

ON AN ACCOUNT OF REDUVIDAE (HEMPITERA) FROM CHHATTISGARH, INDIA

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INTRODUCTION

The family Reduviidae is the largest family of predaceous terrestrial hemiptera and a few are blood suckers. Some of them are pathogenic and transmit various diseases to man and animals. Members of this family are commonly known as “Assassin bugs”. These are small to large, robust or elongated, somewhat flattened, smooth, hairy or spiny bugs, which may vary in size ranging from 2 to 40 mm.

This family is represented globally by more than 6878 species and subspecies under 981 genera belonging to 25 subfamilies (Henry, 2009). Of which 465 species under 144 genera belonging to 14 subfamilies (Ambrose, 2006) are recorded from India. Earlier 417 species under 133 genera belonging to 13 subfamilies are recorded from Indian region (Distant, 1904, 1910). Only 13 species under 10 genera of the family Reduviidae were known so far from Chhattisgarh (Biswas & Ghosh 1995, Chandra & Kushwaha, 2012). The present paper is the first consolidated account on the assassin bugs fauna of Chhattisgarh, which includes 32 species under 23 genera belonging to 7 subfamilies. Of these, 24 species belonging to 18 genera under 6 subfamilies marked with asterisks (*) constitute new record from the state. General characters of the group, keys to various taxa, diagnostic characters, synonymies, distribution in India and elsewhere under each species are also provided.

The classification of the family has been mainly adopted after Ambrose (2006). The work is based on the recent collections made by different survey parties of CAMPA Project.

SYSTEMATIC LIST

Suborder HETEROPTERA

Infraorder CIMICOMORPHA

Family REDUVIDAE

Subfamily I. TRIBELOCEPHALINAE

Genus 1. *Tribelocephala* Stål, 1853

1. *Tribelocephala indica* (Walker, 1873)

Subfamily II. HARPACTORINAE

Genus 2. *Polididus* Stål, 1858

2. *Polididus armatissimus* Stål, 1859

Genus 3. *Sycanus* Amyot & Serville, 1843

*3. *Sycanus collaris* (Fabricius, 1785)

*4. *Sycanus croceovittatus* Dohrn., 1859

Genus 4. *Coranus* Curtis, 1833

*5. *Coranus siva* Kirkaldy, 1891

Genus 5. *Rihirbus* Stål, 1861

*6. *Rihirbus trochantericus* Stål, 1861

Genus 6. *Euagoras* Burmeister, 1835

7. *Euagoras plagiatus* (Burmeister, 1834)

Genus 7. *Rhynocoris* Kolenati, 1857

*8. *Rhynocoris fuscipes* (Fabricius, 1787)

*9. *Rhynocoris marginatus* (Fabricius, 1794)

- *10. *Rhynocoris squalus* (Distant, 1904)
Genus 8. *Sphedanolestes* Stål, 1866
*11. *Sphedanolestes variabilis* Distant, 1904
Subfamily III. STENOPODAINAE
Genus 9. *Pygolampis* Germar, 1817
*12. *Pygolampis foeda* Stål, 1859
13. *Pygolampis unicolor* Walker, 1873
Genus 10. *Sastrapada* Amyot & Serville, 1843
14. *Sastrapada baerensprungi* (Stål, 1859)
Genus 11. *Oncocephalus* Klug, 1830
*15. *Oncocephalus impudicus* Reuter, 1882
*16. *Oncocephalus schioedtei* Reuter, 1882
Subfamily IV. ECTRICHODIINAE
Genus 12. *Haematorrhophus* Stål, 1874a
*17. *Haematorrhophus tuberculatus* (Stål, 1874)
Genus 13. *Scadra* Stål, 1859
*18. *Scadra fuscicrus* Stål, 1859
19. *Scadra annulipes* Reuter, 1881
Genus 14. *Ectrychotes* Burmiester, 1835
*20. *Ectrychotes atripennis* (Stål, 1866)
21. *Ectrychotes dispar* Reuter, 1881
Subfamily V. PEIRATINAE
Genus 15. *Sirthena* Spinola, 1840
*22. *Sirthena flavipes* (Stål, 1855)
Genus 16. *Catamiarus* Amy. & Serville, 1843
*23. *Catamiarus brevipennis* (Serville, 1831)
Genus 17. *Ectomocoris* Mayr, 1865
*24. *Ectomocoris simulans* Distant, 1919
*25. *Ectomocoris cordiger* Stål, 1866
Genus 18. *Lestomerus* Amyot & Serville, 1843
*26. *Lestomerus sanctus* (Fabricius, 1787)
Genus 19. *Spilodermus* Stål, 1868
27. *Spilodermus quadrinotatus* (Fabricius, 1798)
Genus 20. *Cleptocoris* Stål, 1866
*28. *Cleptocoris lepturoides* (Wolff, 1804)
29. *Cleptocoris atromaculatus* Stål, 1874
Subfamily VI. SALYAVATINAE
Genus 21. *Lisarda* Stål, 1859
*30. *Lisarda annulosa* Stål, 1874

Subfamily VII. REDUVIINAE

- Genus 22. *Gerbilius* Distant, 1903
*31. *Gerbilius ornatus* Distant, 1903
Genus 23. *Acanthaspis* Amyot & Serville, 1843
*32. *Acanthaspis quinquespinosa* (Fabricius, 1781)
*33. *Acanthaspis siva* Distant, 1904
34. *Acanthaspis sexguttata* (Fabricius, 1775)
35. *Acanthaspis flavipes* Stål, 1855
36. *Acanthaspis fulvipes* (Dallas, 1850)
37. *Acanthaspis luteipes* Walker, 1873

SYSTEMATIC ACCOUNT

Key to the Subfamilies of the
Family REDUVIIDAE

1. Ocelli present.....2
- Ocelli absent TRIBELOCEPHALINAE
2. Hemelytra with a quadrangular areolet or cell at interior area of corium near base of membrane HARPACTORINAE
- Hemelytra without a quadrangular areolet or cell at interior area of corium near base of membrane3
3. Hemelytra with a discoidal areolet or cell somewhat hexangular and touching base of membrane or largely triangular.....
.....STENOPODANINAE
- Hemelytra without a discoidal areolet or cell.....4
4. Scutellum with its apex broad and 2 or 3 spined..... ECTRICHODIINAE
- Scutellum with its apex triangular or subtriangular5
5. Pronotum constricted behind middle.....
..... PEIRATINAE
- Pronotum constricted before or near middle6
6. Anterior tarsi 2- jointed...SALYAVATINAE
- Anterior tarsi 3-jointed REDUVIINAE

Subfamily I. TRIBELOCEPHALINAE

Genus 1. *Tribelocephala* Stål, 18531853. *Tribelocephala* Stål, *Ofv. Vet.- Ak. Forh.*, p. 220.1. *Tribelocephala indica* (Walker, 1873)

(Plate I, Fig. 1)

1873. *Opisthopteryx indica* Walker, *Cat. Het.*, 8: 20.1904. *Tribelocephala indica*: Distant, *Fauna Brit. India, Rhynchota*, 2: 220.2006. *Tribelocephala indica* : Ambrose, *Zoos' Print Journ.*, 21(9): 27.

Material examined: 2 exs., Barnawapara, Dist. Raipur, 6.VII.2011, coll. Sunil and party; 2 exs., Barnawapara, Dist. Raipur, 16.VIII.2011, coll. Sunil and party; 1ex., Barnawapara, Dist. Raipur, 9.VII.2011, coll. Sunil and party; 1 ex., Barnawapara, Dist. Raipur, 18.VII.2011, coll. Sunil and party.

Diagnostic character: Body chocolate brownish in colour, densely tomentose; membranes with veins darker; rostrum, body beneath and legs pale; head little longer than pronotum which is moderately granulate; antennae with long hairs.

Length: 11-13 mm.

Distribution: India: Chhattisgarh (Raipur), North Bengal. *Elsewhere*: Sri Lanka.

Subfamily II. HARPACTORINAE

Key to the genera of the
Subfamily HARPACTORINAE

1. All femora spined*Polididus* Stål
- All femora unarmed2
2. Abdomen on each side much dilated.....
-*Sycanus* Amyot. & Serville
- Abdomen not dilated on each side3
3. Antennae long, its first joint as long as or longer than head.....4
- Antennae short, its first joint not longer than head..... *Coranus* Curtis
4. Anterior tibiae incurved and spined before apex.....*Rihirbus* Stål

- Anterior tibiae simple, not inwardly spined before apex5

5. Head armed with a spine or tubercle behind the base of each antenna; lateral pronotal angle spinous

.....*Euagoras* Burmeister

- Head without a spine or tubercle behind the base of each antenna; lateral pronotal angle smooth.....6

6. Posterior lobe of pronotum not longitudinally impressed*Rhynocoris* Kolenati

- Posterior lobe of pronotum longitudinally impressed*Spedanolestes* Stål

Genus 2. *Polididus* Stal, 18581858. *Polididus* Stål, *Ofv. Vet.-Ak. Forh.*, :448.2. *Polididus armatissimus* Stål, 1859

(Plate I, Fig. 2)

1859. *Polididus armatissimus* Stål, *Ofv. Vet.-Ak. Forh.*, : 376.1904. *Polididus armatissimus*: Distant, *Fauna Brit. India, Rhynchota*, 2: 386.2006. *Polididus armatissimus*: Ambrose, *Zoos' Print Journ.*, 21(9): 11

Material examined: 1 ex., Barnawapara, Dist. Raipur, 16.VIII.2011, coll. Sunil and party; 1 ex., Barnawapara, Dist. Raipur, 11.XI.2011, coll. Sunil and party; 1ex., Sankra R.H., Dist. Dhamtari, 18.X.2011, coll. Sunil and party.

Diagnostic character: Pale brownish yellow in colour; abdomen beneath with black fasciae on each side; sternum pilose; anterior pronotal angle with greyish narrow vittae; head with long spines at base of each antennae and with smaller discal spines; pronotum spinose, with two erect long spines on anterior lobe and long lateral spines on posterior lobe; femora and tibiae spinous.

Length : 10 mm.

Distribution: India : Chhattisgarh (Raipur, Dhamtari), Tamil Nadu, Maharashtra, West Bengal. *Elsewhere* : China, Japan, Sri Lanka.

Genus 3. *Sycanus* Amyot & Serville, 18431843. *Sycanus* Amy. & Serv., *Hem.*: 360.Key to the species of the
Genus *Sycanus* Amyot & Serville

1. Apical half of corium pale stramineous
.....*collaris* (Fabricius)
- Apical half of corium golden yellow.....
.....*croceovittatus* Dohrn.

3. *Sycanus collaris* (Fabricius, 1785)*
(Plate I, Fig. 3)1785. *Reduvius collaris* Fabricius, *Spec. Ins.*, 2: 380.1904. *Sycanus collaris*: Distant, *Fauna Brit. India, Rhynchota*, 2: 351.2006. *Sycanus collaris*: Ambrose, *Zoos' Print Journ.*, 21(9): 14.

Material examined: 1 ex., Barnawapara, Dist. Raipur, 1.VII.2011, coll. Dr. K. Chandra; 1 ex., Dondnala, Dist. Raipur, 10.VII.2011, coll. Sunil and party; 1 ex., Keduva, Dist. Raipur, 9.VI.2011, coll. Sunil and party; 3 exs., Devgaon, Dist. Raipur, 12.XI.2011, coll. Sunil and party.

Diagnostic character: Specimen black in colour; pronotum piceous; apical half of corium excluding apical angle and basal half of membrane reddish brown; membrane bronzy; antennae black, basal and subapical annulations to first joint, subbasal annulation to second joint and apex of rostrum reddish brown; head about as long as pronotum and scutellum together; first joint of antennae subequal to anterior femora; scutellar spine long, obliquely erect, apex bifid; abdomen strongly dilated on each side especially at third and fourth segments, posterior angles of second and third segments acute.

Length: 22-25 mm.

Distribution: India: Chhattisgarh (Raipur), Tamil Nadu, Assam, West Bengal, Meghalaya. *Elsewhere*: China, Malaysia, Philippines, Sri Lanka, Thailand.

4. *Sycanus croceovittatus* Dohrn., 1859*
(Plate I, Fig. 4)1859. *Sycanus croceovittatus* Dohrn., *Stett. Ent. Zeit.*, 20: 97.1904. *Sycanus croceovittatus*: Distant, *Fauna Brit. India, Rhynchota*, 2: 352.2006. *Sycanus croceovittatus* Dohrn., Ambrose, *Zoos' Print Journ.*, 21(9): 14.

Material examined: 6 exs., Parbatiya, Dist. Raipur, 7.XI.2011, coll. Anil and party.; 1 ex., Lalbandha pond, Dist. Raipur, 12.VII.2011, coll. Sunil and party.

Diagnostic character: Black in colour; posterior lobe of pronotum piceous; apical half of corium (excluding apical angle) and basal margin of membrane golden yellow in colour; second and third joints of rostrum pale reddish brown; head about as long as pronotum and scutellum together; antennae unicolourous, first joint equal to anterior femora; scutellar spine long, suberect, little obliquely curved bifid; abdominal margin strongly amplified and upwardly reflexed (especially 3rd and 4th segments), second, third, fourth and fifth segments with elevation, posterior angles of second and third segments acute.

Length: 22-25 mm.

Distribution: India: Chhattisgarh (Raipur). *Elsewhere*: China, Malaysia, Myanmar.

Genus 4. *Coranus* Curtis, 18331833. *Coranus* Curtis, *Brit. Ent.*, 10: 453.5. *Coranus siva* Kirkaldy, 1891*
(Plate I, Fig. 5)1881. *Coranus spiniscutis* Reuter, *Act. Soc. Sc. Fem.*, 12: 275.1904. *Coranus spiniscutis*: Distant, *Fauna Brit. India, Rhynchota*, 2: 381.2006. *Coranus siva*: Ambrose, *Zoos' Print Journ.*, 21(9): 7

Material examined: 1 ex., Barnawapara WLS, Dist. Raipur, 25.IX.2011, coll. Sunil and party; 1 ex., Anjani Beat, Dist. Surguja, 10.XI.2011, coll. Raha and party.

Diagnostic character: Body brownish yellow to dark brown covered with hairs; corium blackish brown membrane bronzy blackish brown; connexivum yellowish brown spotted with blackish

brown, abdomen beneath yellowish brown, its apex pitchy black; legs brownish yellow; bases and apices of tibiae, annulations to femora and apices of the tarsi pitchy black, extreme base of the tibiae with pale annulations.

Length: 9-10 mm.

Distribution: India: Chhattisgarh (Raipur, Surguja), Uttar Pradesh, Assam, Jharkhand, Meghalaya, West Bengal. *Elsewhere:* Myanmar.

Genus 5. *Rihirbus* Stål, 1861

1861. *Rihirbus* Stål, *Stett. Ent. Zeit.*, **22**: 129.

6. *Rihirbus trochantericus* Stål, 1861*
(Plate I, Fig. 6)

1861. *Rihirbus trochantericus* Stål, *Stett. Ent. Zeit.*, **22**: 132.

1904. *Rihirbus trochantericus*: Distant, *Fauna Brit. India, Rhynchota*, **2**: 378.

2006. *Rihirbus trochantericus*: Ambrose, *Zoos' Print Journ.*, **21**(9): 12.

Material examined: 1 ex., Dist. Kabirdham, 26. VIII. 2011, coll. Sunil and party.

Diagnostic character: Specimen sanguineous in colour; head excluding base and upper surface, antennae, rostrum, legs, lateral areas of meso and metasterna, transverse fasciae to abdomen black; intermediate and posterior femora with distinct yellowish brown annulations; head beneath, collar near middle, two basal tubercles on each side of anterior pronotal lobe, lateral and posterior margins of posterior pronotal lobe, apex of scutellum, intermediate spots behind middle of corium, trochanters, two annulations to anterior femora, sternum and abdomen pale reddish-testaceous.

Length: 18-24 mm.

Distribution: India: Chhattisgarh (Kabirdham), Meghalaya. *Elsewhere:* China, Myanmar, Sri Lanka, Philippines Islands.

Genus 6. *Euagorus* Burmeister, 1835

1835. *Euagorus* Burmeister, *Handb.* **2**: 226.

7. *Euagorus plagiatus* (Burmeister, 1834)
(Plate I, Fig. 7)

1834. *Zelus plagiatus* Burmeister, *Nov. Act. Ac. Nat. Cur.*, **16**(1): 303.

1904. *Euagorus plagiatus*: Distant, *Fauna Brit. India, Rhynchota*, **2**: 363.

2006. *Euagorus plagiatus*: Ambrose, *Zoos' Print Journ.*, **21**(9): 8.

Material examined: 1 ex., Jhirianala, Dist. Raipur, 25.VII.2011, coll. Sunil and party; 1 ex., Naktipond, Dist. Raipur, 13.VII.2011, coll. Sunil and party; 1 ex., Rampurnala, Dist. Raipur, 8.X.2011, coll. Sunil and party; 1 ex., Barnawapara Dist. Raipur, 6.X.2011, coll. Sunil and party; 1 ex., Chilpighati, Dist. Kabirdham, 26.VIII.2011, coll. Sunil and party; 4 exs., Jamunpani Dist. Kabirdham, 22.IX.2011, coll. Anil and party; 1 ex., Staptambur, Dist. Raipur, 7.VIII.2011, coll. Sunil and party; 1 ex., Barnawapara, Dist. Raipur, 5.VIII.2011, coll. Sunil and party; 1 ex., Damau Nala, Dist. Raipur, 7.X.2011, coll. Sunil and party.

Diagnostic character: Head, pronotum, scutellum reddish yellow with slight brownish tinge, hemelytron, sternum and a broad central spot to pronotum black; posterior spines to the pronotum curved and reflexed; first joint of antennae about as long as anterior femora or head, pronotum and scutellum together, rostrum reddish with its apex black.

Length: 13-14 mm.

Distribution: India: Chhattisgarh (Kabirdham, Raipur), Assam, Maharashtra, Tamil Nadu, Andaman Islands, Jammu & Kashmir, Kerala, West Bengal, Meghalaya. *Elsewhere:* Myanmar, China, Japan, Indonesia, Malaysia, Philippines, Singapore.

Genus 7. *Rhynocoris* Kolenati, 1857

1857. *Rhynocoris* Kolenati, *Fascia Bulletin Moscou*, **29**: 419-502.

Key to the species of the
Genus *Rhynocoris* Kolenati

1. Posterior lobe of pronotum rugosely granulate 2

- Posterior lobe of pronotum not, or very obscurely rugosely granulate
.....*fuscipes* (Fabr.)
- 2. Species sanguineous in colour; base of antennae sanguineous; disk of sternum, coxa, trochanters, anterior lobe of pronotum reddish-ochraceous; posterior lobe of pronotum rugose without any excavation.....
.....*marginatus* (Fabr.)
- Species black in colour; antennae black; disk of sternum, coxae, trochanters and pronotum rugulose with central excavation.....
.....*squalus* (Distant)

8. *Rhynocoris fuscipes* (Fabricius, 1787)*
(Plate I, Fig. 8)

1787. *Reduvius fuscipes* Fabricius, *Mant. Ins.*, 2 : 312.
1904. *Harpactor fuscipes*: Distant, *Fauna Brit. India, Rhynchota*, 2: 333.
1986. *Rhynocoris fuscipes*: Ambrose and Livingstone, *J. Bombay nat. Hist. Soc.*, 83(1): 176.
2006. *Rhynocoris fuscipes*: Ambrose, *Zoos' Print Journ.*, 21(9): 11.

Material examined: 1ex., GGNP, Rehand, Dist. Surguja 17.VIII.2011, coll. Angshuman; 1ex., Keduva, Dist. Raipur, 9.VII.2011, coll. Sunil and party; 1ex., Kundpani F., Dist. Kabirdham, 21.XI.2011, coll. Anil and party; 1ex., Sakri river, Dist. Kabirdham, 25.VIII.2011, coll. Sunil and party.; 1ex., Parbatiya WF, Dist. Raipur, 7.XI.2011, coll. Anil and party.; 1ex., Turturia forest, Dist. Raipur, 24.VII. 2011, coll. Sunil and party.

Diagnostic character: Body coral red; rostrum, antennae, anterior area of the posterior lobe of pronotum, disk of scutellum, an oblong spot between antennae, upper surface of postocular area, legs, two spots to pronotum, black; pronotum with the anterior lobe distinctly sculptured, posteriorly centrally a little impressed; membrane passing abdominal apex with its posterior margin pale fuliginous.

Length: 14-16 mm.

Distribution: India: Chhattisgarh (Kabirdham, Raipur, Surguja) Maharashtra, Tamil Nadu, West Bengal. *Elsewhere*: China, Sri Lanka.

9. *Rhynocoris marginatus* (Fabricius, 1794)*
(Plate I, Fig. 9)

1794. *Reduvius marginatus* Fabricius, *Ent. Syst.*, 4: 196.
1904. *Harpactor marginatus*: Distant, *Fauna of Brit. India, Rhynchota*, 2: 332.
2006. *Rhynocoris marginatus*: Ambrose, *Zoos' Print Journ.*, 21(9): 11.
2010. *Rhynocoris marginatus*: Biswas and Bal, *Fauna of Uttarakhand, State Fauna Series*, 18: 260.

Material examined: 1ex., Dongpahari, Dist. Raipur, 16.VII.2011, coll. Sunil and party; 1ex., Thadghat, Dist. Raipur, 9.VIII.2011, coll. Anil and party; 1ex., Devpur, Dist. Raipur, 1.VIII.2011, coll. Sunil and party.

Diagnostic character: Body blood reddish; scutellum, inner area of membrane, eyes, antennae, apical two thirds of tibiae, abdomen beneath violaceous black; pronotum with the anterior lobe sculptured, the posterior lobe wrinkled; first joint of antennae almost equal in length to anterior femora; corium wrinkled, the transverse cell near base of membrane with blood reddish margin; disc of sternum, coxae, trochanters and anterior lobe of pronotum reddish brownish yellow.

Length: 19.50-20 mm.

Distribution: India: Chhattisgarh (Raipur), Uttar Pradesh, Andhra Pradesh, Delhi, Uttarakhand. *Elsewhere*: China, Sri Lanka.

10. *Rhynocoris squalus* (Distant, 1904)*
(Plate II, Fig 10)

1904. *Harpactor squalus* Distant, *Fauna Brit. India, Rhynchota*, 2: 333.
2006. *Rhynocoris squalus*: Ambrose, *Zoos' Print Journ.*, 21(9): 12.

Material examined: 1ex., Ramgarh, Dist. Korea, 2.VIII.2011., coll. Angshuman and party; 1ex., nr. Sakri river, Dist. Kawardha, 25.VIII.2011, coll. Sunil and party; 2exs., nr. Polak river, Dist. Kabirdham, 28.VIII.2011, coll. Sunil and party;

1ex., Sarodadar, Dist. Kabirdham, 27.VIII.2011, coll. Sunil and party; 2exs., Balsarand Dist. Kabirdham, 1.IX.2011, coll. Sunil and party; 1ex., Moharli, Dist. Surguja, 16.VIII.2011, coll. Angshuman and party.

Diagnostic character: Species black in colour; corium, sternum, legs pitchy black; posterior lobe of pronotum and corium coarsely rugosely granulate; anterior pronotal lobe sculptured with two small distinct tubercles and centrally excavated posteriorly; head with anteocular and postocular area equal in length; first joint of antennae almost as long as anterior femora.

Length: 21 mm.

Distribution: India: Chhattisgarh (Kabirdham, Kawardha, Korea, Surguja), Sikkim.

Genus 8. *Sphedanolestes* Stål, 1866

1866. *Sphedanolestes* Stål, *Ofv. Vet. Ak. Forh.*: 284 & 288.

11. *Sphedanolestes variabilis* Distant, 1904* (Plate II, Fig. 11)

1904. *Sphedanolestes variabilis* Distant, *Fauna Brit. India, Rhynchota*, 2: 342.

2006. *Sphedanolestes variabilis*: Ambrose, *Zoos' Print Journ.*, 21(9): 13.

Material examined: 1ex., Sarodadar, Dist. Kabirdham, 27.VIII.2011, coll. Sunil and party; 1ex., Lalbandhanala, Dist. Raipur, 15.VII.2011, coll. Sunil and party; 1ex., Thadghat, Dist. Raipur, 9.VIII.2011, coll. Anil and party.

Diagnostic character: Brownish yellow in colour; head above and lateral areas behind eyes, anterior lobe of pronotum, scutellum (excluding apex), spots to connexivum above and beneath, anterior area of prosternum, meso and meta sterna and coxa black; antennae, rostrum, legs pale reddish brown; apex of rostrum, basal, central and broad apical annulations to femora, bases and apices of tibiae, and tarsi black in colour; first joint of rostrum slightly longer than anteocular area of head which is as long as postocular area; head as long as pronotum; both lobes of pronotum sulcately impressed; first joint of antennae little shorter than anterior femora.

Length: 7-8 mm.

Var. a. Posterior lobe of pronotum more or less infuscated; legs wholly black.

Var. b. Resembling var. a, but with the pronotum black, a small central brownish yellow spot on posterior lobe.

Distribution: India: Chhattisgarh (Kabirdham, Raipur), Tamil Nadu.

Subfamily III. STENOPODAINAE

Key to the genera of the Subfamily STENOPODAINAE

1. First joint of rostrum longer than two apical joints together *Pygolampis* Germ.
- First joint of rostrum not longer than two apical joints together 2
2. Anterior femora with two series of small spines beneath *Sastrapada* Amy. & Serv.
- Anterior femora with a single series of small spines beneath *Oncocephalus* Klug

Genus 9. *Pygolampis* Germ., 1817

1817. *Pygolampis* Germ., *Faun. Ins. Eur.*, p. 8.

Key to the species of the Genus *Pygolampis* Germ.,

1. Mesosternum with two central piceous vittae; pronotum with longitudinal sulcation which is wider behind *foeda* Stål
- A broad central fasciae extending through meso, metasterna and abdomen beneath; anterior lobe of pronotum sulcate where as posterior lobe is with four discal carina *unicolor* Walker

12. *Pygolampis foeda* Stål, 1859* (Plate II, Fig. 12)

1859. *Pygolampis foeda* Stål, *Ofv. Vet.-Ak. Forh.*, p. 379.

1904. *Pygolampis foeda*: Distant, *Fauna Brit. India, Rhynchota*, 2: 223.

2006. *Pygolampis foeda*: Ambrose, *Zoos' Print Journ.*, 21(9): 25.

Material examined: 1ex., Jagdalpur FRH,

Dist Jagdalpur, 14.VII.2011, coll. R.P. Gupta and party; 1ex., Bridulaw colony, Dist Jagdalpur, 16.VII.2011, coll. R.P. Gupta and party; 1ex., Barnawapara, Dist Raipur, 9.VII.2011, coll. Sunil and party.

Diagnostic character: Specimen brownish ochraceous in colour; femora thickened towards apex, anterior and intermediate tibiae annulated with dark brown markings; mesosternum with two central pitchy black vittae; first joint of antennae longer than head; basal joint of antennae, femora and posterior tibiae, mottled with dark brown; pronotum with a longitudinal sulcation which is wider behind.

Length: 12.5-16 mm.

Distribution: India: Chhattisgarh (Jagdalpur, Raipur), Tamil Nadu. *Elsewhere:* Australia, China, Fiji, Malaysia, Myanmar, Philippines, Sri Lanka.

13. *Pygolampis unicolor* Walker, 1873
(Plate II, Fig. 13)

1873. *Pygolampis unicolor* Walker, *Cat. Het.*, **8**: 36.

1904. *Pygolampis unicolor*: Distant, *Fauna Brit. India, Rhynchota*, **2**: 223.

2006. *Pygolampis unicolor*: Ambrose, *Zoos' Print Journ.*, **21**(9): 25.

Material examined: 1ex., Bijapur, Dist. Bastar, 4.II.1990, coll. R. K. Ghosh

Diagnostic character: Head a little shorter than pronotum; anteocular portion faintly longitudinally ridged; postocular portion obsoletely sulcate; anterior lobe of pronotum sulcate, posterior lobe with four discal carina.

Length: 13.5-14.5 mm.

Distribution: India: Chhattisgarh (Bastar), West Bengal.

Genus 10. *Sastrapada* Amyot & Serville, 1843

1843. *Sastrapada* Amy. & Serv., *Hem.*, p. 388.

14. *Sastrapada baerensprungi* (Stål, 1859)
(Plate II, Fig. 14)

1859. *Harpagochares baerensprungi* Stål, *Ofv. Vet. Ak. Forh.*: 381.

1904. *Sastrapada baerensprungi*: Distant, *Fauna Brit. India, Rhynchota*, **2**: 224.

2006. *Sastrapada baerensprungi*: Ambrose, *Zoos' Print Journ.*, **21**(9): 25.

Material examined: 1ex., Bar forest, Dist Raipur, 25.IX.2011, coll. Sunil and party; 1ex., Barnawapara, Dist Raipur, 24.VIII.2011, coll. Sunil and party; 1ex., Chilpi RH, Dist Kabirdham, 1. IX. 2011, coll. Sunil and party.

Diagnostic character: Body pale brownish yellow; a discoidal spot to hemelytra and lateral abdominal margin black; head little shorter than pronotum; hemelytra shorter than abdomen; anterior coxae, apex and sometime sub basal annulations to anterior tibiae, disk of the sternum, lateral areas of head pitchy black.

Length: 14-18 mm.

Distribution: India: Chhattisgarh (Kabirdham, Raipur), Sikkim, West Bengal. *Elsewhere:* Algeria, Australia, Ethiopia, Greece, Israel, Italy, Morocco, Switzerland, Tunisia.

Genus 11. *Oncocephalus* Klug, 1830

1830. *Oncocephalus* Klug, *Symb. Phys.*, **2**^o.

Key to the species of the
Genus *Oncocephalus* Klug

1. Anteocular portion of head longer, but not twice the length of postocular are a.....
.....*impudicus* Reuter
- Anteocular portion of head twice the length of postocular area.....*schioedtei* Reuter

15. *Oncocephalus impudicus* Reuter, 1882*
(Plate II, Fig. 15)

1882. *Oncocephalus impudicus* Reut., *Act. Soc. Sc. Fenn.*, **12**: 715.

1904. *Oncocephalus impudicus*: Distant, *Fauna Brit. India, Rhynchota*, **2**: 229.

2006. *Oncocephalus impudicus*: Ambrose, *Zoos' Print Journ.*, **21**(9): 25.

Material examined: 1ex., Barnawapara, Dist. Raipur, 7.VII.2011, coll. Sunil and party; 1ex., Latadadar, Dist. Raipur, 23.IX.2011, coll. Sunil

and party. 1ex., Barnawapara, Dist. Raipur, 9.VIII.2011, coll. Anil; 1ex., Charalda vil Dist. Raipur, 19.VII.2011, coll. Sunil and party; 1ex., Barnawapara, Dist. Raipur, 8.IX.2011, coll. Sunil and party.; 1ex., Sankra RH, Dist. Dhamtari, 12.X.2011, coll. Sunil and party.; 1ex., Dist. Jagdalpur, 28. VII.2011, coll. R. P. Gupta and party; 1ex., Dist. Jagdalpur, 27. VII.2011, coll. R.P. Gupta and party; 1ex., Barnawapara Dist. Raipur, 19.IX.2011, coll. Sunil and party.

Diagnostic character: Specimen yellowish brown in colour; eyes black; antennae, legs, abdomen beneath brownish yellow in colour; three fasciae on anterior lobe of pronotum and lateral margins dark brown; a central spot to clavus, cellular area of corium, a small spot behind it, long irregular spot on membrane reddish brown; head beneath, sternum, anterior and posterior femora, apices of intermediate tibiae, three annulations to tibiae, lateral area and apex of abdomen dark brown; apex of first antennal joint dark brown, third joint black; apical spine to scutellum long and acute; first and second joint of rostrum subequal.

Length: 12-13 mm.

Distribution: India: Chhattisgarh (Dhamtari, Jagdalpur, Raipur), West Bengal. *Elsewhere:* China, Indonesia, Sri Lanka, Philippines, Myanmar.

16. *Oncocephalus schioedtei* Reuter, 1882*
(Plate II, Fig. 16)

1882. *Oncocephalus schioedtei* Reut., *Act. Soc. Sc. Fenn.*, **12**: 702.

1904. *Oncocephalus schioedtei* : Distant, *Fauna Brit. India, Rhynchota*, **2**: 232.

2006. *Oncocephalus schioedtei* : Ambrose, *Zoos' Print Journ.*, **21**(9): 25.

Material examined: 3ex., Durg, Dist. Rajnand gaon, 24.VIII.2011, coll. Sunil and party.

Diagnostic character: Yellowish brown in colour; basal joint of antennae biannulated with dark brown; head with a black spot on disk behind eyes, the lateral areas dark brown; pronotum with

two central longitudinal lines which are fused on anterior lobe and two obscure waved lines on each lateral areas and lateral margins dark brown; scutellum dark brown with central transverse band yellowish brown; corium with a posterior subclaval elongate spot, a cellular subquadrate spot near inner angle, a very small spot between them, with grayish margin; second joint excluding base and remaining joints of rostrum, lateral areas of meso and metasterna, apices of intermediate and posterior femora, longitudinal lines on under surface of anterior femora, basal, subbasal annulations to intermediate and posterior tibiae and their apices dark brown; 1st joint of antennae as long as head; lateral angles of pronotum acutely pointed.

Length: 16-21 mm.

Distribution: India: Chhattisgarh (Rajnand gaon), West Bengal, Tamil Nadu. *Elsewhere:* Myanmar.

Subfamily IV. ECTRICHODIINAE

Key to the genera of the
Subfamily ECTRICHODIINAE

1. Antennae with eight joints..... 2
- Antennae with six joints.....
..... *Haematorrhophus* Stål
2. Scutellum with two apical spinous angulations..... *Scadra* Stål
- Scutellum with three apical spinous angulations, the middle one minute.....
..... *Ectrychotes* Burm.

Genus 12. *Haematorrhophus* Stål, 1874a

1874a. *Haematorrhophus* Stål, *Kongliga Svenska Vetenskaps Akademiens Handlingar*, **4** :3-7.

17. *Haematorrhophus tuberculatus*

(Stål, 1874)*

(Plate II, Fig. 17)

1874. *Physorhynchus tuberculatus* Stål, *En. Hem.*, **4**: 49.

1904. *Physorhynchus tuberculatus*: Distant, *Fauna Brit. India, Rhynchota*, **2**: 320.

2006. *Haematorrhophus tuberculatus*: Ambrose, *Zoos' Print Journ.*, **21**(9): 3.

Material examined: 1ex., Devgaon, Dist. Raipur, 5.VIII.2011, coll. Sunil and party; 1ex., Darbha, Dist. Jagdalpur, 16.VIII.2011, coll. R.P. Gupta and party.

Diagnostic character: Specimen shining black in colour; lateral margins of connexivum reddish; hemelytra abbreviated, practically absent; apices of tibiae and tarsi clothed with yellowish brown hairs; anterior lobe of pronotum longer than posterior lobe; first and second joint of antennae sub-equal in length.

Length: 28-35 mm.

Distribution: India: Chhattisgarh (Jagdalpur, Raipur), Assam, Meghalaya, Nagaland. *Elsewhere:* Sri Lanka, Myanmar.

Genus 13. *Scadra* Stål, 1859.

1859. *Scadra* Stål, *Ofv. Vet. -Ak. Forh.*: 176 & 182.

Key to the species of the Genus *Scadra* Stål

1. Neither antennae nor tibiae annulated
.....*fuscicrus* Stål
- Both antennae and tibiae annulated
.....*annulipes* Reuter

18. *Scadra fuscicrus* Stål, 1859*

(Plate II, Fig. 18)

1859. *Scadra fuscicrus* Stål, *Ofv. Vet. -Ak. Forh.*: 183.

1904. *Scadra fuscicrus*: Distant, *Fauna of Brit. India, Rhynchota*, 2: 308.

1999. *Scadra fuscicrus*: Biswas *et. al.*, *Fauna of Meghalaya, State Fauna Series*, 4(Part 4): 304.

2007. *Scadra fuscicrus*: Biswas *et. al.*, *Fauna of Andhra Pradesh, State Fauna Series*, 5(Part 3): 340.

Material examined: 2exs., Sankra, Dist. Dhamtari, 21.X.2011, coll. Sunil and party; 1ex., Barnawapara, Dist. Raipur, 10.XI.2011, coll. Sunil and party; 1ex., Barnawapara, Dist. Raipur, 28.IX.2011, coll. Sunil and party; 2exs., Hardifor, Dist. Raipur, 4.X.2011, coll. Sunil and party; 1ex., Sankra, Dist. Dhamtari, 22.X.2011, coll. Sunil and party.

Diagnostic character: Body rufous-testaceous; a large spot on interior area of corium, membrane,

three segmental spots to the ventral segments and the tibiae black; tarsi yellowish brown, apical joint dark brown; posterior lobe of pronotum with two black spots.

Length : 10.5-13.5 mm.

Distribution: India: Chhattisgarh (Dhamtari and Raipur), Meghalaya, Andhra Pradesh. *Elsewhere:* Sri Lanka.

19. *Scadra annulipes* Reuter, 1881

(Plate III, Fig. 19)

1881. *Scadra annulipes* Reuter, *Act. Soc. Sc. Fenn.*, 12: 309.

1904. *Scadra annulipes*: Distant, *Fauna of Brit. India, Rhynchota*, 2: 310.

2006. *Scadra annulipes*: Ambrose, *Zoos' Print Journ.*, 21(9): 4.

Material examined: 2exs., Barnawapara camp., Dist. Raipur, 3.VII.2011, Dr. Kailash Chandra and party.

Diagnostic character: Body flavous-testaceous; antennae, a spot on each side of posterior pronotal lobe, a triangular spot on interior area of corium, membrane, abdomen above, last ventral segment, ventral series of round spots, three annulations to tibiae, apices of tarsi black; third joint of antennae with subapical white annulations; connexivum not spotted.

Length : 13.5 mm.

Distribution: India: Chhattisgarh (Raipur), West Bengal, Tamil Nadu, Kerala.

Genus 14. *Ectrychotes* Burmiester, 1835

1835. *Ectrychotes* Burm. *Handb.*, 2 : 237.

Key to the species of the
Genus *Ectrychotes* Burmiester

1. Pronotum unicolourous*atripennis* (Stal)
- Pronotum not unicolourous.....*dispar* Reuter

20. *Ectrychotes atripennis* (Stål, 1866)*

(Plate III, Fig. 20)

1866. *Larymna atripennis* Stål, *Ofv. Vet. -Ak. Forh.*, p. 302.

1904. *Ectrychotes atripennis*: Distant, *Fauna Brit. India, Rhynchota*, 2: 317.

2006. *Ectrychotes atripennis*: Ambrose, *Zoos' Print Journ.*, 21(9): 1.

Material examined: 1ex., Naktipond, Dist. Raipur, 13.VII.2011, coll. Sunil and party

Diagnostic character: Species coral red in colour, shining. Antennae dark brown at apex; hemelytra excluding base and marginal line from base to middle, three large lateral segmental spots to sternum, lateral fasciae to abdomen black.

Length: 11-12 mm.

Distribution: India: Chhattisgarh (Raipur), Tamil Nadu. *Elsewhere*: Myanmar, Indonesia, Malaysia.

21. *Ectrychotes dispar* Reuter, 1881
(Plate III Fig. 21)

1881. *Ectrychotes dispar* Reuter, *Act. Soc. Sc. Fenn.*, 12: 304.

1904. *Ectrychotes dispar*: Distant, *Fauna of Brit. India, Rhynchota*, 2: 315.

2006. *Ectrychotes dispar*: Ambrose, *Zoos' Print Journ.*, 21(9): 2.

Material examined: 5exs., Barnawapara camp., Dist. Raipur, 1.VII.2011, Dr. Kailash Chandra and party.

Diagnostic character: Species violet in colour, antennae and hemelytra piceous; lateral areas of posterior lobe of pronotum, scutellum, base of clavus, corium, lateral margins of corium, connexivum, apices of coxae, trochanters, basal half of posterior femora, bases of tarsi and abdomen beneath, violaceous.

Length: 12-14 mm.

Distribution: India: Chhattisgarh (Raipur), West Bengal, Maharashtra, Bangalore, Tamil Nadu.

Subfamily V. PEIRATINAE

Key to the genera of the Subfamily **Peiratinae**

1. Head of moderate length; antennae inserted near or not remote from eyes; intermediate tibiae generally provided with a spongy furrow 2

- Head long, porrect; antennae inserted remotely from eyes; intermediate tibiae without a spongy furrow *Sirthenea* Spinola
- 2. Pronotum smooth, or with posterior lobe finely granulate 3
 - Pronotum tuberculosly granulate.....
.....*Catamiarus* Amy. & Serv.
- 3. Spongy furrow occupying more than half of anterior tibiae.....*Ectomocoris* Mayr.
 - Spongy furrow occupying less or not more than half of anterior tibiae..... 4
- 4. Anterior femora not spinose beneath..... 5
 - Anterior femora spinose beneath.....
.....*Lestomerus* Amy. & Serv.
- 5. Second joint of antennae as long as pronotum.....*Spilodermus* Stål
 - Second joint of antennae about as long as anterior lobe of pronotum....*Cleptocoris* Stål

Genus 15. *Sirthenea* Spinola, 1840

1840. *Sirthenea* Spinola, *Spin. Ess. Hem.*, p. 100.

22. *Sirthenea flavipes* (Stål, 1855)*
(Plate III, Fig. 22)

1855. *Rasahus flavipes* Stål, *Ofv. Vet.-Ak. Forh.*, p. 187.

1904. *Sirthenea flavipes*: Distant, *Fauna Brit. India, Rhynchota*, 2: 303.

2006. *Sirthenea flavipes*: Ambrose, *Zoos' Print Journ.*, 21(9): 18.

Material examined: 1ex., Barnawapara, Dist. Raipur, 28.IX.2011, coll. Sunil and party.

Diagnostic character: Black in colour; anterior lobe of pronotum, disk of abdomen beneath reddish brown; first joint of antennae, base of second and third excluding base, base and apex of clavus, base and a subclaval apical spot to corium, apex of membrane, rostrum, legs, spots to connexivum above and beneath and a large lateral, basal and apical abdominal spot yellowish brown; antennae pilose, first joint not reaching apex of head, second about as long as anteocular portion of head.

Length: 19-21 mm.

Distribution: India: Chhattisgarh (Raipur), Assam, Nagaland, Tamil Nadu. *Elsewhere:* China, Hong Kong, Indonesia, Japan, Philippines, Sri Lanka.

Genus 16. *Catamiarus* Amyot & Serville, 1843

1843. *Catamiarus* Amyot & Serville, *Hem.*,: 323.

23. *Catamiarus brevipennis* (Serville, 1831)*
(Plate III, Fig. 23)

1831. *Pirates brevipennis* Serv., *Ann. Sc. Nat.*, **23**: 217.

1904. *Catamiarus brevipennis*: Distant, *Fauna Brit. India, Rhynchota*, **2**: 302.

2006. *Catamiarus brevipennis*: Ambrose, *Zoos' Print Journ.*, **21**(9): 15.

Material examined: 1ex., Korea, 3.VII.2011, coll. Angshuman and party; 1ex., Surguja, 16.VIII.2011, coll. Angshuman and party.

Diagnostic character: Body black; a large rounded spot adjoining to the apex of the clavus and a very large discal spot to membrane brownish yellow; antennae hairy; head with the lateral margin hirsute; legs and margins of the body with long hair or hirsute.

Length: 20-26 mm.

Distribution: India: Chhattisgarh (Surguja), Uttaranchal, Rajasthan, Tamil Nadu, Karnataka.

Genus 17. *Ectomocoris* Mayr, 1865

1865. *Ectomocoris* Mayr, *Verh. Z.-b. Ges. Wien.*, p. 438.

Key to the species of the
Genus *Ectomocoris* Mayr

1. Hemelytra abbreviated *simulans* Distant
- Hemeltra fully developed *cordiger* Stål

24. *Ectomocoris simulans* Distant, 1919*
(Plate III, Fig. 24)

1919. *Ectomocoris simulans* Distant, *Ann. Mag. Nat. Hist.*, **3**: 466-469.

2006. *Ectomocoris simulans* : Ambrose, *Zoos' Print Journ.*, **21**(9): 17.

Material examined: 1ex., Bar forest, Dist. Raipur, 6.VIII.2011, Sunil and party; 1ex., Devgaon, Dist. Raipur, 5.VIII.2011, Sunil and party.

Diagnostic character: Specimen black in colour; head moderately long, anteocular longer than postocular area, impressed transversely between eyes; antennae brownish yellow, first joint shorter than head, second and third joints almost equal in size; rostrum brownish yellow, stout, second joint longest; pronotum elongate, anterior lobe more than twice the length of posterior lobe; hemelytra excluding base and spot at apex, yellowish and only reaching base of first abdominal segment; apex of scutellum acute; abdomen moderately dilated; legs brownish yellow, anterior femora strongly, intermediate femora moderately incrassated, anterior tibiae almost as long as femora and provided with a spongy furrow occupying three-fourths of their under surface, tarsi three-jointed.

Length : 15-16 mm.

Distribution: Known from India including Chhattisgarh (Raipur).

25. *Ectomocoris cordiger* Stål, 1866*
(Plate III, Fig. 25)

1866. *Ectomocoris cordiger* Stål, *Ofv. Vet.-Ak. Forh.*, p. 256.

1904. *Ectomocoris cordiger*: Distant, *Fauna Brit. India, Rhynchota*, **2**: 295.

2006. *Ectomocoris cordiger*: Ambrose, *Zoos' Print Journ.*, **21**(9): 16.

Material examined: 1ex., Chilpi R.H, Dist. Kawardha., 31.VIII.2011, coll. Sunil and party.

Diagnostic character: Black, opaque; pronotum and scutellum olivaceous black; antennae, greater part of second and third joints of rostrum, small spots to connexivum above and beneath, legs, yellowish brown in colour; apical half of clavus confluent with somewhat similar sized spot on corium, small spot on outer area of basal cell to membrane, brownish yellow; legs and antennae hairy.

Length : 12-15 mm.

Distribution: India: Chhattisgarh (Kawardha), West Bengal, Maharashtra, Tamil Nadu, Kerala. *Elsewhere*: Sri Lanka, New Guinea, Iran, Iraq, United Arab Emirates.

Genus 18. *Lestomerus* Amyot & Serville, 1843

1843. *Lestomerus* Amyot & Serville, *Hem.*, p. 322.

26. *Lestomerus sanctus* (Fabricius, 1787)*
(Plate III, Fig. 26)

1787. *Reduvius sanctus* Fabricius, *Mant.*, 2, p. 310.

1904. *Pirates sanctus*: Distant, *Fauna Brit. India, Rhynchota*, 2: 298.

2006. *Lestomerus sanctus*: Ambrose, *Zoos' Print Journ.*, 21(9): 17.

Material examined : 1ex., Barnawapara, Dist Raipur, 12.VII.2011, coll. Sunil and party; 1ex., Barnawapara, Dist Raipur, 18.IX.2011, coll. Sunil and party; 1ex., Barnawapara, Dist Raipur, 9.IX.2011, coll. Sunil and party.

Diagnostic character: Body brownish yellow in colour; eyes, narrow lateral margins and a central longitudinal fascia to anterior pronotal lobe, anterior marginal area of posterior pronotal lobe, hemelytra, transverse spots to connexivum above and beneath, lateral areas of prosternum, meso and metasterna, segmental fasciae and apex to abdomen, anterior femora beneath, apex of femora and tibiae, black; second joint of antennae almost as long as pronotum; anterior pronotal lobe with a sulcation, merged in a foveate spot near base; anterior and intermediate femora spinose beneath.

Length: 14.5-15 mm.

Distribution: India: Chhattisgarh (Raipur), North Bengal, Tamil Nadu, Punjab. *Elsewhere*: Sri Lanka, Myanmar.

Genus 19. *Spilodermus* Stål, 1868

1868. *Spilodermus* Stål, *Hem.*, 1: 122.

27. *Spilodermus quadrinotatus*
(Fabricius, 1798)
(Plate III, Fig. 27)

1798. *Reduvius quadrinotatus* Fabricius, *Ent. Syst. Suppl.*, p. 544.

1904. *Pirates quadrinotatus*: Distant, *Fauna Brit. India, Rhynchota*, 2: 300.

2006. *Spilodermus quadrinotatus*: Ambrose, *Zoos' Print Journ.*, 21(9): 18.

Material examined: 1ex., Barnawapara, Dist Raipur, 16.VIII.2011, coll. Sunil and party.

Diagnostic character: Black, legs with greyish hairy; posterior lobe of pronotum, scutellum, clavus, corium, posterior margin of prosternum, cinnamon- brown; posterior inner area of corium black; membrane with one anterior another posterior spots and a line on basal margin white; spots to connexivum above and beneath, apices of coxae, bases of intermediate and posterior femora brownish yellow; second joint of antennae as long as pronotum.

Length: 9-10.5 mm.

Distribution: India: Chhattisgarh (Raipur), Tamil Nadu. *Elsewhere*: Sri Lanka, Bangladesh.

Genus 20. *Cleptocoris* Stål, 1866

1866. *Cleptocoris* Stål, *Ofv. Vet.-Ak. Forh.*, p. 262.

Key to the species of the
Genus *Cleptocoris* Stål

1. Membrane fuscous, unicolorous
.....*lepturoides* (Wolff.)
- Membrane spotted with black
.....*atromaculatus* Stål

28. *Cleptocoris lepturoides* Wolff., 1804*
(Plate IV, Fig. 28)

1804. *Reduvius lepturoides* Wolff, *IC.*, 4: 165.

1904. *Pirates lepturoides* : Distant, *Fauna Brit. India, Rhynchota*, 2: 301.

2006. *Cleptocoris lepturoides* : Ambrose, *Zoos' Print Journ.*, 21(9): 15.

Material examined: 1ex., Moharli, Dist Surguja, 16.VIII.2011, coll. Angshuman and party.

Diagnostic character: Black; corium brownish yellow in colour, a small spot at inner angle at base of membrane, the membrane, brownish yellow; connexivum above and beneath spotted with yellowish brown; anterior pronotal lobe centrally impressed; anterior femora unarmed beneath.

Length : 9-10.5 mm.

Distribution: India: Chhattisgarh (Surguja), Maharashtra. *Elsewhere*: Sri Lanka, Myanmar, Indonesia.

29. *Cleptocoris atromaculatus* Stål, 1870

(Plate IV, Fig. 29)

1870. *Cleptocoris atromaculatus* Stål, *Ofv. Vet.-Ak. Forh.*, p. 692.

1904. *Pirates atromaculatus*: Distant, *Fauna Brit. India, Rhynchota*, 2: 301.

2006. *Cleptocoris atromaculatus*: Ambrose, *Zoos' Print Journ.*, 21(9): 15.

Material examined: 1ex., Kutru, Dist. Bastar, 2.II.1990, coll. R.K. Ghosh; 1ex., Kerpe, 20 km N.W. of Kutru, Dist. Bastar, 31. I.1990, Coll. R.K. Ghosh.

Diagnostic character: Black; posterior lobe of pronotum, scutellum, clavus, corium and posterior lateral margin of pro-sternum cinnamon brown; antennae pilose, second joint about as long as pronotum.

Length : 12 mm.

Distribution: India: Chhattisgarh (Bastar), Assam, Meghalaya, Nagaland, *Elsewhere*: Sri Lanka, Myanmar, Indonesia, China, Hong Kong, Japan and Philippines.

Subfamily VI. SALYAVATINAE

Genus 21. *Lisarda* Stål, 1859

1859. *Lisarda* Stål, *Ofv. Vet.-Ak. Forh.*, p. 192.

30. *Lisarda annulosa* Stål, 1874*

(Plate IV, Fig. 30)

1874. *Lisarda annulosa* Stål, *En. Hem.*, 4, p. 83.

1904. *Lisarda annulosa*, Distant, *Fauna Brit. India, Rhynchota*, 2: 237.

2006. *Lisarda annulosa*: Ambrose, *Zoos' Print Journ.*, 21(9): 23.

Material examined: 1ex., Sonnat, Dist Korea, 1.VIII.2011, coll. Sunil and party; 1ex., Lalbandhapond Dist Raipur, 14.VII.2011, coll. Sunil and party.

Diagnostic character: Species brownish-yellow in colour; base and annulations to second joint of antennae, mottlings to hemelytra and abdomen, connexivum and legs brownish yellow; subocellate spots to connexivum, head beneath, sternum, a broad fasciae on each side of abdomen joining a spot on apical segment and a few smaller linear central spots dark reddish brown; tibiae and femora annulated with brownish yellow; femora with a spine on apex, anterior femora with a medial spine, spine to scutellum short and obtuse.

Length : 11 mm.

Distribution: India: Chhattisgarh (Korea and Raipur), Tamil Nadu. *Elsewhere*: China, Myanmar, Sri Lanka

Subfamily VII. REDUVIINAE

Key to the genera of the
Subfamily REDUVIINAE

1. Eyes and ocelli large or very prominent; eyes extending transversely quite across the lateral areas of the head; pronotum broadly longitudinally impressed or sulcate.....
.....*Gerbelius* Distant
- Eyes and ocelli small or mediocre; eyes never extending transversely across the lateral areas of the head; pronotum is not broadly longitudinally impressed or sulcate.....
.....*Acanthaspis* Amy. & Serv.

Genus 22. *Gerbelius* Distant, 1903

1903. *Gerbelius* Distant, *Ann. Soc. Ent. Belg.*, p. 59.

31. *Gerbelius ornatus* Distant, 1903*

(Plate IV, Fig. 31)

1903. *Gerbelius ornatus* Distant, *Ann. Soc. Ent. Belg.*, p. 59.

1904. *Gerbelius ornatus*: Distant, *Fauna Brit. India, Rhynchota*, 2: 254.

2006. *Gerbelius ornatus*: Ambrose, *Zoos' Print Journ.*, 21(9): 21.

Material examined: 1ex., Latadadar, Dist Raipur, 9.X.2011, coll. Sunil and party.

Diagnostic character: Species brownish black

in colour; femora pale brownish, their bases, the tibiae, tarsi, antennae, rostrum, a large spot occupying claval apices, adjacent area of corium, apical angle of corium, a small adjacent spot on membrane, apex of scutellum pale yellowish brown; femora spined beneath; connexivum with pale narrow incisural spots.

Length: 8.5-10 mm.

Distribution: India: Chhattisgarh (Raipur), Maharashtra. *Elsewhere*: Sri Lanka.

Genus 23. *Acanthaspis* Amyot & Serv., 1843

Key to the species of the

Genus *Acanthaspis* Amyot & Serv.

1. Posterior lobe of pronotum either with discal spines or with tubercles 2
 - Posterior lobe of pronotum discally unarmed 3
2. Posterior lobe of pronotum with two short but prominent discal tubercles 4
 - Posterior lobe of pronotum with two long discal spines..... *quinquespinosa* (Fabricius)
3. Pronotum unicolorous, unspotted; legs unicolorous *siva* Distant
 - Pronotum dark with pale spots and markings; legs annulate *sexguttata* (Fabricius)
4. Pronotum unicolorous, unspotted 5
 - Pronotum palely marked or spotted *flavipes* Stål
5. Piceous in colour; central disc of abdomen reddish brown; first joint of rostrum distinctly longer than second *fulvipes* (Dallas)
 - Purplish-brown in colour; abdomen beneath yellowish brown; first joint of rostrum shorter than second *luteipes* Walker

32. *Acanthaspis quinquespinosa* (Fabr., 1781)*
(Plate IV, Fig. 32)

1781. *Reduvius quinquespinosa* Fabr., *Spec. Ins.*, 2: p. 382.

1904. *Acanthaspis quinquespinosa*: Distant, *Fauna Brit. India, Rhynchota*, 2: 257.

2006. *Acanthaspis quinquespinosa*: Ambrose, *Zoos' Print Journ.*, 21(9): 20.

2007. *Acanthaspis quinquespinosa*: Biswas and Bal, *Fauna of Andhra Pradesh, State Fauna Series*, 5(Part-3): 342.

Material examined: 1ex., Barnawapara, Dist Raipur, 11.VII.2011, coll. Sunil and party; 1ex., Raipur, Dist Raipur, 10.VII.2011, coll. Anil and party; 1ex., Raipur, Dist Raipur, 10.VII.2011, coll. Anil and party.

Diagnostic character: Body black; two lateral and two discal spines to pronotum; a transverse discal spot to corium and spot to connexivum above and beneath luteous; anterior lobe of pronotum strongly sculptured, posterior lobe rugose with a long lateral spine on each side and with two shorter erect discal spines between them; scutellar spine long, obliquely ascending.

Length: 15.5-19 mm.

Distribution: India: Chhattisgarh (Raipur), Assam, Madhya Pradesh, Tamil Nadu, Maharashtra, Meghalaya and West Bengal. *Elsewhere*: China, Sri Lanka, Myanmar.

33. *Acanthaspis siva* Distant, 1904*
(Plate IV, Fig. 33)

1904. *Acanthaspis siva* Distant, *Fauna Brit. India, Rhynchota*, 2: 265.

2006. *Acanthaspis siva*: Ambrose, *Zoos' Print Journ.*, 21(9): 20.

Material examined: 1ex., Kabirdham, 1.X.2011, coll. Sunil and party.

Diagnostic character: Body black and rugulose; corium with basal and sub basal angular creamy spot; connexivum spotted pale ochraceous; antennae basal joint black and remaining joints brown in colour; pronotum posterior lobe rugulose and centrally sulcate; scutellar spine ascendant obliquely, apex of membrane creamy white.

Length: 18 mm.

Distribution: India: Chhattisgarh (Kabirdham), Madhya Pradesh, North and Central India and Tamil Nadu. *Elsewhere*: Sri Lanka.

34. *Acanthaspis sexguttata* (Fabricius, 1775)
(Plate IV, Fig. 34)

1775. *Reduvius sexguttata* Fabricius, *Syst. Ent.*, p. 832.
1904. *Acanthaspis sexguttata*: Distant, *Fauna Brit. India, Rhynchota*, 2: 270
2003. *Acanthaspis sexguttata*: Biswas and Bal, *Fauna of Sikkim, State Fauna Series*, 9(Part-2): 529.
2006. *Acanthaspis sexguttata*: Ambrose, *Zoos' Print Journ.*, 21(9): 20.

Material examined: 1 ex., AABR, Bilaspur, Chhaparwa FRH, 4.VI.08, coll. Y.N. Gupta and party.

Diagnostic character: Posterior pronotal lobe transversely rugulose with four flavous brownish yellow spots; anterior lobe distinctly sculptured, corium with sub basal and a larger about rounded subapical spot and large apical spot to membrane greyish flavescent, femora annulated near apex and the tibiae biannulate; scuteller spine obliquely ascendant.

Length: 16-20 mm.

Distribution: India: Chhattisgarh (Bilaspur), Andhra Pradesh, Sikkim, Karnataka, Tamil Nadu and West Bengal.

35. *Acanthaspis flavipes* Stål, 1855
(Plate IV, Fig. 35)

1855. *Acanthaspis flavipes* Stål, *Ofv. Vet.-Ak. Forh.*, p. 187.
1904. *Acanthaspis flavipes*: Distant, *Fauna Brit. India, Rhynchota*, 2: 262.
2006. *Acanthaspis flavipes*: Ambrose, *Zoos' Print Journ.* 21(9): 19.

Material examined: 1ex., Barnawapara, Dist Raipur, 12.VII.2011, coll. Sunil and party.; 1ex., Devpur, Dist Raipur, 1.VIII.2011, coll. Sunil and party.

Diagnostic character: Body brown; large transverse spot to the middle of corium, spot to connexivum; rostrum, legs, apex of scutellar spine luteous; pronotum with anterior lobe strongly sculptured, lateral angle spinously produced; scutellar spine obliquely ascendant.

Length: 15.5-16 mm.

Distribution: India: Chhattisgarh (Raipur), Madhya Pradesh, Maharashtra, Punjab, Tamil Nadu and West Bengal.

36. *Acanthaspis fulvipes* (Dallas, 1850)
(Plate IV, Fig. 36)

1850. *Platyeris fulvipes* Dallas, *Tr. Ent. Soc.*, p. 6.
1904. *Acanthaspis fulvipes*: Distant, *Fauna Brit. India, Rhynchota*, 2: 259.
2006. *Acanthaspis fulvipes*: Ambrose, *Zoos' Print Journ.*, 21(9): 19.

Material examined: 1ex., Jagdalpur, Dist. Jagdalpur, 16.VIII.2011, coll. R.P. Gupta.

Diagnostic character: Pronotum with anterior lobe moderately sculptured and deeply centrally foveate on posterior margin; posterior lobe rugulose, its lateral angles acutely spinous, scutellar spine long, obliquely ascendant; antennae, rostrum, legs and central disk of abdomen reddish brown; a large spot behind middle of corium and spot to connexivum above and beneath ochraceous.

Length: 25-26 mm.

Distribution: India: Chhattisgarh (Jagdalpur), Assam, Madhya Pradesh, West Bengal and Sikkim. *Elsewhere*: Bhutan.

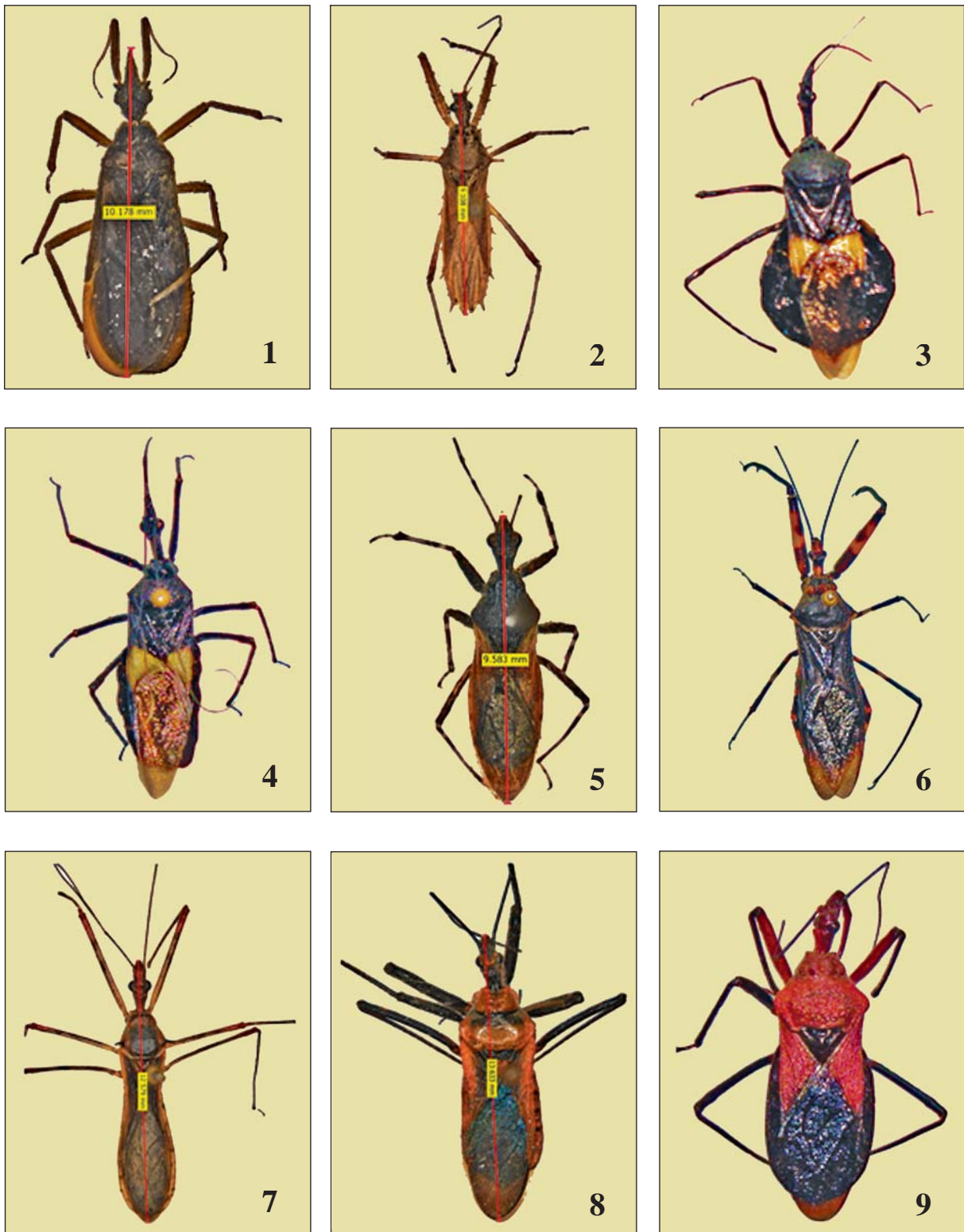
37. *Acanthaspis luteipes* Walk., 1873
(Plate IV, Fig. 37)

1873. *Acanthaspis luteipes* Walk., *Cat. Het.*, 7, p. 175.
1904. *Acanthaspis luteipes* Distant, *Fauna Brit. India, Rhynchota*, 2: 260.
2006. *Acanthaspis luteipes*: Ambrose, *Zoos' Print Journ.*, 21(9): 19.
2007. *Acanthaspis luteipes*: Biswas and Bal, *Fauna of Andhra Pradesh, State Fauna Series*, 5(Part-3): 342.

Material examined: 1ex., Jhirianala; Dist. Raipur, 25.VII.2011, coll. Sunil and party; 1ex., Barnawapara, Dist Raipur, 28.IX.2011, coll. Sunil and party; 1ex., Barnawapara, Dist Raipur, 4. VIII.2011, coll. Sunil and party.

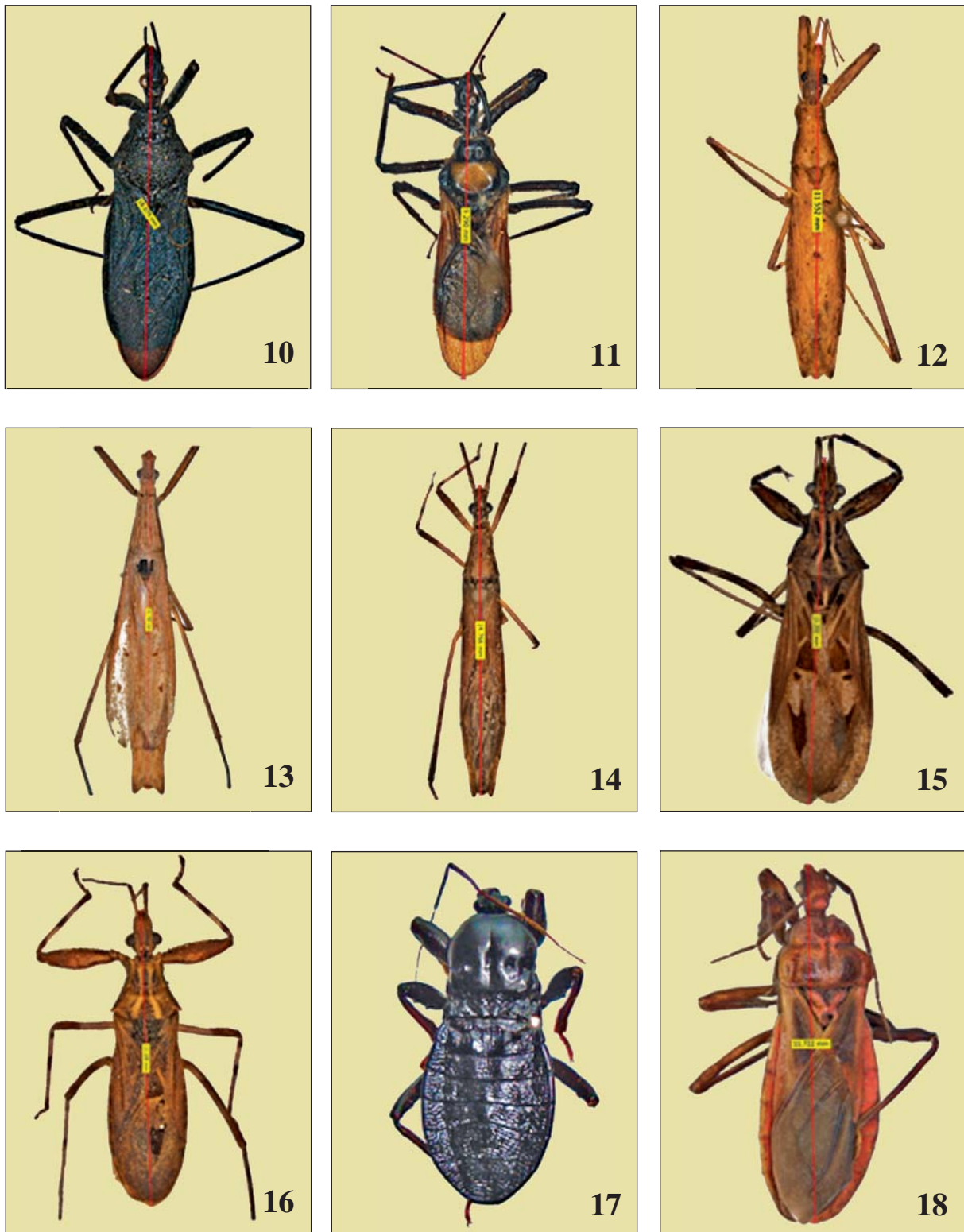
Diagnostic character: Body purplish brown;

PLATE I



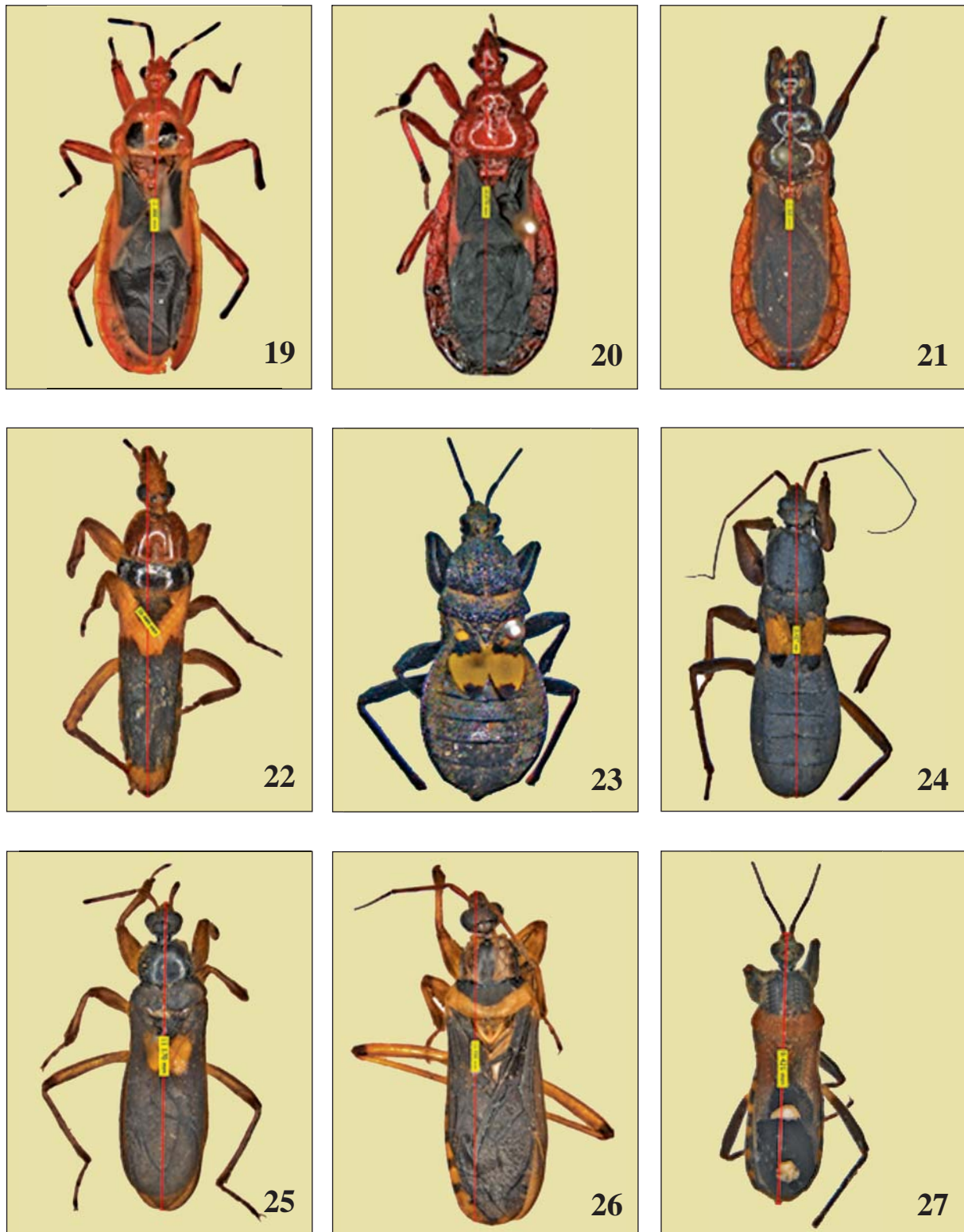
Figs. 1-9. 1. *Tribelocephala indica* Walker, 2. *Polididus armatissimus* Stål, 3. *Sycanus collaris* (Fabricius), 4. *Sycanus croceovittatus* Dohrn, 5. *Coranus siva* Kirkaldy, 6. *Rihirbus trochantericus* Stål, 7. *Euogoras plagiatus* (Burmiester), 8. *Rhynocoris fuscipes* (Fabricius), 9. *Rhynocoris marginatus* (Fabricius)

PLATE II



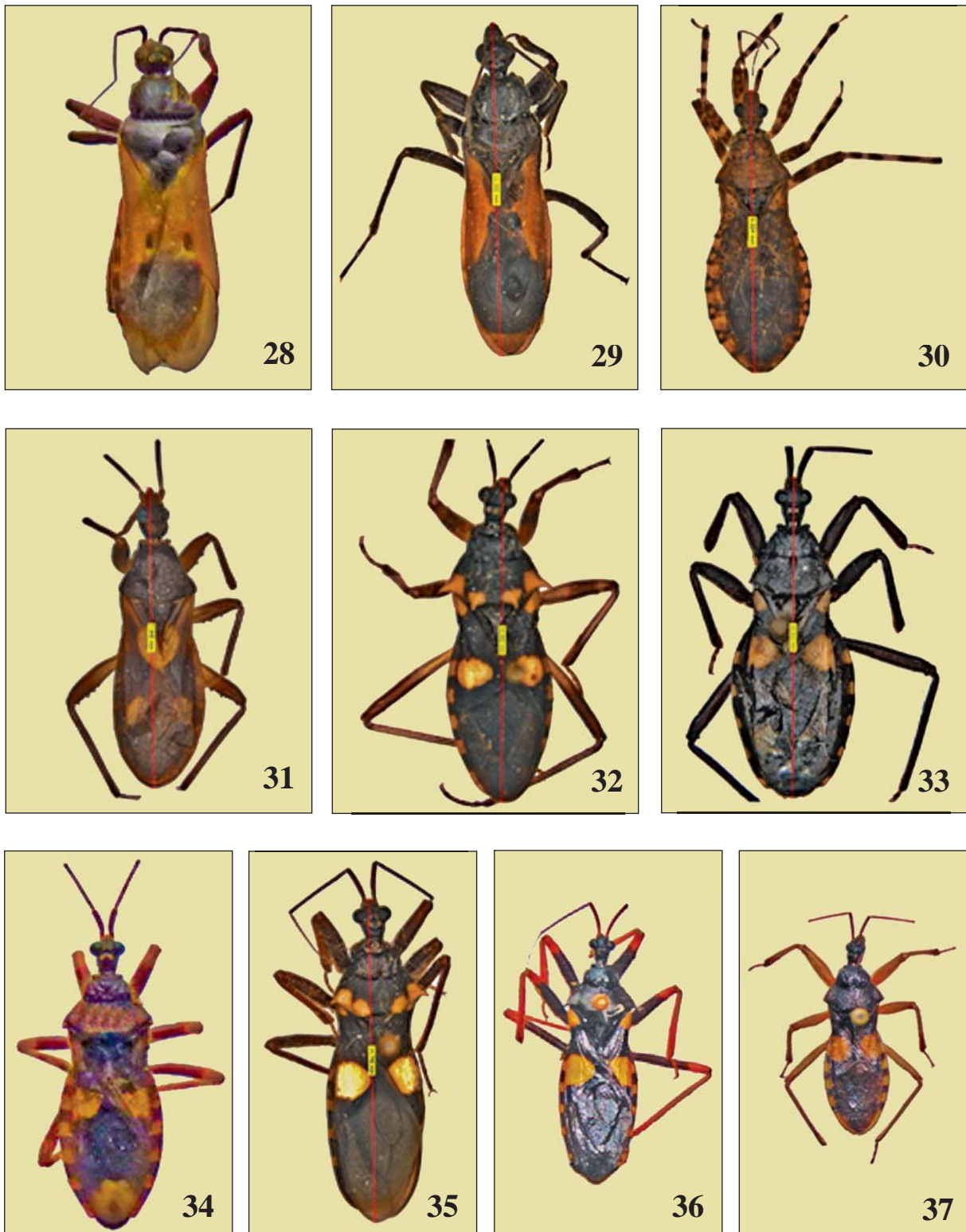
Figs. 10-18. 10. *Rhynocoris Squalus* (Distant), 11. *Sphedanolestes variabilis* Distant, 12. *Pygolampis foeda* Stål, 13. *Pygolampis unicolor* Walker, 14. *Sastrapada baerensprungi* (Stål), 15. *Oncocephalus impudicus* Reuter, 16. *Oncocephalus schioedtei* Reuter, 17. *Haematorrhophus tuberculatum* (Stål), 18. *Scadra fuscicrus* Stål.

PLATE III



Figs. 19-27. 19. *Scadra annulipes* Reuter, 20. *Ectrychotes atripennis* Stål, 21. *Ectrychotes dispar* Reuter, 22. *Sirthenea flavipes* (Stål), 23. *Catamarius brevipennis* (Serville), 24. *Ectomocoris simulans* Distant, 25. *Ectomocoris cordiger* Stål, 26. *Lestomerus sancturs* (Fabricius), 27. *Spilodermus quadrinotatus* (Fabricius).

PLATE IV



Figs. 28-37. 28. *Cleptocoris lepuroides* (Wolff), 29. *Cleptocoris atromaculatus* Stål, 30. *Lisarda annulosa* Stål, 31. *Gerbelius ornatus* Distant, 32. *Acanthaspis quinquespinosa* (Fabricius), 33. *Acanthaspis siva* Distant, 34. *Acanthaspis sexguttata* (Fabricius), 35. *Acanthaspis flavipes* Stål, 36. *Acanthaspis fulvipes* (Dallas), 37. *Acanthaspis luteipes* Walker.

head with a spot on each side of ocelli and a distinct, longitudinal incision between eyes; pronotum with anterior lobe moderately sculptured and centrally sulcate; a large moderately sculptured and centrally sulcate, posterior lobe obsoletely rugulose, lateral angles subacutely prominent; a large spot to connexivum above and beneath, coxae trochanters and legs pale ochraceous.

Length: 17-18 mm.

Distribution: India: Chhattisgarh (Raipur), Andhra Pradesh, West Bengal, Sikkim, Tripura, Nicobar Islands.

from the state of Chhattisgarh, of which 24 species belonging to 18 genera under 6 subfamilies constitute new record to the State. Relevant literature references, diagnosis of each species, keys to various taxa, distribution of each species in various districts of Chhattisgarh and other states, have been incorporated. The record of these species will provide the information on predacious species diversity of the family Reduviidae of the state. It is also expected that the further study of unexplored area may yield many more species.

SUMMARY

This paper deals with 32 species of Reduviid bugs belonging to 23 genera under 7 subfamilies

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REFERENCES

- Ambrose, D.P., 2006. A Checklist of Indian Assassin bugs (Insecta: Hemiptera: Reduviidae) with taxonomic status, distribution and diagnostic morphological characteristics. *Zoos' Print Journal*, **21**(9): 2388-2406.
- Biswas, B. and L.K. Ghosh, 1995. *Fauna of Indravati Tiger Reserve, Conservation Area Series*, **6**: 19-29.
- Chandra, K, Kushwaha, S. 2012. Studies on the Hemiptera Fauna of Barnawapara Wildlife Sanctuary, Chhattisgarh, India, *DCSI*, **7**: 101-108.
- Distant, W.L., 1904. *The Fauna of British India including Ceylon and Burma, Rhynchota*, **2**: 198-389.
- Distant, W.L., 1910. *The Fauna of British India including Ceylon and Burma. Rhynchota*, **5**: 169-217.
- Henry, T.J. 2009. Biodiversity of Heteroptera in *Insect Biodiversity Science and Society* Edt. By Robert, G. Footitt and Piter, H. Adler: 224-263.