CHAPTER - V Sub-Family : PIRATINAE

Piratina Stal, En. Hem. IV, P. 4 (1874).

The pronotal characters of the piratinae are very apparent, the transverse constriction is situated behind the middle and the whole pronotum is of a more or less elongate character; the scutellum, as in the other subfamilies, is triangular or sub-triangular, its apex acuminate, or spinously produced.

The subfamily Piratinae, among the tibiaroliate group of Reduviidae, could be broadly divided into two groups, one having more elongately produced head, with antennae far removed in front of the eyes and having tibiarolium developed only on the fore tibiae and the other group having moderately elongate head with the antennae arising closer to the eyes and the fore and mid tibiae provided with tibiarolium. The first group is exclusive for Sirthenea whereas the second group includes several genera, the Ectomocoris and Pirates, constituting the major genera comprising of more than 90% of the recorded species of Piratinae and the diagnostic feature of these two genera is the extent of development of tibiarolium. In Ectomocoris the tibiarolium of the fore and mid tibiae extends more than half the length of each tibia whereas in Piratinae it is restricted almost to the tip of the tibia but its lobe extending almost the entire length of the first two tarsomeres. In both genera the second segment of the rostrum is always the longest, more than double the length of the first segment and in the case of Pirates the fore femora is usually provided with tuberculate spines.
REDESCRIPTIONS

Genus: ECTOMOCORIS


Type: E. Quadriguttatus, Fabricius.

Distribution: Ethiopian, Oriental, South-East Palaearctic and Australasian Regions.

Head moderately long, anteocular area much longer than postocular area, impressed more or less transversely behind eyes; rostrum stout, the second joint longest; antennae moderately long, first joint incrassated shorter than head; pronotum elongate, transversely constricted at about one-third from base; lateral margins of anterior lobe sub-convex; apex of scutellum moderately produced; lateral margins of abdomen moderately dilated; legs of ordinary length, anterior femora strongly, intermediate, femora moderately incrassated; anterior tibiae about as long as femora and provided with a tibiarolium which occupies more than half of their under surface.
Total number of species recorded by Distant from Orient ...... 14
Total number of species known from India ...... ...... ...... .. 9
Total number of species recorded earlier from Southern India ...... 1
Total number of species recorded for the first time from Southern India in the present account ...... ...... ...... ... 6
Total number of species described new to Science in the present account ...... ...... ...... ...... ...... ...... 1

Ectomocoris cordiger Stal, Ofy. Vet. Ak. Forh. P. 256 (1866);
Distant, A.M.N.H. (7) X, P. 283 (1902); Pirates adjunctus Walker,
Cat. Het. VII, P. 114 (1873).

Female: (S.No. 59) Length 13 mm, width across the abdomen 3.5 mm;
macropterous; elongately ovate; piceous; opaque; pronotum and scutellum
olivaceous-black, shining; antennae, greater part of second and third
joints of rostrum, small spots to connexivum above and beneath and
legs ochraceous; third segment of the rostrum, much longer than first,
slightly shorter than second, second segment as long as scape; antennae
pilose, second joint about as long as anterior lobe of pronotum; gular
prominence obscure; clypeal area sericious; ocelli reddish brown; pronotum
almost smooth having fine hairs only along the longitudinal sulpations,
tubercles of the anterolateral angles of the pronotum moderately developed;
posterolateral prominence of the posterior lobe moderately pronounced;
scutellum triangular with apically rounded porrect tubercle; legs pilose,
fore femora incrassated, tibiarolium extending more than 3/4 the length
of the apically piceous fore tibiae; mid tibiae apically densely setaceous
dorsally.
Previous Record: North Bengal (Brit. Mus.), Sylhet (Stockholm Mus.), Bombay; Bor Ghat (Dixon), Ceylon (Green), Persian Gulf (Brit. Mus.).

Present Record: Tamil Nadu: Walayar (200) and Vadavalli (450).


Female: (S.No. 60) Length 15 mm, width across the abdomen 5 mm; brachypterous; black; body posteriorly ovate, anteriorly elongate; antennal segments unicolourous, pale fuscous; rostral segments unicolourous fuscous; ocelli red, ocellar prominence not significant, almost in flush with the frons; head on either side of the gula prominently globose; pronotal anterior lobe elongately ovate, medially grooved, the groove extending up to the middle of posterior lobe; lateral foveations obscure; posterior lobe transverse, uniformly narrow; transverse groove very deep between anterior and posterior lobes, sparsely covered by bristles; scutellum elongately triangular, scutellar spine obscure; hemelytra brachypterous; membrane more than half black apically; corium basally fuscous, medially connecting the discal vein, both brown; in between area ochraceous; membrane not exceeding 4th abdominal segments; abdomen black unicolourous; connexivum obliquely directing upward, very obscurely marked by ochraceous spots; coxae black, fore and mid femora fuscous; hind femora pale fuscous, tibiae and tarsomeres ochraceous.
Males a little longer than female, their wings extending a little beyond the fourth abdominal segment.

Previous Record: Bor Chat (Dixon).

Present Record: Tamil Nadu: Aramboli (50), Cape Comorin (50), Courtallam (350), Alagar Kovil (350), Yelagiri Hills (1000), Walayar (200) and Maruthamalai (500); Kerala: Malampuzha Dam (100).

Ectomocoris cordatus Wolff (Reduvius) Ic. IV, P. 163 (1804); Stal (Eumerus), En. Hem. IV, P. 61 (1874); Peirates singalensis, Dohrn, Stett. ent. Zeit XXI, P. 408 (1860).

Female: (S.No. 61) Length 16 mm, width across the abdomen 4 mm; macropterous; oblong; black; a spot on the clavus, a spot at base and apex of membrane, lateral margins of abdomen, legs, rostrum and antennae flavous; head, pronotum, scutellum, thorax, abdomen and hemelytra (other than the spots) black; lateral areas of the gula not globose; pronotal anterior lobe about thrice as long as the posterior lobe, its median foveations marred by granulations; posterior lobe almost smooth; pronotal anterolateral angles tuberculate; scutellar tubercle moderately formed, porrect; rostrum acutely pointed, third segment slightly shorter than second segment; antennae unicolourous, pilose; apices of the femora palely fuscous.

Previous Record: Ceylon (Stockholm Mus.).

Present Record: Tamil Nadu: Vadavalli (450) and Walayar (200); Kerala: Neyyar Dam (100).
Ectomocoris gangeticus Bergroth, (Pirates), Rev. d'Ent. XIII, P. 162(1894).

Female : (S.No. 62) Length 15 mm, width across the abdomen 4 mm; macropterous; elongate; black; clavus (except base and extreme apex) and an oblong adjacent spot on corium, a large spot at anterior basal angle of membrane and its apical area, and base of posterior femora pale ochraceous; head, pronotum, scutellum, abdomen beneath and above and thorax beneath, piceous; apical joint of rostrum and spots to connexivum above and beneath obscure pale piceous; rostrum third segment a little shorter than second, narrow and sharply pointed; scutellum acutely pointed, porrectly tuberculate; pronotum anterior lobe four times longer than posterior lobe with shallow foveations, almost smooth dorsally; head a little shorter than anterior lobe of pronotum; hemelytra only reaching the base of the fifth abdominal segment, tibiarolium to anterior tibiae occupying the greater part of their under surfaces, extending upto the base of third tarsomere.

Previous Record : Banks of the Ganges.

Present Record : Tamil Nadu: Vadavalli (450) and Walayar (200). Kerala: Peppara Dam (100).


Fabricius, Syst. Rhyng. P. 277 (1803); Distant A.M.N.H. (7)X, P.282 (1902);
Cimex octomaculatus Gmet, Syst. Nat. I, IV, P. 2199 (1788);
Ectomocoris caloratus Mayr, Verh. Z.B. Gest. Wien. XV, P. 438 (1865);
Pirates sexmaculatus Walker, Cat. Het. VII, P. 116 (1873);
Pirates decius Walker, Loc. Cit. P. 118
Male: (S.No. 63) Length 17 mm, width across the abdomen 5 mm; macropterous; body elongate, large in size; piceous black; posterior lobe of pronotum, antennae, rostrum, legs, marginal spots, and the whole of lateral abdominal margins, ochraceous; head, anterior lobe of pronotum, scutellum black and hemelytra (the area other than the spots) black; hemelytra with two sub-basal, transverse discal and apical spots pale luteous; the third segment of the rostrum narrow, pointed, slightly shorter than second; antennae finely pilose, second joint about as long as anterior lobe of pronotum which is smooth and obscurely longitudinally striate; anterolateral margin of the anterior lobe of pronotum tuberculate, posterolateral margin of the posterior lobe slightly elevated, smooth, dorsally also smooth; anterior lobe also smooth without carinations and sulcations; ocelli reddish brown, area lateral to the gula slightly globose and pilose; abdomen ventrally black, dorsally the connexivum ochraceous; third segment of the rostrum narrow, pointed, slightly shorter than second; legs pilose; coxae black; tibiariolium of fore and mid tibiae exceeding 3/4 the length of tibiae and extending upto the base of third tarsomere.

Previous Record: North Bengal (Brit. Mus.); Bombay: Bor Ghat (Dixon); Pondichery (Coll. Signoret); Ceylon (Green).

Present Record: Tamil Nadu: Vadavalli (45) and Kanjanur (50).
Ectomocoris horridus  

Male:  
(S.No. 64) Length 22 mm, width across the abdomen 5.5 mm; macropterous; large in size; elongate; black, apical half of clavus confluent with a somewhat similarly sized spot on corium and a smaller spot at base of membrane, yellowish white; head elongately produced, as long as anterior lobe of pronotum; lateral areas of the gula subglobose; ocelli close to each other with transverse groove in front, connecting the posterior margin of the eyes; antennae moderately pilose; third rostral segment almost half as long as second segment, narrow and acutely pointed; fore femora incrassated, coxae almost half its length, trochanter very narrow and constricted; legs longly pilose; pronotal lateral longitudinal carinations anteriorly terminating at the anterolateral tubercle, posteriorly terminating subapically; anterior lobe with posterior median narrow sulcation and lateral area with three incomplete shallow sulci marked with long bristles throughout their length; posterior lobe almost half as long as anterior lobe, transversely elongate with lateral prominence and shallow sulcus; connexivum spotted with ochraceous above and beneath; apex of scutellum slightly reflexed as an obscure tubercle.

Previous Record: Ceylon (Green).

Present Record: Tamil Nadu: Siruvani (450).
Genus : PIRATES

Peirates, Serville, Ann. Sc. Nat. XXIII, P. 215 (1931); Laparte, Ess. PP. 6, 9 and 78 (1832); Pirates Burmister (Part) Handb. II, PP. 222 and 239 (1835); Amyot and Serville, Hem. P. 324 (1843); Stal, Ofv. Vet. Ak. Forh. P. 250 (1866); Stal, En. Hem. IV, P. 56 (1874);


Type : P. hybridus Scopoli, a Palaearctic species.

Distribution : Palaearctic, Ethiopian, Oriental and Australasian Regions.

This genus possesses all the general characters of Ectomocoris and is distinguished from it by the tibiarolium of each anterior tibia not occupying more than half its length.

Total number of species recorded by Distant from Orient ..... 11
Total number of species known from India ..... 10
Total number of species recorded earlier from Southern India ..... 1
Total number of species recorded for the first time from Southern India in the present account ..... 6
Total number of species described new to Science in the present account ..... 1

**Male:** (S.No. 67) Length 10 mm, width across the abdomen 3 mm; macropterous; elongately ovate; small in size; black; head, pronotum, scutellum, thoracic sternites, coxae, femora and genital segments and filamentar segments, black; hemelytra piceous, corium with a median longitudinal ochraceous fascia which is inwardly amplified and angulated and margined with black; a large discal spot to membrane and a small spot near base of clavus black; connexivum and venter of first three abdominal segments ochraceous, contiguous; antennae pilose, pedicel about as long as anterior lobe of pronotum; tibiae and first two antennal segments and rostral segment fuscous; third segment of the rostrum shorter than second; anteocular area triangular, declivent, much shorter than postocular area; frons smooth; ocellar prominence well formed and ocelli fuscous; anterior lobe of pronotum slightly longer than posterior lobe, foveations and carinations less significantly formed with tomentose hairs on the carinations; area in front of the carinations smooth; prominent tubercles confluent with lateral ridge present; posterior lobe medially slightly convex; lateral prominences slightly marked without tubercles; scutellum slightly covex, scutellar tubercle obscure; anterior femora slightly incrassated and unarmed beneath; tibiaroliuni to anterior tibiae not occupying more than a third of its length.
Previous Record: Assam; Khasi and Naga Hills (Chennell). Ceylon (Green), Burma; Karennee, Katha, Metanga, Schwego, Myo (Fea) - Also recorded from Java, Philippines (Semper), Hong Kong (Bowring, Brit. Mus.).

Present Record: Tamil Nadu: Vadavalli (450), Bharathiar University (450) and Walayar (200).


Male: (S.No. 68) Length 11 mm, width across the abdomen 2.5 mm; macropterous; black, beneath with legs some what greyishly sericeous; pronotum bicolourous; posterior lobe of pronotum, scutellum, clavus, corium and posterolateral margins of prosternum cinnamon-brown; posterior inner area of corium black; membrane with two spots (one anterior and the other subapical) and a line on basal margin of membrane white; frons with white shining hairs; antennae pilose, pedicel as long as pronotum; pronotal anterior lobe with conspicuous carinations, and sulcations not extending into the anterior smooth area; carinations and posterior margin of posterior lobe hirsute; anterolateral angles of pronotum with nodule like recurved tubercles; epimeral lobe of pronotum prominently projecting forward; spots to connexivum above and beneath; apices of coxae and bases of intermediate and posterior femora luteous; apex of scutellum distinctly recurved; femora unarmed beneath, fore femora slightly
incrassated, hind femora much elongated and cylindrical; tibiarolium to anterior tibiae not occupying more than about a third of its length.

Previous Record: Sylhet, (Stockholm Mus.), Ceylon (Green).

Present Record: Tamil Nadu: Vadavalli (450) and Bharathiar University (450).

_Pirates lepturoides_ Wolff (Reduvius), _Ic. IV, P. 165, f. 159 (1804).
_Stal, Ofv. Vet-Ak. Forh. P. 262 (1866)._ 

Female: (S.No. 69) Length 12 mm, width across the abdomen 3 mm; macropterous; oblong; medium size; piceous-black; corium fuscous-brown, a small spot at inner angle near base of membrane and the membrane fuscous; connexivum above and beneath spotted with obscure ochraceous; anteocular area as long as postocular area; frons smooth; ocellar prominence distinct, ocelli fuscous; antennae pilose, scape basally ochraceous, distally fuscous, otherwise unicolourous; pedicel about as long as anterior pronotal lobe, which is centrally longitudinally linearly impressed; third rostral segment much shorter than second; foveations and carinations of anterior lobe of pronotum insignificantly formed; longitudinal median groove distinct, carinations with short tomentose hairs, sulcations in between smooth; posterior lobe with obscure median sulcation; posterior margin slightly convex, lateral prominence well formed; scutellar tubercle insignificantly rounded and porrect; anterior femora incrassated and unarmed beneath, tibiarolium to anterior tibiae occupying a little more than a third part of its length.
Previous Record: Bombay; Khandala (Dixon). Ceylon (Green). Burma; Bhamo, Katha (Fea) - Also recorded from Java and Borneo.

Present Record: Tamil Nadu: Vadavalli (450).

**Pirates punctum** Fabricius, (Reduvius) *Ent. Syst.* IV. P. 203 (1794); Fabricius, (Reduvius) *Syst. Rhyng.* P. 277 (1803); **Pirates instabilis** Walker, *Cat. Het.* VII, P. 118 (1873).

Male: (S.No. 70) Length 15 mm, width across the abdomen 4 mm; macropterous; oblong; greyish ochraceous; head, antennae, rostrum, pronotum connexivum above and beneath, lateral margins of sternum and legs ochraceous; eyes and area bordering the ocelli black; membrane, base of corium and clavus, apex of the corium, clavus, and scutellum fuscous; scutellar spine present in the form of porrect short ochraceous tubercle; antennae pilose, apices fuscous, pedicel as long as pronotum; median frontal groove fairly deep, confluent with the interocular transverse fissure; lateral margins of the pronotal anterior lobe light brown; anterolateral angles tuberculate, anterior lobe more elongately cylindrical than the posterior lobe, both separated by a posteriorly curved transverse fissure; median longitudinal fissure extending from the middle of the anterior lobe to the posterior lobe and terminating subapically; posterolateral angles of the posterior lobe minutely tuberculate and dorsally tomentose; tibiolarium to anterior tibia occupying not more than a third of its length; anterior femora incrassated and minutely tuberculous spinous beneath.
Previous Record: North Bengal (Compbell, Brit. Mus.).

Present Record: Tamil Nadu: Maruthamalai (500).

Pirates affinis Serville, (Pirates), Ann. Sc. Nat. XXIII, P. 216 (1831);
Amyot and Serville, (Lestomerus), Hem. P. 323 (1843); Distant, A.M.N.H.
(7) X, P. 284 (1902); Lestomerus affinis Var. Walker, Cat. Het. VII,
P. 91 (1873); Lestomerus piceipennis Walker, Tom. Cit. P. 92; Var.
Lestomerus diffinis Walker, Loc. Cit., Pirates walker Lethierry and

Male: (S.No. 71) Length 21 mm, breadth across the abdomen
5.5 mm; macropterous; piceous black; pronotum and scutellum shining
olivaceous; head triangular; eyes very large, closely approximating each
other ventrally; anteocular area slightly longer than postocular area;
ocelli large reddish brown, ocellar prominence globose, medially grooved
in between; interocular fissure deep; antennae pilose; arising sub-dorsally
in front of the eyes, pedicel more than twice as long as scape; second
rostral segment as long as first and third segments together; collar
narrow; anterolateral angles of pronotum tuberculous, anterior margin
of the pronotum longly pilose; anterior lobe slightly longer than the
transversely elongate posterior lobe, marginally slightly globose; dorsally
rugulose transversely and longly pilose; scutellum broadly triangular,
scutellar tubercle obscure, porrect; corium opaque with griseous hairs,
clavus and membrane translucent, piceous; membrane passing the abdomen;
fore and mid femora with tuberculate spine; mid ventrally, the fore
femora with two rows of tubercles, the basal tubercles of the inner row robust; tibiarolium of fore and mid tibiae not exceeding 1/3 of their length; females apterous.

Previous Record: Assam; Khasi Hills (Chennell). Bombay (Leith). Burma; Rangoon, Teinzo, Bhamo (Fea) - also recorded from the Malay Peninsula, Cochin, China, Java and some other islands of the Malayan Archipelago.

Present Record: Tamil Nadu; Anakatti (500), Alagar Kovil (350), Karaiyar (250), Sattanur Dam (150), Vandavasi (75), Vandalur (50), Periakalandai (350), Tambaram (50), Walayar (200), Madukkarai (300), Aliyar (300), Malumichampatti (300) and Sulur (400). Karnataka: Talacauvery (1200).

Genus: SIRTHENEAE


Type: S. carinata Fabricius, a Nearctic species.

Distribution: Nearctic, Neotropical, Ethiopian and Oriental Regions.

Head long, subporrect, anteocular area very much the longest; antennae inserted remotely from eyes; rostrum with the third joint slender and longer than first joint, second at least twice the length of first;
pronotum with the apex distinctly sinuate, anterior angles not tuberculate, rounded or subprominent; mesosternum carinate; intermediate tibiae without a tibiarolium.

Total number of species recorded by Distant from Orient ..... 1
Total number of species known from India ..... 1
Total number of species recorded earlier from Southern India ..... Nil
Total number of species recorded for the first time from Southern India in the present account ..... 2
Total number of species described new to Science in the present account ..... 1


**Male:** (S.No. 72) Length 20 mm, width across the abdomen 4 mm; macropterous; larger in size; very elongate; black; head, anterior lobe of pronotum and disk of abdomen beneath pale castaneous; scape, base of pedicel and filament, base and apex of membrane, rostrum, legs, spots to connexivum above and beneath and a large apical spot to abdomen luteous; a longitudinal brown band reaching from the eye to the base of the rostrum running beneath the antennal segment testaceous; second and third antennal segments luteous; second segment of rostrum almost reaching the entire length of head, first segment almost one third as
as long as the second, third segment very slender acutely pointed, half as long as second segment; pronotum without any tubercle, anterior border fuscous, confluent with a prominent stripe on either side of middle line along sulcation and laterally an oblique sulcation reaching the posterior margin starting lateral and behind a small incomplete triangular sulcation; pronotum ventrolaterally fuscous; posterior lobe of pronotum transversely elongate, obliquely narrowing posteriorly, with lateral prominence, almost 1/3 as long as the anterior lobe; a median fuscous sulcation at the posterior end of anterior lobe; posterior lobe completely fuscous throughout, ventrolaterally confluent with the colouration of anterior lobe; scutellum fuscous, acutely pointed without tubercle, fore tibiarolium extending beyond the length of first tarsomere and not exceeding 1/2 the length of tibia; fore coxae ochraceous, much elongate, almost as long as the femora and ventrally pilose.

Previous Record: Assam; Naga Hills (Doherty). Ceylon (Green), Java, Borneo, Philippines. China; Hong Kong, Amoy (Brit. Mus.), Japan (Lewis), Formosa (Brit. Mus.).

Present Record: Tamil Nadu: Vadavalli (450),

Genus: CATAMIARUS


Type: C. brevipennis Serville

Distribution: Oriental and Ethiopian Regions.
Body broad, robust; pronotum tuberculously granulate, the granulations on anterior lobe being in longitudinal series on disk and in oblique series on lateral areas; head with the anteocular area considerably longer than the postocular area, more or less transversely impressed behind eyes; antennae pilose, first and second joints moderately robust; rostrum stout, second joint much longer than first; pronotum with the anterior angles tuberculously prominently, transversely constricted at about one third from base, lateral angles sub prominent, lateral margins of the abdomen dilated; apex of scutellum robustly elongated; each anterior tibia provided apically with a tibiarolium, which is not much more than a third of its length.

Total number of species recorded by Distant from Orient ..... 1
Total number of species known from India ..... ..... 1
Total number of species recorded earlier from Southern India ..... 1
Total number of species recorded for the first time from Southern India in the present account ..... ..... Nil
Total number of species described new to Science in the present account ..... ..... Nil


Female: (S.No. 74) Length 27 mm, width across the abdomen 11 mm; brachypterous; black; a large somewhat rounded spot to corium adjoining apex of clavus and a very large transverse discal spot to membrane
ochraceous; head declivent with hirsute lateral margins; anteocular area acutely pointed, as long as postocular area; eyes brownish yellow; ocelli reddish brown, ocellar prominence distinct; frontal fissure prominent, bifurcating at the base of clypeus covered with hirsute hairs; lateral areas of gula globose; a distinct tubercular process present on either side of the anterior margin of the collar; antennae pilose, scape about as long as from its insertion to the base of head, pedicel as long as the anterior lobe of pronotum; rostrum unicolourous; third segment much shorter than second; pronotal anterior lobe longitudinally striated, striations with rows of minute tubercles; posterior lobe finely tuberculate all over the surface, anterolateral tubercles of pronotum robust and apically recurved, elongately pilose confluent with posteriorly running ridge; scutellum posteriorly slightly tuberculate; membrane apically piceous; legs and margins of body longly pilose or hirsute; fore femora incrassated, with two rows of less prominent tubercles.

Previous Record: Hardwar (Wood-Mason), Cutch (Ind. Mus.). Madras (Coll. Dist), Mysore (Ind. Mus.), Bangalore (Cameron).

Present Record: Tamil Nadu: Aramboli (50), Natayaneri (300), Malayalapatti (250), Melivsharam (200), Maruthuvamalai (50), Karaiyar (250), Watrap (350), Vandavasi (75), Tiruttani (150), Sathuvachari (200), Periakalandai (350), Madukkarai (300), Vadavalli (450), Anakatti (500), Aliyar (300), Malumichampatti (300), Kovaipudur (400), Maruthamalai (500), Bharathiar University (450) and Chandrapuram (350).

Karnataka: Mysore (Chamundi Hills) (950).
NEW DESCRIPTIONS

Ectomocoris nigrochripes sp.nov. (Fig. 38)

Female: Length 17 mm, width across the abdomen 6 mm; micropterous; elongately ovate; anteocular area porrect to declivent; first antennal segment slightly curved inward, basally, and slightly incrassated; terminal antennal segment light brownish, rest stramineous; pronotal anterolateral margin with nodulose tubercles; the area of the head beneath the eyes prominently globose; pronotal foveations, and carinations faintly marked, pro-epimeron on either side of the prosternal groove prominently projecting; the transverse constriction between anterior and posterior lobe of pronotum very deep, anterior lobe oblong slightly convex outward; posterior lobe not more than one and fourth in length of the anterior lobe; scutellar spine in the form of tubercle almost porrect; hemelytra rudimentary not exceeding first abdominal segment, yellowish white; corium brownish ochraceous, its inner basal angle with base of the hemelytra piceous; the claval vein meet the cross vein from the subapical area of the corium enclosing a triangular cell; connexivum vertically deflected upward, broad, unicolourous, fuscous; legs throughout ochraceous fore and mid femora incrassated, third femora elongate tibiarolium of fore and mid tibia protruding as triangular extension far beyond the tip of the tibia.

Type Information:

Holotype Female Serial No. 58 Paratypes many all pinned specimens deposited for the present in the reduviid collection of the Division of Entomology, Bharathiar University, Coimbatore India.
Collection Information:

_Holotype_ collected from underneath stone in Mathukkarai, Coimbatore District, Tamil Nadu on 02-09-1983 at elevation 300 MSL, temperature 27°C and humidity 74%. _Paratypes_ several, all collected from different locations of Tamil Nadu on different dates, elevations, temperatures and humidities.

_Ectomocoris tuberculatum_ sp.nov. (Fig. 39).

_Male:_ Length 18 mm, width across the abdomen 3 mm; macropterous; elongate; head elongately ovate; piceous; smooth; head, pronotum, scutellum, abdomen dorsally and ventrally, thorax ventrally and membrane piceous; eyes black, globose, placed vertically upward; ocelli reddish brown, separated by a broad interocellar furrow; scape and pedicel, first two segments of the rostrum, clavus, basal half of corium and base of the membrane ochraceous; both filamentar segments of antennae pale fuscous; scape having a brown basal ring, not exceeding the length of preocular area; third segment of the rostrum pale fuscous, much shorter than second, almost as long as the first segment, second rostral segment slightly incrassated, almost as long as the scape; ocellar prominence extending laterally beyond the level of the eyes; pronotal anterior lobe almost double the length of the posterior lobe; anterolateral tubercle porrectly produced; carinations and sulcations of the anterior lobe faintly differentiated; smooth with a median longitudinal shallow fissure throughout the length and extending up to the anterior half of the posterior lobe; the epimeral lobe of the prothorax globose, prominently projecting on either side of the
FIG. 39 ECTOMOCORIS TUBERCULATUM SP. NOV.
FIG. 40 PIRATES UNIPUNCTATUS SP. NOV.
Pirates unipunctatus sp.nov. (Fig. 40).

Male: Length 12 mm, width across the abdomen 4 mm; macropterous; elongate; head elongately ovate; fuscous with reddish tinge; testaceous; eyes black, globose; ocelli reddish brown, ocellar prominence moderately formed; anteocular and postocular areas almost equal; second segment of rostrum ochraceous, third segment fuscous and basal segment pale fuscous; antennae pale fuscous, pedicel more than double the length of slightly incrassated scape; filamentar segment and the scape almost equal in length; scape almost as long as the anteocular area as well as the second rostral segment; pronotum unicoulourous; dorsally densely clothed with tomentose hairs; discal prominence moderately developed; posterior lobe slightly convex, posterolateral margin elevated; the transverse fissure between anterior and posterior lobes moderately deep and dark, expanded towards the exterior; carinations and sulcations of anterior lobe most obscure, densely clothed with white tomentose hairs; anterolateral tubercles obscure; apimal prominence of the prothorax globose and porrectly produced in front of the pronotum; scutellum broadly triangular with marginal carinations and central foveation, scutellar spine moderately developed, porrect, fuscous; clavus and inner margin of the corium yellowish white with a tinge of red; entire corium exclusively clothed with tomentose hairs; thorax and abdomen unicoulourous, fuscous, clothed with tomentose hairs; legs unicoulourous, ochraceous; fore femora incrassated with median ventral longitudinal dark serrated carina; tibiarolium of the fore leg not exceeding ¾ of the tibiae but anteriorly the lobe reaching upto the middle of the second tarsomere.
This species resembles *Pirates punctum* in having similar spotted hemelytra, carinated, serrated fore femora and in the general clothing of the body by tomentose hairs. But this could be readily recognised from *P. punctum* by its smallness in size, colouration of the head, pronotum and abdomen (*Fuscous with reddish tinge*), slightly incrassated nature of the scape, the more numerous tuberculate spines of the fore femora, more elongate second rostral segment and by the largeness in the size of the black eyes.

Female: Also macropterous.

**Type Information:**

**Holotype:** Male Serial No. 66, pinned specimen deposited at present in the reduviid collection of the Division of Entomology, Bharathiar University, Coimbatore, India.

**Collection Information:**

Holotype collected by light trap in an agro ecosystem in Vadavalli, Coimbatore District, Tamil Nadu, on 01-04-1985 at 7.50 P.M. and at elevation 500 MSL, temperature 28°C and humidity 70%, *Paratypes* several collected from the same location on different dates.

*Sirthenea nigripes* sp.nov. (Fig. 41)

**Male:** Macropterous; elongate, length 18 mm, width across the pronotum 4 mm and across the abdomen 3 mm; piceous; legs pale fuscous, anterior lobe of the pronotum, dorsal and ventral surface of the head, first two rostral segments and scape fuscous; a longitudinal dark streak extending
from beneath the antennal socket up to the base of the articulation of the rostrum conspicuous; entire sternum, scutellum, posterior lobe of pronotum, major part of the corium and membrane piceous.

Head elongate, anteocular area more than twice as long as the postocular area; antennal socket more dorsally located far removed from the eyes; frons, clypeus, lorum etc. setaceous; ocelli wide apart, reddish brown, encircled by piceous ring, ocellar prominence smooth; collar short and narrow; scape slightly incrassated, very short, almost half as long as the pedicel and not exceeding the anterior limit of the clypeal prominence; second segment of the rostrum almost four times as long as the first segment and almost twice as long as the very slender, acutely pointed third segment.

Anterior lobe of the pronotum almost twice as long as the posterior lobe; the sulcations include one on either side of the median longitudinal fissure, another oblique one outer to it, extending almost up to the posterior limit of the anterior lobe and a short more shallow one in between these two, anteriorly the sulcations expand, being lined by fine setae; anterolateral tubercles obscure; posterior lobe with discal prominences demarcated on either side of the median longitudinal furrow; the transverse fissure delineating the two lobes fairly deep; scutellum piceous, acutely pointed posteriorly, laterally compressed and dorsally flattened; hemelytra with an ochraceous spot at the distal end of the clavus confluent with the similar spot on the corium; both corium and clavus basally ochraceous; the membrane basally piceous, apically ochraceous and translucent; legs concolourous, femora only slightly longer than the coxae, both laterally compressed forming a ventral setaceous keel,
FIG. 41 SIRTHENEA NIGRIPIES SP. NOV.
fore tibiae almost as long as the femora; tibiarolium more apically differentiated, anteriorly extending up to the tip of the first tarsomere; mid and hind tibiae without any trace of a pad, mesosternal carination prominent, metasternum foveated at the posterior margin.

Abdomen with ochraceous spots on the connexivum, mid ventral keel of the abdominal segments brownish ochraceous except at the pregenital and genital segments; first abdominal sternite ochraceous throughout.

This species closely resembles *Sirthenea flavipes* in the pattern of the formation of carinations and sulcations of the anterior lobe of pronotum and other characters of the head and segments of the appendages. But it can be readily recognised from *S. flavipes* by its smallness in size and by the colouration of the corium, clavus and the sulcations of the anterior lobe of pronotum (black in *S. flavipes* and fuscous concolourous with the rest of the anterior lobe of the pronotum in *S. nigripes* sp.nov) legs in the former ochraceous and in the latter pale fuscous.

**Type Information:**

*Holotype:* Male Serial No. 73, pinned specimen deposited for the present in the reduviid collection of the Division of Entomology, Bharathiar University, Coimbatore, India.

**Collection Information:**

Single specimen collected in light trap at Sunabeda, Koraput District, Orissa on 19-06-1987 at elevation 950 MSL, temperature 25°C, humidity 70%.
KEY TO THE SOUTH INDIAN GENERA OF PIRATINAE STAL

1. Pronotum coarsely granulate or warty; brachypterous; pronotal anterior angles robustly tuberculate ....

........ Catamiarus Amyot and Serville

Pronotal anterior lobe with carinations and sulcations, either extending more than ½ or even ¾ of the entire pronotum; alate, brachypterous or apterous; tibiarolium present either in the fore and mid tibiae or the fore tibiae alone; anteocular area short or more elongately produced ...... ...... ...... ...... 2

2. Fore tibiae alone with tibiarolium; anteocular area more elongately produced; macropterous ...... Sirthenea Spinola

Anteocular and postocular areas variable in length; anterior lobe of pronotum almost as long as, even much longer than the posterior lobe; tibiarolium on fore and mid tibiae either more than half or less half than the length of each tibia ...... ...... ...... ...... 3

3. Anterior lobe of the pronotum much more than half its entire length; tibiarolium of the fore and mid tibiae extending more than half the length of tibiae; micropterous; brachypterous or macropterous ...... Ectomocoris Mayr
4. Anterior lobe of pronotum almost half its entire length; tibirolium on both fore and mid tibiae not extending more than half the length of tibiae; macropterous or only males alate and the females apterous ....

...... Pirates Serville
KEY TO THE IDENTIFICATION OF SPECIES OF THE GENUS ECTOMOCORIS

MAYR OF SOUTHERN INDIA

1. Pronotum bicolourous; alate, ventral carina of fore femora setaceous but nontuberculate; hemelytra three spotted connexivum unbanded .... .... E. quadriguttatus Fabricius

Pronotum concolourous, alate or brachypterous, ventral carina of fore femora setaceous or tuberculate, hemelytra when present one or two spotted, connexivum banded or unbanded ...... ...... ...... ...... ...... 2

2. Macropterous, hemelytra spotted basally, fore femoral ventral carination both setaceous and tuberculate, connexivum unbanded .... ... E. tuberculatum sp. nov.

Macropterous or brachypterous, hemelytra single or two spotted; connexivum banded or unbanded ...... ...... ...... 3

3. Brachypterous, connexivum unbanded ...... ...... ... 4

Macropterous, connexivum banded .... .... .... ... 5

4. Wing pad concolourous, legs concolourous, ochraceous .... .... E. nigrochripes sp. nov.

Wing pad bicolourous, basally ochraceous, apically piceous; legs fuscous ...... ...... ...... E. tibialis Distant
5. Legs piceous; hemelytra two spotted, but membrane apically not spotted, large size ..... ..... ..... E. horridus Kirby

Legs ochraceous; hemelytra single or two spotted, medium size, membrane apically spotted or unspotted ..... ..... 6

6. Hemelytra single spotted, membrane concolourous, piceous, connexivum spotted, small size .... E. cordiger Stal

Hemelytra two spotted, membrane apically spotted, connexivum broadly spotted as fascia dorsally and ventrally ..... ..... ..... ..... ..... 7

7. Hemelytra passing abdomen, fore femora ochraceous ..... ..... E. cordatus Wolff

Hemelytra not passing the seventh abdominal tergite, fore femora fuscous ..... ..... ..... ..... E. gangeticus Bergroth
KEY TO THE IDENTIFICATION OF THE SOUTH INDIAN SPECIES
OF PIRATES STAL

1. Pronotum bicolourous, membrane spotted, fore and mid
femora nontuberculate, mid and hind femora basally
banded white ....  ....  ....  ....  P. quadrinotatus Fabricius

Pronotum concolourous, ochraceous or piceous; membrane
spotted or not spotted, legs concolourous, fuscous or
ochraceous; fore and mid femora tuberculate or
nontuberculate ....  ....  ....  ....  ....  ....  2

2. Brownish ochraceous or piceous; fore and mid femora or
fore femora alone tuberculate; corium and clavus spotted
or unspotted ....  ....  ....  ....  ....  ....  ....  3

Piceous or rufescent, fore and mid femora nontuberculate,
membrane spotted piceous or not spotted, corium and clavus
spotted or concolourous ....  ....  ....  ....  ....  ....  4

3. Piceous; both fore and mid femora strongly tuberculate,
corium and clavus unspotted, large size, males alate and
females apterous ....  ....  ....  ....  P. affinis Serville

Brownish ochraceous, fore femora alone with a few tubercles,
corium and clavus spotted ....  ....  ....  P. punctum Fabricius
4. Rufescent clavus and corium spotted, anterior lobe of pronotum without carinations and sulcations ....

        .....  P. unipunctatus  sp. nov.

Piceous; clavus and corium concolourous; pronotum with carinations and sulcations ..... .....  ....  ....  5

5. Membrane spotted with black, connexivum unbanded ....

        .....  P. atromaculatus  Stal

Membrane unspotted, connexivum banded ..... .....  ....  ....  5

        .....  P. lepturoides  Wolff