This small subfamily is easily recognised by the following features:- pronotum invariably smooth or granulate, head longitudinally elongate; scutellum neither tuberculate nor spinous; always alate.

The subfamily Triatominae, represented by a single species of *Triatoma* and two species of *Linshcosteus* in the present account is the only haematophagous reduviid subfamily found in this region. Distant (1904) described *Triatoma* as the genus *Conorhinus* under the subfamily Acanthaspidae. Nymphal camouflaging that commonly occurs in Acanthaspidae and Salyavatinae has also been reported in several species of *Triatoma* by Zeledan et. al (1973) as well as in the present investigation. Morphologically, the adults differ markedly from all species of Acanthaspidae, but their eggs closely resemble those of most species of Acanthaspidae. Both *Triatoma* and *Linshcosteus* lack a specialised tibiarolium and that is considered here as a specialised feature for haematophagy since their warm blooded animal hosts are enormous in size.

In the revision of the subfamilies of Reduviidae China and Miller (1959) considered Triatominae as a distinct subfamily and subsequently most workers followed the same taxonomic qualification. In the present account also the three species have been described under Triatominae, having close relationship with the Acanthaspidae. The genus *Conorhinus* was erected earlier by Laporte in 1832 with the description of the type species *C. rubrofasciata* de Geer and placed under Acanthaspidae (Distant, 1904).
Genus: TRIATOMA


Type: T. rubrofasciata de Geer

Distribution: Nearctic, Neotropical and Oriental Regions, China and Madagascar.

Head long, porrect, more or less distinctly impressed behind eyes; rostrum with the first joint very much shorter than second; antennae inserted on the sides of the head, about midway between eyes and apex; ocelli placed very far apart prosternum broadly sulcated; abdomen strongly apliated, not centrally carinate, frequently with the disk prominently flattened; posterior tibiae longer than the femora.

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
Triatoma rubrofasciata de Geer (Cimex), Mem. Ill, P. 349, Pl. XXXV, f. 12 (1773); Amyot and Serville, Hem. P. 384, Pl. VIII, f. 2 (1843); Stal, Hem. Fabr. P. 123 (1868); Champion, Biol. Centr. Amer., Rhynch. II, P. 208, tab. XII, f. 22 (1899); Stal, Pun. f. 85.

Female : (S.No. 75) Length 24 mm, width across the abdomen 7 mm; macropterous; body elongate; piceous-brown; basal margin of head, anterior angles and anterior and lateral margins of pronotum, nearly apical half of scutellum, a basal oblique, linear streak and a subapical discal spot to corium, connexivum and tarsi ochraceous; connexivum above and beneath spotted with piceous; the spots not quite reaching lateral margins; antennae finely pilose, first and second joints piceous, filament pale ochraceous; scape not quite reaching apex of head pedicel about three times as long as scape; second segment of the rostrum almost reaching the posterior margin of the head and twice as long as the first segment; eyes transverse, dorsally wide apart, ventrally both almost approximate; head distinctly finely granulate; pronotum coarsely granulate, anterior angles somewhat longly tuberculously prominent, transversely impressed before middle; anterior lobe subglobose, with median longitudinal groove and small tubercular prominence on either side, posteriorly a oblique longitudinal carination on either side of the median groove connects the anterior and posterior lobes; membrane fuscous, not reaching the apex of the abdomen; scutellum apically pointed but not spinous; disk of abdomen beneath distinctly flattened.

Previous Record : Sylhet (Stockholm Mus.), Bombay (Leith); Bor Ghat (Dixon), Calcutta and Mysore (Ind. Mus.); Ceylon (Green); Andaman Islands (Ind. Mus.); Burma; Toungoom Mandalay (Fea) - Widely distributed throughout
the Malay Peninsula and Malayan Archipelago; recorded from Madagascar; West Africa (Coll. Distant); and generally found in the Southern Nearctic and Northern Neotropical Regions and in the Antilles. Nocturnal; usually found in the houses in the Bor Ghat (R.M. Dixon).

Present Record: Tamil Nadu: Kanjanur (100); Kumbakonam (100) and Bharathiar University (450); Kerala: Calicut.

**Genus**: LINSHCOSTEUS

**Linshcosteus** Distant, *Fauna of British India including Ceylon and Burma Rhynchota (Heteropetra)*, Vol. II, P. 287 (1904).

**Type**: *L. carnifex* Distant

**Distribution**: Northern Districts of India.

Head cylindric, porrect, very long, as long as pronotum and scutellum together, sinuately constricted behind eyes; anteocular area more than three times as long as postocular area; antennae inserted much nearer to apex than to eyes, at about one-third from apex of anteocular area, the first joint not nearly reaching apex of head, second joint as long as anteocular area of head; antenniferous tubercles laterally prominent; rostrum depressed to head, reaching eyes, first joint short, second very long; pronotum somewhat short, subtriangular, constricted before middle, posterior lateral angles obtusely prominent; body broad, flattened, lateral abdominal margins much dilated; membrane large, about reaching apex of abdomen; scutellum short, broad, apex produced in a somewhat long lateral tuberculous spine; disk of abdomen beneath flattened; legs unarmed, femora not incrassated.
Total number of species recorded by Distant from Orient ... ... 1
Total number of species known from India ... ... ... ... 3
Total number of species recorded earlier from Southern India ... 2
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

The genus Linshcosteus Distant resembles Rhodnius Stal, Belminus Stal; Erathyrus Stal, Triatoma Laporte and Eratyrus Usinger in general shape of the body and elongated condition of the head with the antennae arising nearer its apex rather than close to the eyes. But this genus could be readily differentiated from all these other genera by its relatively shorter rostrum that does not reach the stridulatory furrow and for that reason the rostrum has been considered as one of the main diagnostic feature of the three known species (Ghauri, 1976).

The genus Linshcosteus was erected by Distant with the type species L. carnifex. Though both Triatoma and Linshcosteus are known to be haematophagous their vector role in India has not been conclusively established. Lent (1951) recorded two more species of Triatoma, namely, T. migrans Breddin and T. bouvieri Larrousse from the Orient.

In his description of three Indian species of Linshcosteus, Ghauri (1976) observed that Linshcosteus is the only genus of Triatominae to be found exclusively outside the Neotropical and Nearctic regions and it is reported to be confined to South India alone, despite its record by Distant (1904) from 'Northern District of India'. Ghauri commented...
that Distant's description was based on a single female specimen that remained mixed up with the collections made from various localities in Northern India and therefore, could have led him to recording of wrong locality for this genus. All three species of *Linshcosteus*, namely, *L. carnifex* Distant, *L. confumus* Ghauri, and *L. costalis* Ghauri originated from Bangalore. In the present account *L. confumus* and *L. costalis* alone have been included since *L. carnifex* is not found in this region.

*L. confumus* Ghauri

(S.No. 76 a)

Male : / Length 19 mm, width across the abdomen 7 mm, dark brown, membrane brownish ochraceous, veins ochraceous; head finely granulate, slender, almost as the scape and pedicel combined; anteocular area almost twice as long as the postocular area, anteocular area in front of the antennal socket slender, almost half as long as the post antennal region of the same; loral lobes on either side of the anteclypeus obscure; scape slightly incrassated, not reaching the apex of the head, pedicel almost as long as the area of the head in front of the transverse fissure behind the eyes; rostrum straight, first segment almost reaching the antennal socket, second segment longest, almost reaching the anterior margin of the eyes, third segment shortest, brownish ochraceous, acutely pointed, not reaching the anterior margin of the obscurely developed prosternal stridulatory furrow; ocelli wide apart, obscure, far removed behind the eyes; transverse fissure far behind the eyes; pronotum and scutellum finely granulate; pronotal anterior lobe with a median and lateral fissures; anterolateral angles minutely tuberculate; carination on either side of the median foveation terminating at the transverse fissure between the two lobes; posterior lobe rectangular, laterally raised, posteriorly emarginate; scutellum triangular
scutellar spine porrectly produced; connexivum marginally and inter segmentally ochraceous; abdomen subspherical membrane not reaching the tip but almost covering the abdomen up to the connexivum; femora and tibiae unicolourous, piceous; tarsomeres ochraceous.

Previous Record: Bangalore (British Museum).

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

L. costalis Ghauri

(S.No. 76 b)

Male: / Length 21 mm, width across the abdomen 9 mm; dark brown; oblong; head coarsely granulate, slender, elongate almost as long as the fore femora; anteocular area slightly less than twice as long as the postocular area; antenniferous tubercles prominent; loral lobes conspicuously projecting on either side of the anteclypeus; transverse fissure of the head a little behind the posterior margin of the eyes; first segment of the rostrum not reaching the base of the antafossa; second segment not reaching the anterior margin of the eyes; ocelli wide apart, with conspicuous ocellar prominence of the vertex; collar narrow and short; pronotum and scutellum coarsely granulate, piceous; anterior lobe narrow, subglobose, rugulose with the median foveation deepening at the junction of the two lobes; carination on either side of the median foveation extending upto the middle of the posterior lobe; anterolateral angles of the anterior lobe with short acutely pointed tubercle; postero lateral angles of the posterior lobe rounded; scutellum medially foveated scutellar spine porrectly pointed; hemelytra not reaching the posterior limit of the abdomen; connexivum and part of the dorsum exposed.

Previous Record: Bangalore (British Museum).

Present Record: Tamil Nadu: Bharathiar University (450).
KEY TO THE SOUTH INDIAN GENERA OF TRIATOMINAE

1. Oblong; anteocular area in front of the eyes almost as long as the area behind; antennae laterally inserted, almost at the middle of the anteocular area in front of the eyes; rostrum reaching the prosternal furrow; loral lobes obscure; scutellar tubercles short

... ... Triatoma Laporte

2. Ovate; anteocular area in front of the eyes almost twice as long as the area posterior to it; antennae inserted almost 3/4 the distance of the anteocular area in front of the eyes; rostrum not reaching the prosternal furrow; loral lobes prominently porrectly projecting in front of the clypeus; scutellar spine acutely pointed

... ... ... Linshcosteus Distant
KEY TO THE TWO SPECIES OF LINSHCOSTEUS

1. First rostral segment reaching antafossa; second rostral segment reaching anterior margin of eyes; ocelli obscure; loral lobes obscure; hemelytra covering the abdomen almost up to the connexivum, anterolateral angles of the pronotum obscurely tuberculate, head pronotum and scutellum finely granulate ......... L. confumus Ghauri

2. First rostral segment not reaching antafossa; second rostral segment not reaching anterior margin of eyes; ocelli prominent; loral lobes conspicuous; hemelytra not covering the lateral area of the abdomen; anterolateral angles of the pronotum acutely tuberculate; head, pronotum and scutellum coarsely granulate .... L. costalis Ghauri