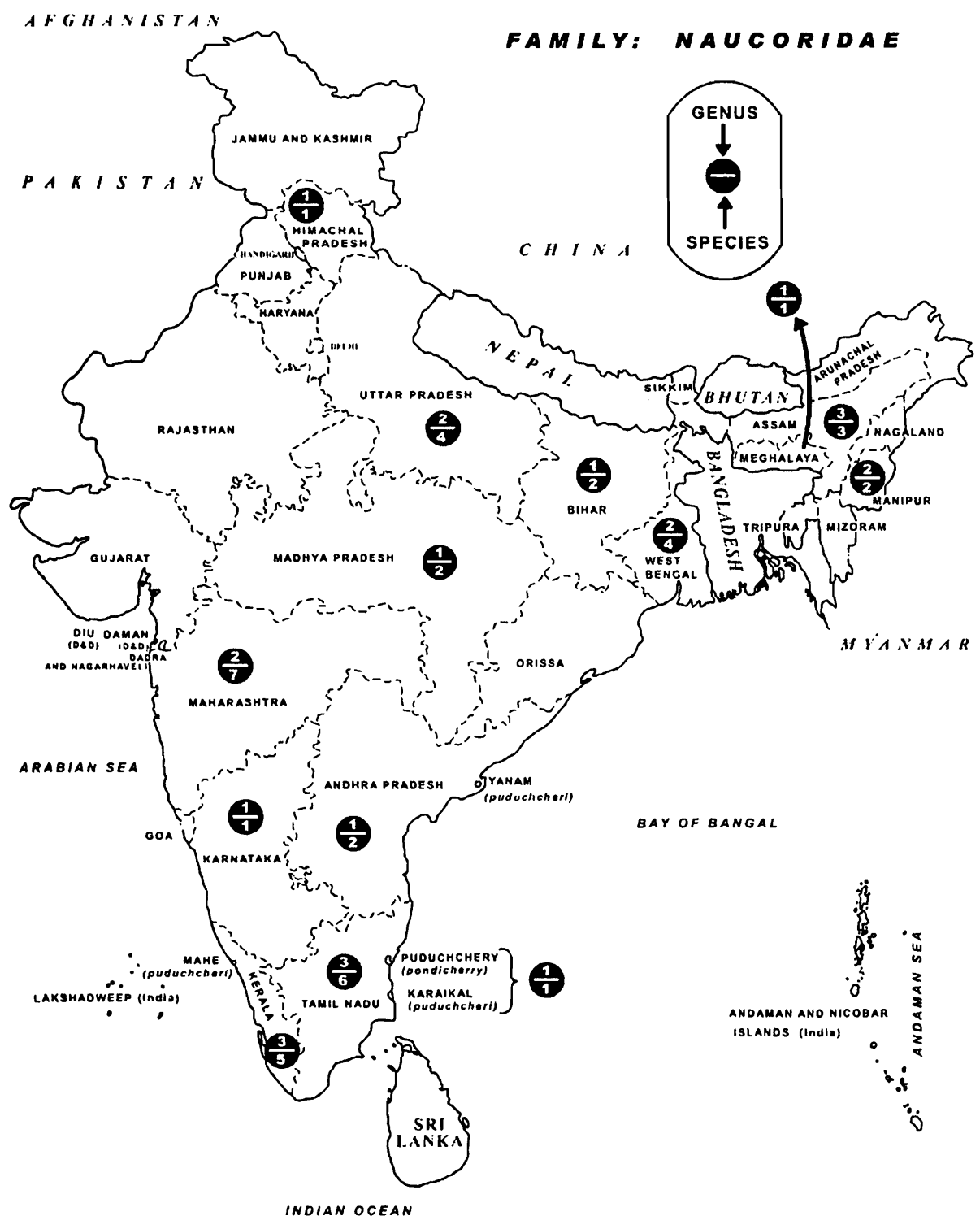




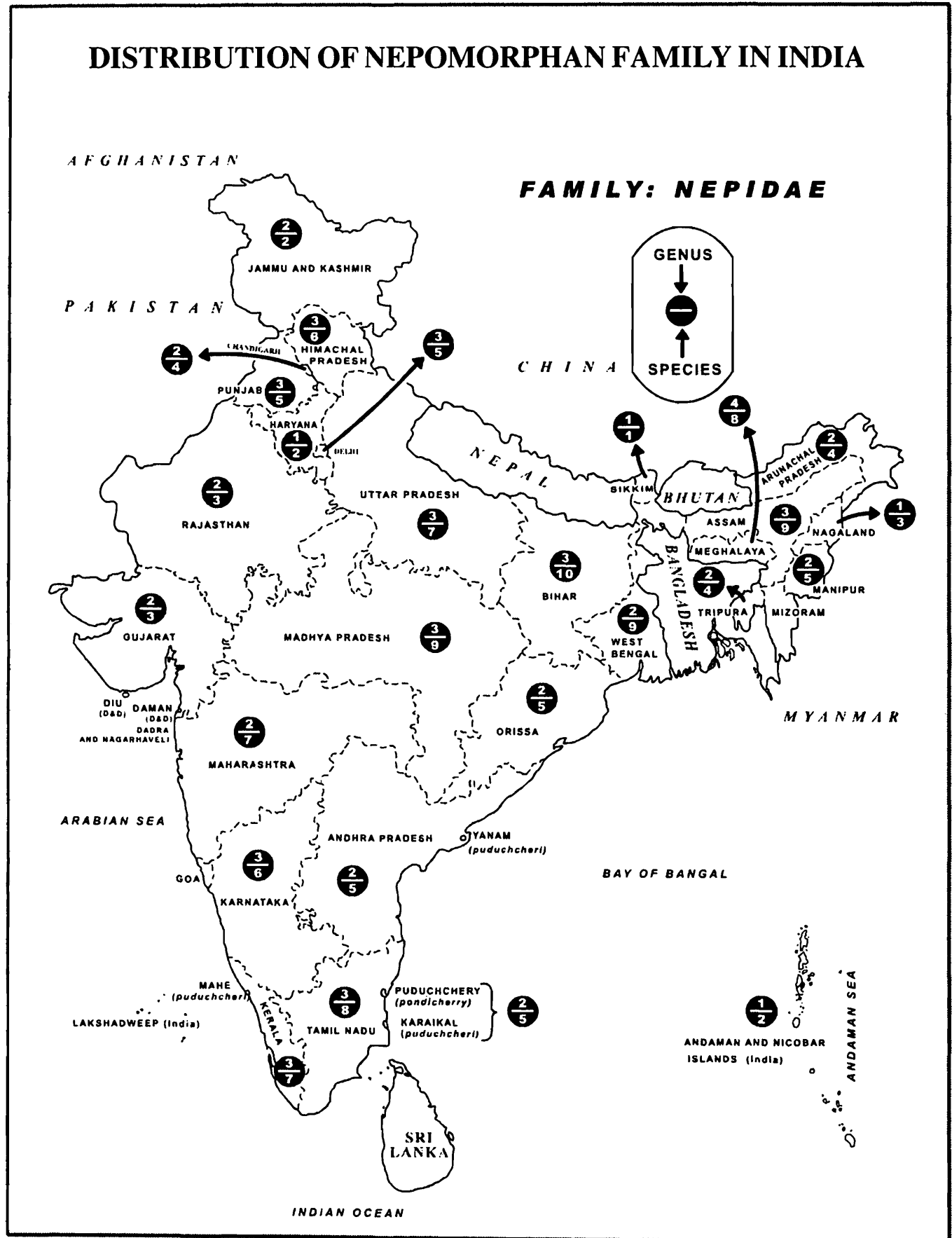
# DISTRIBUTION OF NEPOMORPHAN FAMILY IN INDIA



## DISTRIBUTION OF NEPOMORPHAN FAMILY IN INDIA



# DISTRIBUTION OF NEPOMORPHAN FAMILY IN INDIA



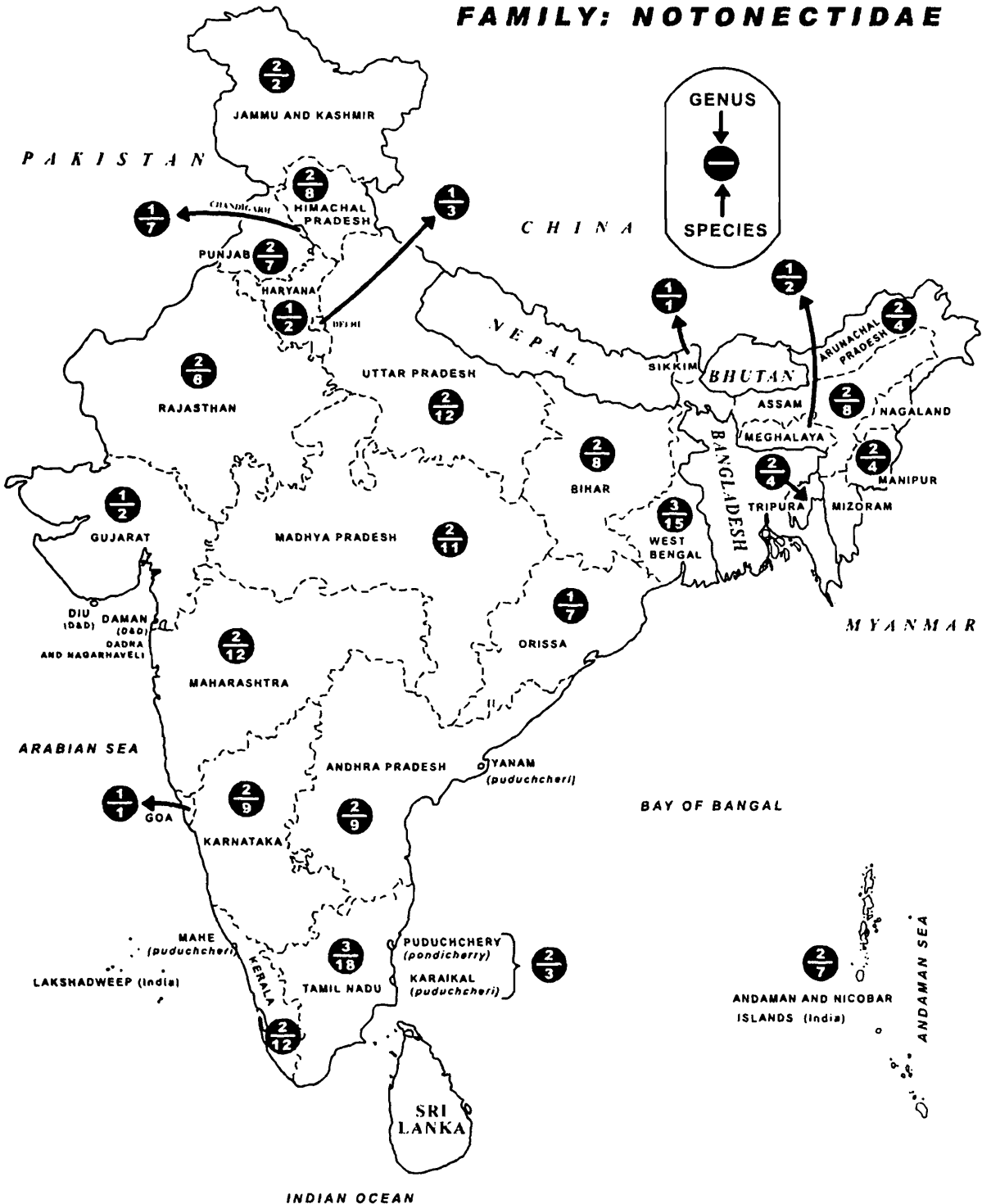
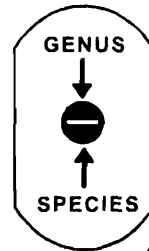
**DISTRIBUTION OF NEPOMORPHAN FAMILY IN INDIA**

**FAMILY: NOTONECTIDAE**

AFGHANISTAN

PAKISTAN

CHINA



# DISTRIBUTION OF NEPOMORPHAN FAMILY IN INDIA

