

# STUDIES ON INDIAN ITONIDIDAE (CECIDOMYIDAE : DIPTERA).

## III. ON A COLLECTION OF MIDGES FROM SOUTH INDIA.<sup>1</sup>

By M. S. MANI, *Zoological Survey of India, Indian Museum,  
Calcutta.*

Mr. M. C. Cherian, Government Entomologist, Agricultural College and Research Institute, Coimbatore, recently sent me for identification a small collection of gall midges from South India. The material comprises eight species, four of which are new to science. Of particular interest is the finding of a male of *Neolasioptera cephalandrae* Mani, originally described from females only.

My thanks are due to Mr. M. C. Cherian for giving me an opportunity of studying this interesting collection.

### Tribe LASIOPTERARIAE.

#### ***Neolasioptera cephalandrae* Mani.**

1934. *Neolasioptera cephalandrae*, Mani, *Rec. Ind. Mus.*, XXXVI, pp. 397-399, figs. 8-9.

One male of this species found in the material before me is described below :

Length 1.25 mm. in the dry specimen. General colour of body brownish black. Antennae two ninth the length of body, brownish, moderately setose ; segments 15 ; segments three to six subequal, length in each case one tenth greater than diameter ; segments seven to ten subequal, each about three fourths the length of sixth segment ; segments eleven and twelve almost equal ; the two penultimate segments short and pyriform ; terminal segment subglobose. Palpi rather long, quadri-articulate, moderately setose ; first segment short ; second segment stout, its length about twice its diameter ; third segment somewhat longer ; fourth segment slender. Mesonotum densely clothed with whitish scales, these appear golden brown when viewed from certain angles. Scutellum covered with white scales. Halteres light brownish. Post-scutellum naked and somewhat darker than scutellum. Claw unidentate, slightly curved ; legs reddish brown. Abdomen thickly scaled, black, dorsally with five transverse whitish bands on either side of a median black region, the basal bands are rather broad laterally and almost contiguous with each other. Genitalia rather densely setose ; dorsal plate roundly divided ; ventral plate longer than dorsal plate ; harpes short ; basal clasp segment emarginate ; terminal clasp segment about three fourths the length of the basal clasp segment.

---

<sup>1</sup> Part II of this series was published in *Rec. Ind. Mus.*, XXXVII, pp. 425-454 (1935).

*Allotype*.—Partly dissected on slide No. 1131/H6. Coll. C. V S., Coimbatore, 24-vi-1935. In the collections of the Zoological Survey of India, Indian Museum, Calcutta. Forming galls on shoots of *Cephalandra indica*.

Tribe ASPHONDYLARIAE.

**Schizomyia cheriani**, sp. nov.

I associate with this new species the name of Mr. M. C. Cherian. It is easily separated from the known Indian species of the genus *Schizomyia* by its relatively longer empodium.

*Female*.—Length of the dry specimen 1.5 mm. Body dark brown, densely clothed with black setae. Antennae three fourths the length of body; except the scape and pedicel black in colour; fourth segment fused with third segment, one seventh shorter than third; fifth segment one seventh shorter than fourth, also two and a half times its own diameter and with a very short stem; sixth and seventh segments nearly equal to fifth; eighth, ninth and tenth segments equal, each about one sixth shorter than seventh; eleventh one fifth shorter than tenth; twelfth segment about three fourths the length of eleventh; thirteenth segment about half the length of twelfth; terminal segment subglobose. First segment of palpus short, moderately stout; second segment twice the length of first, somewhat stouter; third segment as long as second, stouter and more densely setose; fourth segment slender and rather long. Mesonotum brown. Submedian lines densely setose. Scutellum grayish brown, thickly setose. Claw as long as empodium. Abdomen dark brown, thickly setose. Ovipositor moderately long, with a rudimentary dorsal pouch at the base of ovipositor.

*Male*.—Unknown.

*Cotypes*.—Two examples dissected on slide No. 1133/H6. One example on pin No. 1132/H6. In the collections of the Zoological Survey of India, Indian Museum, Calcutta. One example on pin in the collections of the Agricultural Research Institute, Coimbatore. Coll. M. C. Cherian, Madras, 24-vii-1935. Bred from galls on "Blue Bells"

*Galls*.—The galls are produced on *Ipomea carica* Sw. (Blue Bell). The parts attacked are the flowers, and the galls resemble those on flowers of *Ipomea sepiaria* Koen. and *Rivea hypocrateriformis* Choisy described in an earlier paper<sup>1</sup>.

**Asphondylia morindae** Mani.

1934. *Asphondylia morindae*, Mani, *Ann. Mag. Nat. Hist.*, (10), XIII, pp. 134-137.

1934. *Asphondylia morindae*, Mani, *Rec. Ind. Mus.*, XXXVI, p. 409, pl. vii, fig. 2, text-fig. 13-14.

This species is known so far from Tanjore, South India. Several midges labelled as having been bred from "fruits" (really the inflorescence galls) of *Morinda tinctoria* Roxb. at Coimbatore, are referred to this species.

<sup>1</sup> Mani, *Rec. Ind. Mus.*, XXXVI, pp. 406-407 (1934); also, *id.*, *ibid.*, XXXVII, p. 452 (1935).

## Tribe ITONIDIDINARIAE.

**Stictodiplosis moringae**, sp. nov.

This new species is readily distinguished from the only known Indian species *S. pulcherrima* Kieff.<sup>1</sup> by its much smaller size, paler colour and other characters.

*Female*.—Length 1.5 mm. General colour of body brownish black. Mesonotum brown. Scutellum brownish black. Abdomen brownish black, two thirds the length of body. Submedian lines densely setose. Head with long setae. Palpi densely setose, terminal segment rather very long. Antennae short, third segment longest, its stem short, stout; fourth segment fused with third, somewhat shorter, with a very short stem, of a length about one and two thirds the diameter: fifth segment with a somewhat longer stem; sixth, seventh and eighth segments, shorter than fifth, their stems more slender and somewhat dilated apically. Claw as long as empodium.

*Male*.—Generally resembling the female. Terminal palpal segment longest. Antennae somewhat longer than body; stems of third segment half the length of the basal and apical enlargements; fourth segment fused with third, basal stem two thirds the length of basal enlargement, apical stem three fourths the length of apical enlargement; stems of fifth segment equal to the enlargements; basal stem of sixth segment a little shorter than basal enlargement, apical stem equal to apical enlargement. Terminal clasp segment of genitalia slender, bidentate apically; basal clasp segment apically emarginate on the inner side.

*Cotypes*.—One female dissected on slide No. 1134/H6. One male dissected on slide No. 1135/H6, one female on pin No. 1136/H6. In the collections of the Zoological Survey of India, Indian Museum, Calcutta. Two females on pin in the collections of the Agricultural Research Institute, Coimbatore. On *Moringa* buds. Coll. Basheer, Coimbatore, 7-ii-1936.

**Mycodiplosis indica** Felt.

1934. *Mycodiplosis indica*, Mani, *Rec. Ind. Mus.* XXXVI, p. 423.

This species was described from midges bred from the Fungus rust spores on leaves of *Pennisetum typhoideum* Gaertn. In the material before me this species is represented by several females labelled as bred from the Fungus rust spores on leaves of *Lucerne*, at Coimbatore.

**Raodiplosis orientalis** Felt.

I provisionally refer to this species a few females labelled as bred from galls on ear-heads of *Andropogon annulatus* by Y. R. Rao at Coimbatore. The species was originally described from midges taken on mango leaves at Thaton, Burma, by A. G. Rao. The specimens agree in most respects with *Raodiplosis* Felt but until both the sexes are available the identification cannot be considered as final.

---

<sup>1</sup> Mani, *Rec. Ind. Mus.*, XXXVI, p. 419 (1934); also see Kieffer, *Rec. Ind. Mus.*, III, p. 130 (1909).

**Itonida paspalumi**, sp. nov.

This new species differs from *I. penniseti* Felt and *I. seminis* Felt, recorded in an earlier paper<sup>1</sup>. in the much larger size of the female, shorter claws and the relatively shorter stem of fifth antennal segment of female.

*Male*.—Length about 1.75 mm. Reddish brown, densely hairy. Mesonotum dark reddish brown. Palpi long; first segment stout, globose; second and third segments slender, their lengths about thrice their diameters; fourth segment more slender, about one and three fourths as long as the third. Antennae equal in length to body; fourth segment about three fourths the length of third segment with which it is fused, stem about half the length of apical enlargement, which is separated from the basal enlargement by a very short stem; fifth segment almost equal in length to fourth, with the stems one sixth and one half of the basal and apical enlargements; sixth segment equal to fifth, basal stem somewhat longer, apical stem similar to that of fifth segment; eighth segment somewhat shorter, basal stem half the basal enlargement, apical stem about half the apical enlargement; terminal segment with a transverse basal enlargement, apical enlargement long, conically produced at apex. Empodium well-developed, longer than claw.

*Female*.—Length about 2.5 mm. Dark reddish brown. Abdomen densely setose. Mesonotum dark brown. Antennae black, a little less than three fifths the length of body; third antennal segment fused with fourth, the stem of latter two and a half times that of the former; stem of fifth antennal segment about one fifth its cylindrical enlargement; stem of twelfth segment one third the cylindrical enlargement. Claw shorter than empodium. Ovipositor short.

*Cotypes*.—One male dissected, with head and genitalia on slide No. 1137/H6, rest of its body on slide No. 1138/H6. One female dissected on slide No. 1139/H6. In the collections of the Zoological Survey of India, Indian Museum, Calcutta. Two females on pin in the collections of the Agricultural Research Institute, Coimbatore. Bred from galls of *Paspalum scrobiculatum*. Coll. A. G. Rao, Cannanore, 20-30-viii-1928.

**Cecidomyia eragrostisae**, sp. nov.<sup>2</sup>

I am erecting this new species for a midge bred by Y. R. Rao from galls in ear-heads of *Eragrostis amabilis*. This species runs in Felt's<sup>3</sup> key to genera between *Orseoliella* Kieff. and *Isodiplosis* Rubs. It differs from the former in the divided ventral plate, short and stout terminal clasp segment, long style and in the lobe of the basal clasp segment being broad and median instead of basal. From the latter it differs in the ventral plate not being very deeply lobed, dorsal plate divided by a slight incision and the terminal clasp segment pectinate at apex. With additional material, especially of females, this species may have to be referred to a new genus.

<sup>1</sup> Mani, *Rec. Ind. Mus.*, XXXVI, p. 438 (1934).

<sup>2</sup> *Cecidomyia* is employed here as a group name and not in the sense of *Itonida* Meig., vide Felt, *Bull. N. Y. St. Mus.*, No. 257, p. 15 (1925); *Mem. Dept. Agric. Ind., Ent. Ser.* VII, pp. 11, 27, (1920-1); X, pp. 2-3 (1927).

<sup>3</sup> Felt, *Bull. N. Y. St. Mus.*, No. 257, p. 167 (1925).

*Male*.—Length 2 mm. Body brownish and moderately setose in the dry specimen. Antennae somewhat longer than body, segments 14; third segment with an oval basal enlargement about one third the length of segment, an apical subcylindrical enlargement about half the length of segment and stems one fifth and one third the basal and apical enlargements respectively; fourth segment not fused with third, somewhat shorter, basal enlargement globose, basal stem equal in length to basal enlargement, apical enlargement subcylindrical, constricted in the middle, broader apically than basally, over one and a half times the basal enlargement; fifth nearly equal to fourth, basal enlargement globose, stem three fourths its length, apical enlargement about twice the basal enlargement, more distinctly constricted, apical stem a little over half the apical enlargement; sixth somewhat shorter than fifth, basal enlargement and stem equal, apical enlargement broader apically than basally, not greatly constricted, its stem two thirds its length; tenth segment somewhat shorter than sixth, apical enlargement cylindrical, not constricted, length about twice the thickness, apical stem about one fourth longer than the basal stem; eleventh segment somewhat longer than tenth, apical stem much longer than that of tenth; twelfth equal to tenth, apical stem longer; thirteenth almost equal to twelfth; terminal segment equal to thirteenth, stem equal in length to diameter of basal globose enlargement, apical enlargement half the length of segment, cylindrical, with a short apical prolongation. Palpal segments almost equal, basal segment somewhat stout. Mesonotum dark brown. Genitalia moderately hairy.

*Cotypes*.—Two males dissected on slides Nos. 1140-41/H6. In the collections of the Zoological Survey of India, Indian Museum, Calcutta. One male on slide and one male on pin in the collections of the Agricultural Research Institute, Coimbatore. Coll. Y. R. Rao, Mangalore, 18-viii-1922. Bred from galls on ear-heads of *Eragrostis amabilis*.