STUDIES ON THE FAUNA OF SURINAME AND OTHER GUYANAS: No. 37.

TWO GALL MIDGES FROM SURINAM

(Diptera, Cecidomyiidae)

by

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In 1959, Dr. H. A. VAN HOOF, being detached at the time as virologist to the Agricultural Experiment Station in Paramaribo, Surinam, sent to me a small collection of Cecidomyids for identification. The midges were bred from leaf galls on *Hura crepitans* L. and on *Manihot utilissima* Pohl.

An examination showed that the gall midge from *Hura* was undescribed. According to Harris' classification (1966), it belongs to the subfamily Cecidomyiinae, supertribe Cecidomyiidi, tribe Contariini. It resembles most the genus *Zeuxidiplosis*; however, it is different because of the wing venation, the insertion of the third palp segment, the somewhat triangular lobes of the ovipositor and because the female antennal segments do not have long necks and long circumfilar loops. Therefore I should like to introduce a new genus, *Huradiplosis*, based on the host plant on which the type-species occurs.

Huradiplosis, gen. n.

Adult. – Antennae of male with 2 basal and 12 flagellar segments; flagellar segments binodose, each node bearing long stout setae and a single set of circumfilar loops; antennal segments of female cylindrical with a short neck and simple circumfila; palps with three segments; wings with cross-vein, third vein joining the costa at the wing apex; tarsal claws all simple; male genitalia with stout basal

clasp segments and relative slender, recurved distal ones, dorsal and ventral plate emarginate; ovipositor short, terminal lobes somewhat triangular.

Huradiplosis surinamensis, sp. n.

Male. – Length about 1,5 mm. Head: with three segmented maxillary palps (Fig. 81), first segment about as long as broad, second segment about 1.2 times as long as broad and terminal segment about 3.8 times as long as broad; antennae 2 + 12, first two flagellar segments fused, each flagellar segment binodose, basal node about equal in size to the distal node, each node bearing long stout setae and one series of circumfilar loops, stem of fifth flagellar segment about 1.3 times as long as broad, neck about 2 times as long as broad, terminal segment as illustrated (Fig. 79). Thorax: brown, wings elliptical, cross vein present, third vein slightly curved, uniting with costa at the apex, fourth vein missing, fifth vein forked (Fig. 76); legs densely hairy, tarsal claws all simple, strongly bent (Fig. 78).

Abdomen: basal clasp segments of genitalia broadly oval with stout setae, distal clasp segments relative slender, slightly recurved and sparsely setose, dorsal and ventral plate emarginate with rounded lobes, style short (Fig. 75).

Holotype: Cecid. 2640, Paramaribo, Surinam, ex leaf galls on *Hura crepitans*, leg. H. A. van Hoof (coll. W. Nijveldt). Paratypes: Cecids 2639, 2641-2643, 2721-2725, with data as above.

Female. – Length about 1.5 mm. Head: antennae presumably 2 + 12, two first flagellar segments fused, each flagellar segment cylindrical with a short neck and short, simple circumfila (Fig. 80), neck of fifth flagellar segment about 2 times as long as broad. Abdomen: ovipositor short with somewhat triangular terminal lobes (Fig. 77).

Allotype: Cecid 2636, Paramaribo, Surinam, ex leaf galls on *Hura crepitans*, leg. H. A. van Hoof (coll. W. Nijveldt). Paratypes: Cecids 2637, 2638, 2726, with data as above.

Egg, larva and pupa unknown. - Gall unknown, but perhaps identical with the pustulate galls, described from *Hura* by RÜBSAAMEN (1907).

The gall midge from Manihot belongs to the genus Dolicholabis and this is the first record of its occurrence in Surinam. Morphologically it cannot be distinguished from the type species D. lantanae Tavares, which occurs in the leaf galls of Clinodiplosis lantanae Rübsaamen on Lantana sp. in Brazil (TAVARES 1918). The fact that Lantana is also a common weed in Surinam, creates the possibility that the Dolicholabis species from Manihot is identical to Dolicholabis lantanae, because of the fact that non-gall-producing Cecidomyids seem to be less restricted to a special host than the phytophagous species. Therefore I wish to name the Dolicholabis from Manihot for the time being Dolicholabis lantanae Tavares. Its feeding habits are not exactly known. The larvae may live as inquilines or as predators in the leaf galls, caused by other gall midge species, such as Cecidomyia manihot Felt, Jatrophobia brasiliensis (Rübs.), Lasiopteryx manihot Felt and Schizomyia manihoti Tavares (BARNES 1946).

The body length of D. lantanae is about 1 mm.

Male. – Maxillary palps with four segments (Fig. 87); antennae with 2 basal and 14 to 17 flagellar segments, flagellar segments sessile, subcylindrical, with stout setae and simple circumfila (Fig. 84); wings with simple venation, third vein joining the costa well before the wing apex (Fig. 85), tarsal claws dentate (Fig. 86); genitalia with slender basal clasp segments and long, tapering distal clasp segments, dorsal plate broad emarginate, ventral plate narrow and broadly rounded, parameres about as long as style (Fig. 82).

Female. – Antennal segments 2 + 18 to 19; ovipositor broadly rounded (Fig. 89), otherwise about as in male.

Egg, larva and pupa unknown.

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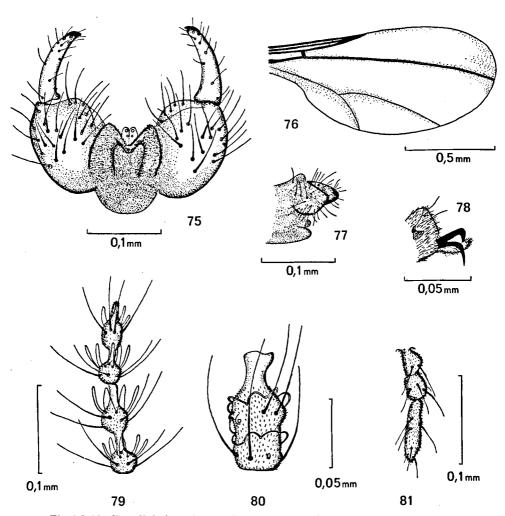


Fig. 75-81. Huradiplosis surinamensis gen. n., sp. n. from Hura, Suriname. - 75, male genitalia. - 76, wing. - 77, ovipositor. - 78, tarsal claw. - 79, two terminal flagellar segments of male. - 80, fifth flagellar segment of female. - 81, maxillary palp.

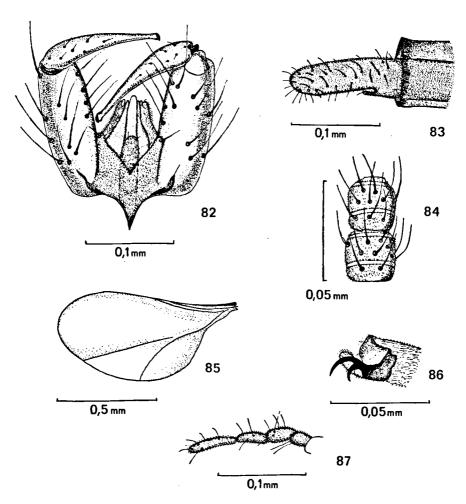


Fig. 82-87. Dolicholabis lantanae Tavares from Manihot, Surinam. - 82, male genitalia. - 83, ovipositor. - 84, third and fourth flagellar segment of male. - 85, wing. - 86, tarsal claw. - 87, maxillary palp.