

Taxonomic notes on Indian Encyrtidae (Hym.: Chalcidoidea). I

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Introduction

Taxonomy of the Indian Encyrtidae is at present in a confused state. Most of the recent contributions have almost exclusively been devoted to descriptions of new genera and species, and, except for the recent paper by Subba Rao (1976), no attempt has been made to clarify the systematic position of several species which were described earlier. A perusal of the literature on Indian Encyrtidae shows that there are several generic and specific synonyms, generic misplacements and misidentifications. The author has planned to publish a series of papers on the systematic position of Indian Encyrtidae. This paper is the first of this series. Since types of most of the species are not available to the author, the conclusions reached here are based on the (conspecific) material collected and on published descriptions. Species with inadequate descriptions will be taken up after the types are examined, which might take several years.

The present paper deals with 21 species belonging to several genera. One generic and seven specific synonyms, and nine new combinations are proposed. Further, material of some known species collected by the author is also included.

Wherever possible specimens of most of the species included in the present paper were sent to the following persons for deposition in the museums mentioned against their names, and these are indicated in the text using the abbreviations given below:

Dr. B. D. Burks and Dr. G. Gordh: U. S. National Museum, Washington (U.S.N.M.).
Dr. B. R. Subba Rao: British Museum (Natural History), London (B.M.N.H.).
Dr. V. A. Trjapitzin: Zoological Institute, Academy of Science, Leningrad (Z.I.A.S.L.).

The proposed changes are as follows:

Anagyrus mirzai Agarwal (= *Anagyrus delhiensis* Subba Rao and Raj, *Anagyrus gunturiensis* Shafee et al.; *syn. nov.*).

Arrhenophagus chionaspidis Aurivillius (= *Arrhenophagus diaspidiatus* Agarwal; *syn. nov.*).

Charitopus apicatus (Mani & Saraswat), *comb. nov.* from *Tetralophidea*.

C. panchgania (Mani & Saraswat), *comb. nov.* from *Diversicornia*.

Encyrtus lecaniorum (Mayr) (= *Encyrtus ceroplastis* Agarwal; *syn. nov.*).

Gyranusoidea ceroplastis (Agarwal), *comb. nov.* from *Ericydnus* (= *Gyranusoidea pallida* Alam; *syn. nov.*).

Leiocyrtus aphidivorus Shafee et al. probably belongs to *Aphidencyrtus*.

Mayrencyrtus Hincks (= *Cheilonicetus* Shafee et al.; *syn. nov.*).

M. daulai (Shafee et al.), *comb. nov.* from *Cheilonicetus*.

M. fusiscapus (Agarwal), *comb. nov.* from *Cheiloneurus*.

Monstranusia antennata (Narayanan), *comb. nov.* from *Cerapterocerus*.

Neocladia indica (Agarwal), *comb. nov.* from *Hexacladia*.

Parablastothrix indica (Mani & Saraswat), *comb. nov.* from *Tetralophidea* (= *P. indicus* Shafee *et al.*; *syn. nov.*).

Tetracnemus deccanensis (Mani & Kaul), *comb. nov.* from *Masia*. (Next available name for *T. indicus* (Mani & Kaul), preoccupied by *T. indicus* Ayyar.)

T. heterocornis Mani & Saraswat erroneously transferred to *Arhopoideus* by Subba Rao, 1976.

Xiphomastix poonensis (Mani & Kaul), *comb. nov.* from *Pseudleptomastix*.

Anagyrus alami Hayat

Anagyrus alami Hayat, 1970: 112. ♀.

FURTHER MATERIAL EXAMINED: INDIA: Karnataka, Gulbarga, 21.xi.1967, 1 ♀ (215 M), ex *Nipaecoccus* sp. † on *Acacia* sp. (M. Hayat). The specimen deposited in the U.S.N.M.

Anagyrus mirzai Agarwal

(Figs. 1–3)

Anagyrus mirzai Agarwal, 1965: pp. 43, 46–48, ♂ ♀; Shafee *et al.*, 1975: 11, 20, ♂ ♀.

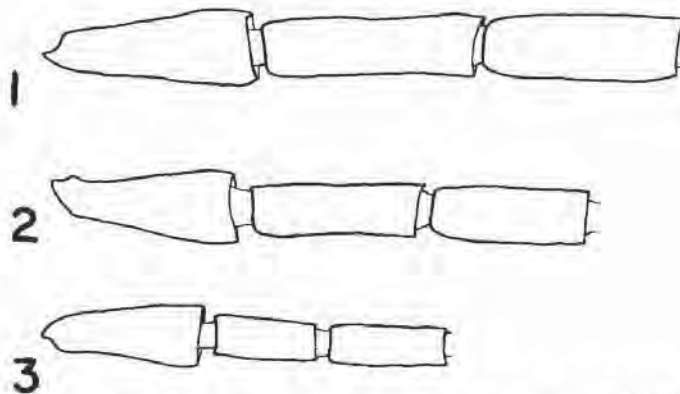
Anagyrus delhiensis Subba Rao & Rai, 1970: pp. 86, 89–91, ♀, *syn. nov.*

Anagyrus gunturiensis Sh., Al. and Ag., 1975: pp. 11, 15, ♀, *syn. nov.*

The name *Anagyrus mirzai* was used first as a *nomen nudum* by Man Mohan (= Agarwal) & Alam (1959).

A. delhiensis: The agreement between this species and *mirzai* is complete. The author failed to find a single character to separate these two species.

A. gunturiensis: Initially the author considered this species (described from a single female, holotype) as distinct; but examination of a large series of specimens revealed that the relative lengths of the pedicel and F1 depend more or less on the size of the specimens. In larger specimens the F1 is from as long to slightly longer than the pedicel; in smaller specimens F1 tends to be shorter to much shorter than the pedicel (figs. 1–3). Incidentally, comparative lengths of the marginal and stigmal veins given for *mirzai* in the key to species by Shafee *et al.* (1975) do not agree with their fig. 23 of the same, and hardly differ from that of *gunturiensis* (Shafee *et al.*, 1975: fig. 15).



FIGS. 1–3. *Anagyrus mirzai* Agarwal, ♀: (1) Antennal pedicel, F1 and F2 (11 M); (2) the same (309 MA); (3) the same (294 M).

† Unless mentioned otherwise, the host insects were determined by Mr. S. M. Ali, Zoological Survey of India, Calcutta.

MATERIAL EXAMINED: INDIA: Andhra Pradesh, Nellore, 28.i.1967, 1 ♀ (21 MC), ex *Nipaecoccus* sp. on *Casuarina equisetifolia*; Chilkalarpeta, 20.i.1967, 2 ♀♀, 1 ♂ (11 M), ex *Nipaecoccus* sp. on *Tamarindus indica*; Tamil Nadu, Sri Rangam, 27.ii.1967, 4 ♀♀ (38 MC), ex *Nipaecoccus* sp.; Shencottah, 6.iii.1967, 11 ♀♀, 3 ♂♂ (51 MC), ex *Nipaecoccus* sp.; Himachal Pradesh, Mandi, 19.vi.1967, 6 ♀♀ (87 MA), ex *N. viridis* (Newstd.); Uttar Pradesh, Aligarh, 15.vii.1968, 5 ♀♀ (229 MA), ex *Rastrococcus iceryoides* (Green) on *Citrus* sp.; Aligarh, 16.iv.1970, 1 ♀ (NP70) swept over grasses; Shahjahanpur, 30.x.1969, 1 ♀ (380 MA), ex *Icerya formicarum* Newstd. on *Psidium guajava*; Haryana, Hissar, 13.ix.1968, 3 ♀♀ (294 M), ex *Nipaecoccus* sp. on *Morus alba*; Punjab, Nabha, 17.ix.1968, 10 ♀♀ (309 MA), rest of data as in the preceding. (*M. Hayat*).

5 ♀♀ (229 MA) in U.S.N.M., 6 ♀♀ (87 MA) in B.M.N.H.

Arrhenophagus chionaspidis Aurivillius

Arrhenophagus chionaspidis Aurivillius, 1888: p. 142, ♀; Annecke & Prinsloo, 1974: pp. 36–38, ♂ ♀; Shafee *et al.*, 1975: p. 106, ♀.

Arrhenophagus diaspidiatus Agarwal, 1963: pp. 394–397, ♀, *syn. nov.*

A. diaspidiatus: The differences between this species and *chionaspidis* given in the key to species by Agarwal (1963), in the light of Annecke & Prinsloo's studies (1974), fall within the range of variations to be expected in such a widely distributed species. His statement that the frontovertex is wider than the length of the gena in *diaspidiatus* applies to *chionaspidis* as well; and the dimensions of F1 ('first funicle segment oblique, scaly and eight times wider than long') refer to the ring segment and not to F1 (cf. Agarwal, 1963: fig. 2). Consequently, *diaspidiatus* is here sunk as a junior primary synonym of *chionaspidis*. The name *Arrhenophagous* [*sic*] *diaspidiatus* was used first as a *nomen nudum* by Man Mohan (= Agarwal) & Alam (1960).

The specimens studied by the author agree in all respects with the Ugandan specimens obtained from *Pinnaspis strachani* and referred to *chionaspidis* by Annecke & Prinsloo (1974).

MATERIAL EXAMINED: INDIA: Andhra Pradesh, Guntur, 24.i.1967, 9 ♀♀ (20 MC) ex *Pinnaspis strachani* (Cooley) (det. R. F. Wilkey) on *Murraya koenigi*, (*M. Hayat*); Karnataka, Gulbarga, 15.xi.1967, 18 ♀♀ (214 M) ex *Contigaspis* sp. (det. R. F. Wilkey), (*M. Hayat*).

3 ♀♀ (214 M) in U.S.N.M.

Cerapteroceroides sp.

The single specimen referred to *Cerapterocerus mirabilis* Westw. by Saraswat & Mukerjee (1975: pp. 48–49, ♀, fig. 8 A–G) belongs to the genus *Cerapteroceroides*, and appears to be closely related to *C. japonicus* (see Tachikawa, 1963: pp. 144–151, figs. 55, 56). This is the second record of the genus outside Japan, the first being that by Annecke (1971) from Pundotvoya, Sri Lanka.

Charitopus apicatus (Mani & Saraswat), comb. nov.

Tetralophidea apicata Mani and Saraswat, in Mani *et al.*, 1974: pp. 79–81, ♂.

The species *apicata* is misplaced in *Tetralophidea*. The three-dentate mandibles and the presence of parapsidal furrows on the mesoscutum refer it to *Charitopus*.

C. apicatus differs from *C. fulviventris* Foerster and *C. obscurus* (Erdős) by having F4 about a third shorter than F5, club longer than F5 and half of that of F2. It

is closely related to and is probably a senior synonym of *Diversicornia panchgania* (see below).

MATERIAL EXAMINED: INDIA: Rajasthan. Bikaner, Lalgarh Fort area, 26.x.1975, 1 ♂ (DRS. No. 934A) swept over grasses (*M. Hayat and party*).

Charitopus panchgania (Mani & Saraswat), comb. nov.

Diversicornia panchgania Mani & Saraswat, in Mani *et al.*, 1974: pp. 81–3, ♂.

Encyrtus lecaniorum (Mayr)

Encyrtus ceroplastis Agarwal, 1965: pp. 59–60, ♂, ♀, *syn. nov.*

This is a well-known species of Encyrtidae. Trjapitzin (1957) gave a detailed redescription of the species, and Tachikawa (1963) provided a bibliography. Graham (1969) while revising the European species gave a key to the species.

E. ceroplastis: From the description and the illustrations given by Agarwal (1965) *ceroplastis* is indistinguishable from *lecaniorum*. The agreement between Agarwal's species and the description given by Trjapitzin (1957) is complete. Also in the key to species given by Graham (1969) *ceroplastis* runs to *lecaniorum*.

Gyranusoidea ceroplastis (Agarwal), comb. nov.

Ericydnus ceroplastis Agarwal, 1965: pp. 73–75, ♀

Gyranusoidea pallida Alam, 1971: pp. 131–132, ♀, *syn. nov.*

Holotype female of *G. pallida* examined. The author has no doubt of its identity with *ceroplastis*.

Leiocyrtus aphidivorus Sh., Al., & Ag.

Leiocyrtus aphidivorus Shafee *et al.*, 1975: pp. 93–95, ♀.

The species was incorrectly placed in *Leiocyrtus*, a genus characterized by the fairly flattened thorax, the presence of a triangular expansion at the distal third of the submarginal vein, and absence of a postmarginal vein. It is best placed in *Aphidencyrtus*. This view is also supported by the host records. It is closely related to *A. qadrii* Alam, *A. acamas* Trjapitzin, and *A. annellicornis* Hoffer, but differs by the sharply three-dentate mandibles, the large antennal club (club longer than funicle), basal four funicle segments transverse, and strongly exerted ovipositor. As the species requires a new name in the genus *Aphidencyrtus* (Preoccupied by *A. aphidivorus* (Mayr), it has not been transferred to that genus and the matter of transfer and renaming of this species is left to its authors.

MATERIAL EXAMINED: INDIA: Uttar Pradesh, Aligarh, 5.i.1973, 2 ♀♀ (A91), ex *Hysteroneura setariae* (Thomas) on *Cynodon dactylon*, (*Shuja-Uddin*); 1970, 1 ♀ (NP70); 24.xi.1967, 1 ♀ (FC5A), (*M. Hayat*); Punjab, Jassowal, 3.ix.1968, 1 ♀ (287 M), ex *Longiunguis sacchari* Zehnt. (det. V. F. Eastop) on *Sorghum vulgare*, (*M. Hayat*); 1 ♀ (B61 IIIA), no other data (*Shuja-Uddin*).

1 ♀ (NP70) in U.S.N.M.

Mayrencyrtus Hincks

Liothorax Mayr, 1876: p. 728, nec Motschulsky, 1860.

Mayrencyrtus Hincks, 1944: p. 37: replacement name for *Liothorax* Mayr nee Motschulsky.

Cheilomicetus Sh., Al., & Ag., 1975: pp. 55–56, *syn. nov.*

Cheilonicetus: From the description and illustrations given for *C. daulai*, the type species of the genus *Cheilonicetus*, by Shafee *et al.* (1975: figs. 137-147) it is indistinguishable from the South African *Mayrencyrtus armillatus* Annecke, 1969. So *Cheilonicetus* is here sunk as a junior synonym of *Mayrencyrtus*.

***Mayrencyrtus daulai* (Sh., Al., & Ag.) comb. nov.**

Cheilonicetus daulai Sh., Al., & Ag., 1975: pp. 58-59, ♀.

This species might prove to be a synonym of *M. armillatus*. Pending examination of the types, it is provisionally considered as valid.

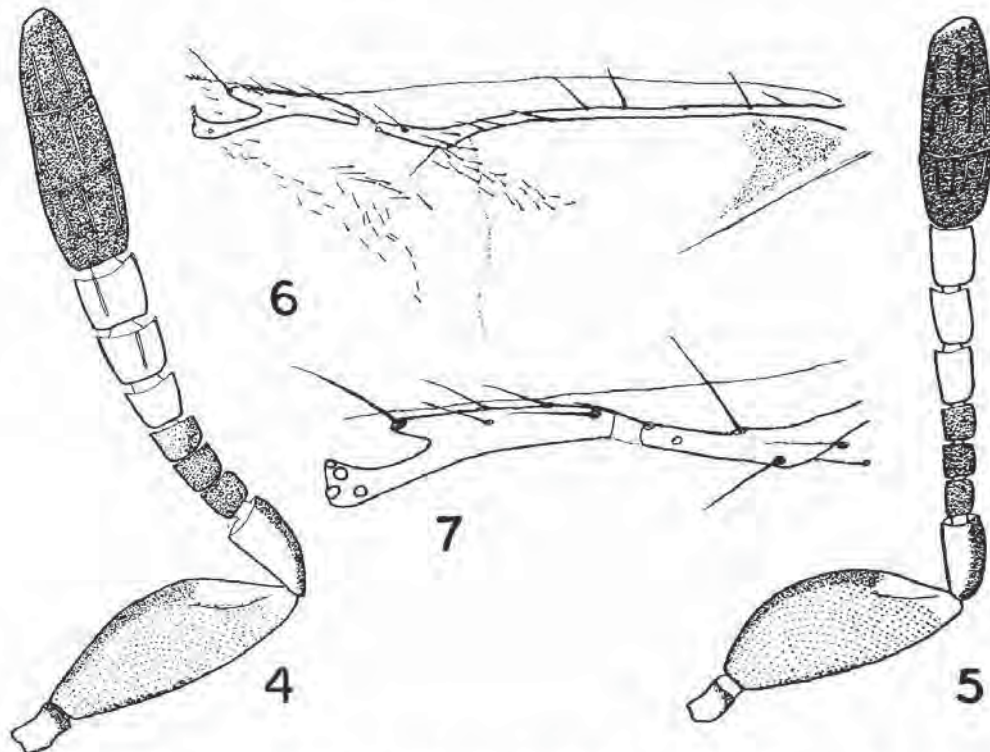
***Mayrencyrtus fusiscapus* (Agarwal), comb. nov.**

(Figs. 4-7)

Cheiloneurus fusiscapus Agarwal, 1965: pp. 62-65, ♀; Hayat *et al.*, 1975: pp. 45, 47, ♂♀.

C. fusiscapus is best placed in *Mayrencyrtus*: the shape of head, scale-like scutellar setae, fore wing with short marginal vein, and the triangular expansion at distal third of the submarginal vein refer this species to *Mayrencyrtus*.

The species appears to be variable in several characters. The original description should be amplified to include several departures. In smaller specimens (about 0.95 mm) funicle segments tend to be quadrate and shorter, club nearly as long as funicle (fig. 4), wings narrower with the marginal fringe of the fore wing about $\frac{1}{8}$ of width of disc, post-marginal vein from less than half to as long as half of the stigmal vein (figs. 6 and 7), tibial spur of middle leg slightly longer than basitarsus, and third



FIGS. 4-7. *Mayrencyrtus fusiscapus* (Agarwal), ♀: (4) Antenna (330 M); (5) the same (DRS. 926A); (6) Fore wing showing venation and proximal discal setation (DRS. 926A); (7) Part of venation of fore wing (330 M).

valvulae much longer than middle tibial spur. In larger specimens (about 1.2 to 1.4 mm; holotype 1.26 mm) F2 quadrate, shorter than F1, funicle segments otherwise longer than wide, club as long as preceding four funicle segments combined (Agarwal, 1965: fig. 46), marginal fringe about $\frac{1}{15}$ the width of disc, postmarginal vein somewhat longer than half of stigmal vein (Hayat *et al.*, 1975: fig. 107), tibial spur somewhat shorter than basitarsus, and third valvulae only a fourth longer than spur. In one female collected in Rajasthan State the basal three funicle segments are quadrate (fig. 5) and distal three longer than wide. Also the number of setae proximad of speculum vary from three to six, and those behind the triangular expansion from nine to 22.

MATERIAL EXAMINED: INDIA: Tamil Nadu, Salem, 1.v.1969, 3 ♀♀ (330 M), ex coccid on *Rhynchosia* sp., (M. Hayat).

Monstranusia antennata (Narayanan), comb. nov.

Cerapterocerus antennatus Narayanan, 1960: pp. 122–123, ♀.

The species was erroneously placed in the genus *Cerapterocerus*. The description and illustrations (Narayanan, 1960: figs. 2, 1–8) leave no doubt that *antennatus* belongs to *Monstranusia* Trjapitzin, 1964; and might prove to be a senior synonym of *M. mirabilissima*, a species recorded from the U.S.S.R. (Moldavia, Tadjikstan) and Afghanistan (Trjapitzin, 1971 a). It is of interest to note that *mirabilissima* is known to occur in Pakistan (Burks in Trjapitzin, 1973: p. 171).

Neocladia indica (Agarwal), comb. nov.

Hexacladia indica Agarwal, 1970: pp. 25–26, ♂.

While describing *indica* in the genus *Hexacladia*, Agarwal (1970) stated that the species is tentatively placed in that genus as according to him, it shows resemblances with both *Hexacnemus* and *Hexacladia*. In the author's opinion *indica* is out of place in both these genera (see Burks (1972) for *Hexacladia*, and Timberlake (1926) for *Hexacnemus*). On the bases of male antennal structure, expanded hind femora, and wing venation (Agarwal, 1970 figs. 1–3) *indica* is best placed in *Neocladia* Perkins, and appears to be very closely related to *N. tibialis* Annecke, 1965. The species of this genus are known to parasitize jassid nymphs, hence Agarwal's record of *Pseudococcus* sp. as the host of *N. indica* is dubious and needs confirmation.

Parablastothrix indica (Mani & Saraswat), comb. nov.

Tetralophidea indica Mani & Saraswat, in Mani *et al.*, 1974: pp. 77–79, ♂.

Parablastothrix indicus Sh., Al., & Ag., 1975: pp. 104–105, ♂, *syn. nov.*

The species was incorrectly placed in the genus *Tetralophidea*. The three-dentate mandibles, funicle with rami on segments 1–4 and shorter F6 refer *indica* to *Parablastothrix*. From the description and illustrations *P. indicus* Shafee *et al.* is indistinguishable from *P. indica* (M. & S.). So the former species is considered here as not only a homonym but also a synonym of the latter.

P. indica is a distinct species. It differs from the known species of this genus (*P. vespertinus* Mercet, *P. montana* Erdős, *P. nearctica* Miller, *P. plugarui* Trjapitzin, *P. nepticulae* Hedqvist; *P. metatibialis* Erdős is known in the female sex only) by having F5 only a trifle longer than F4 and ramus of F4 a little over one-half of that of F1; largely blackish legs, and middle tibial spur shorter than basitarsus. It also differs from other species in having faintly indicated parapsidal sutures in anterior third or

so of the mesoscutum. In the five species mentioned above F5 is as long as preceding three or four funicle segments combined, ramus of F4 slightly shorter than that of F1, and middle tibial spur longer than basitarsus.

MATERIAL EXAMINED: INDIA: Rajasthan, Jaipur (Durgapura Agric. Farm), 11.x.1975, 1 ♂ (DRS No. 935A) (*M. Hayat and party*); Uttar Pradesh, Aligarh, 30.iv.1977, 3 ♂♂; 13.v.1977, 1 ♂; 27.v.1977, 1 ♂; 13.vii.1977, 1 ♂ (*M. Hayat*).

1 ♂ (13.vii.1977, Aligarh) in Z.I.A.S.L.

Proleurocerus fulgoridis Ferrière

The single female specimen recently recorded under the name *Anicetus ceylonensis* Howard by Saraswat and Mukerjee (1975: pp. 45–46, fig. 6 A–G) is clearly a misidentification for *Proleurocerus fulgoridis* as is evident from the figures given by these authors. (See Shafee *et al.*, 1975, for a redescription and illustrations of this species.)

Among the material listed in Hayat (1972) 6 ♀♀, 1 ♂, were deposited in the U.S.N.M.

Pseudmicroterys Sh., Al., & Ag.

Pseudmicroterys Shafee, Alam & Agarwal, 1975: pp. 71–72.

The genus *Pseudmicroterys* is provisionally treated here as valid. It might be a junior synonym of *Nikolskiella* Trjapitzin (Dr. B. R. Subba Rao, personal communication).

Pseudmicroterys cerococci Sh., Al., & Ag.

Pseudmicroterys cerococci Sh., Al., & Ag., 1975: pp. 73, 76, ♂ ♀.

MATERIAL EXAMINED: INDIA: Uttar Pradesh, Aligarh, 14.xii.1966, 1 ♀ (106); 1.iii.1971, 2 ♀♀, 1 ♂ (435 M); Shahjahanpur, 30.x.1969, 1 ♀ (384 M); all ex *Cerococcus* sp. on *Hibiscus rosasinensis*, (*M. Hayat*).

1 ♀ (384 M) in U.S.N.M.

Psyllaphycus diaphorinae Hayat

Psyllaphycus diaphorinae Hayat, 1972: pp. 207, 208–209, ♂ ♀.

MATERIAL EXAMINED: INDIA: Punjab, Maur, 13.ix.1968, 1 ♀ (303 MA), ex *Diaphorina cardiae* Crawfd. on *Cardia ruyxa*, (*M. Hayat*).

1 ♂ paratype (Hayat, 1972) and the above listed specimen deposited in the U.S.N.M.

Tetracnemus Westwood

Tetracnemus Westwood, 1837: p. 258.

(See Peck, 1963 and Trjapitzin, 1971 b, for synonyms.)

The genus *Tetracnemus* contains two Indian species, one based on a male and the other on females. In the present paper *T. diversicornis* Westw. is recorded for the first time from India and notes on the other species are given.

Tetracnemus deccanensis (Mani & Kaul), comb. nov.

Calocerinus indicus Mani & Kaul, in Mani *et al.*, 1973, pp. 66–67, ♀; Preoccupied in *Tetracnemus* by *indicus* Ayyar, 1932, *syn. nov.*

Masia deccanensis Mani & Kaul, in Mani *et al.*, 1974: pp. 65–66, ♀; as synonym of *T. indicus* (M. & K.) by Subba Rao, 1976.

Tetracnemus indicus (Mani & Kaul): Subba Rao, 1976: p. 687; preoccupied by *T. indicus* Ayyar, 1932 (= *Arrhopoideus indicus*).

Subba Rao (1976) transferred *Calocerinus indicus* to the genus *Tetracnemus* and synonymised *Masia deccanensis* with that species. In doing so he overlooked the earlier name *indicus* in *Tetracnemus* by Ayyar (1932). *T. indicus* (M. & K.) is an unavailable name and should be replaced, in this case, with the next available name, *deccanensis*.

The species appears to be very closely related to *T. diversicornis*, but differs by the longer antennal club.

Tetracnemus diversicornis Westwood

Tetracnemus diversicornis Westwood, 1837: p. 258. ♂: Howard, 1892: pp. 362–363; Graham, 1959: p. 66, ♂.

In the key to species given by Erdős (1955) the specimens listed below run to *T. diversicornis* (syn.: *T. bifasciatellus*, *T. hispanica*; see also Erdős, 1964). The author finds no character to distinguish our specimens from the available descriptions of *diversicornis*.

MATERIAL EXAMINED: INDIA: Rajasthan, Bikaner, 22.x.1975, 1 ♂ (DRS No. 972A), (*M. Hayat and party*), Uttar Pradesh, Aligarh, 12.v.1977, 1 ♂; 13.v.1977, 1 ♂; 12.vii.1977, 1 ♀, 6 ♂♂ (*M. Hayat*).

1 ♂ in B.M.N.H. and 1 ♂ in Z.I.A.S.L.

Tetracnemus heterocornis Mani & Saraswat

Tetracnemus heterocornis Mani & Saraswat, in Mani *et al.*, 1974: pp. 75–77. ♂.
Arrhopoideus [*sic*] *heterocornis* (Mani & Saraswat); Subba Rao, 1976: pp. 687.

The species was correctly placed in the genus *Tetracnemus*. Subba Rao (1976), erroneously transferred it to *Arrhopoideus*, a genus characterised by having a five-segmented funicle and differently shaped wings and wing venation. So *heterocornis* is restored to its original genus. This species might prove to be the still unknown male of *T. deccanensis*.

Xiphomastix De Santis

Xiphomastix De Santis, 1972: p. 45.

The genus *Xiphomastix* has a superficial resemblance with *Leptomastix* Foerster, but the contrasting white and black colour of the antennal segments, the very narrow costal cell and small speculum of the fore wings, long ovipositor (ovipositor longer than gaster and strongly exerted at apex), shape of the second valvifer, and the tenth tergum clearly distinguish this genus from *Leptomastix* and other related genera. It is doubtfully distinct from several as yet undescribed species in the author's collection belonging apparently to *Anagyrus* (in a wider sense as understood by some authors; for instance, Trjapitzin) having long and strongly exerted ovipositors, narrow wings, gaster longer than head and thorax combined, wider frontovertex, somewhat flattened thorax, and subprognathous head. Further comments will be made in connection with the study of *Anagyrus* and allied genera, which the author hopes to include in the second paper in this series.

The genus *Xiphomastix* contains two species: *X. bellator* De Santis and *X. nigriceps* De Santis, both neotropical (Argentina). The Indian species, *poomensis*, described in the genus *Pseudleptomastix* by Mani & Kaul (1974) belongs to this genus.

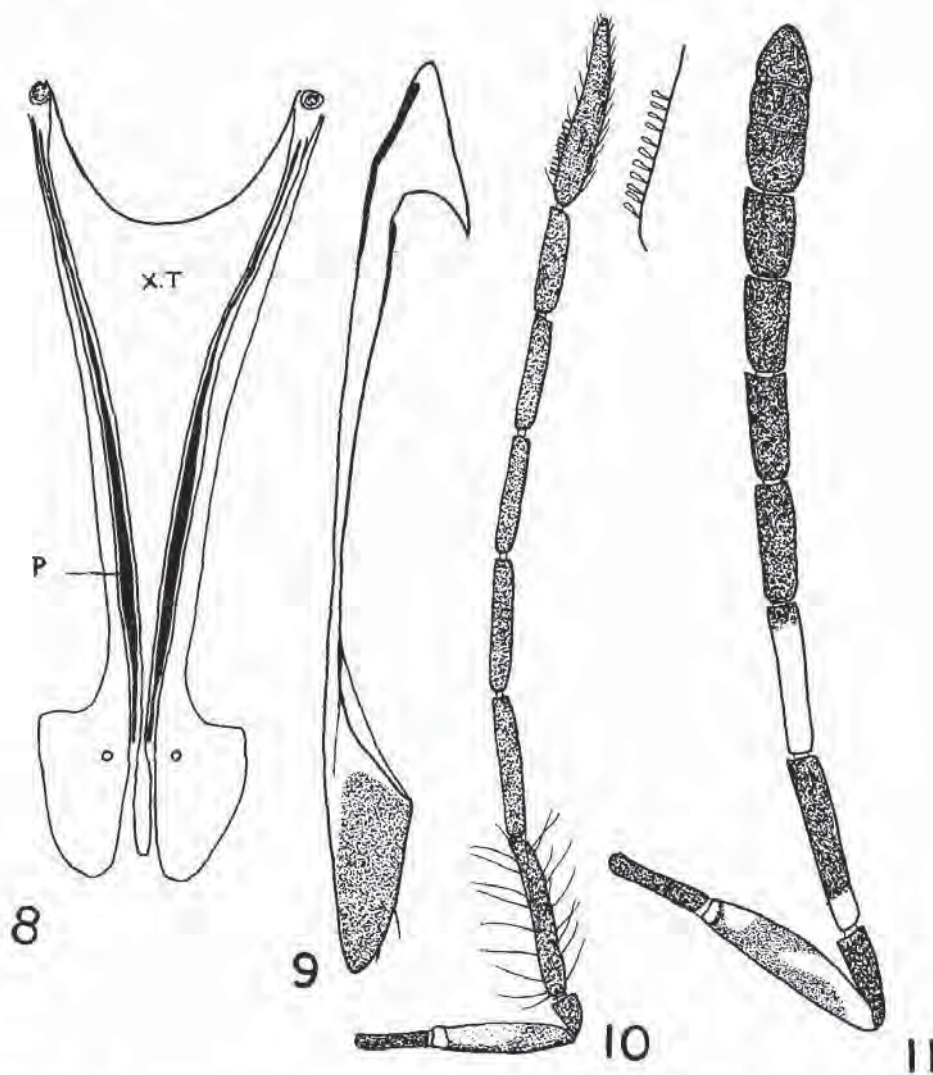
In *P. squammulatus* Girault (*P. flatulescens* Compere is a synonym; Compere, 1947) none of the funicle segments are longer than pedicel, club longer than preceding three funicle segments, costal cell broad, and ovipositor is short.

Xiphomastix poonensis (Mani & Kaul), comb. nov.

(Figs. 8-11)

Pseudoleptomastix [*sic*] *poonensis* Mani & Kaul, in Mani *et al.*, 1974; pp. 68-70. ♀.

The species was adequately described by its authors. Illustrations of some structures are given here. The males (new record) are similar to females except for the antennae (fig. 10) and characters associated with sex. *X. poonensis* differs from the two neotropical species by the completely blackish body colour, different conformation of the antennal segments, and by having the basal fourth of F1 and almost whole of F2 whitish.



FIGS. 8-11. *Xiphomastix poonensis* (Mani & Kaul): (8) Apex of gaster, dorsal showing tenth tergum and paratergites, ♀ (DRS. 940A); (9) Second valvula (DRS. 940A); (10) Antenna, ♂ (DRS. 938 A); (11) Antenna, ♀ (DRS. 940A). X.T. = Tenth Tergum, P = Paratergite.

MATERIAL EXAMINED: INDIA: Rajasthan, Jaipur (Durgapura Agric. Farm), 1♂ (DRS No. 937A), 11.x.1975; Galtaji near Jaipur, 12.x.1975, 1♂ (940A), 1♀ (941A); Chomu, 13.x.1975, 3♀♀, 2♂♂ (942A); Bikaner Public Park, 22.x.1975, 1♀ (939A); Marwar Mundwa, 29.x.1975, 3♂♂ (938A); swept over grasses, (*M. Hayat and party*). The material is in the collections of the Desert Regional Station, Zoological Survey of India, Jodhpur.

The author has also a large series (30♀♀, 50♂♂) of specimens collected by sweeping over grasses during April–June 1977 around the Zoology Department, Aligarh Muslim University, Aligarh. From this material 4♀♀ and 4♂♂ were deposited in Z.I.A.S.L.

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