NEW THYSANOPTERA FROM CUBA

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Terebrantia, 1836
Family Thripidae, Uzel
Anaphothrips alternans, Bagnall
(Euthrips alternans, Bagn.)

Taken on leaf roll of Panicum barbinode, August 24, 1926, (Moulton No. 1845) and Panicum maximum, August 30, 1926, by Mr. L. S. Scaramuzza (Moulton No. 1846), both at Baragua, Cuba, and on Saccharum officinarum, September 28, 1927, by Mr. H. P. Plank at Central Jaronu, Cuba, (Moulton No. 2604).

This is the first record of this species having been found in North America, having been known heretofore only from Egypt.

Bregmatothrips venustus, Hood

Numerous specimens of this species were taken in the leaf rolls of Panicum barbinode, August 24, 1926 (Moulton No. 1845) and on Panicum maximum on August 30, 1926 (Moulton No. 1846). Both collections were made by Mr. L. C. Scaramuzza at Baragua, Cuba.

There seems to be no record of the male which was found to be quite as numerous in these collections as was the female. The specimens before me are brachypterous and colored like the brachypterous females as in the original description. This extends the habitat of the species to Cuba.

Thrips panicus, Moulton, n. sp.

Female holotype. Color of head and thorax brown with much reddish orange hypodermal pigment. Abdomen yellow at base, shading to yellowish gray in segments three to seven, two distal segments blackish brown. Antennal segments one, two and five
to seven dark brown with five lighter at extreme base, three yellow, four yellow, shading to light grayish brown. Legs yellow. Wings brownish gray in second and third quarters. All prominent body spines clear yellow.

Total body length 1 mm.; head, length .126 mm., width .126 mm.; prothorax, length .12 mm., width .135 mm.; pterothorax, width .165 mm.; abdomen, width .165 mm. Segments of antennae: length (width) I, 18 (27); II, 27 (21); III, 36 (20); IV, 45 (18); V, 33 (15); VI, 51 (16); VII, 21; total length 240 microns. Length of spines: intercellars 21 μ, pair at posterior angles of prothorax 45 μ, on ninth abdominal segment 135 μ, on tenth 135 microns. Wing spines, fore vein 3-10-2, hind vein 14.

Head as wide as long, slightly projecting in front of eyes, cheeks almost parallel. Intercellular spines placed anterior to posterior ocelli and slightly inward, a series of four or five smaller ones posterior to eyes. Eyes in dorsal view longer than wide and occupying about .4 the side of the head. Intermission approximately twice the width of a single eye. Ocelli fully developed. Antennae twice as long as head, segments four and six distinctly longer than others with six longer than four, style almost half as long as four.

Prothorax of about equal length and width with head. A pair of prominent spines on each posterior angle with one smaller spine between each pair and three others along either side of posterior margin. Mesothorax wider than metathorax. Legs moderately stout. Wings fully developed, with spines as follows: costa 20, fore vein 3-10-2, hind vein 14.

Abdomen long and slender with segments three to eight of almost even width, nine and ten greatly reduced, ten with clearly defined dorsal suture over entire length.

Type Material: Female holotype and 13 female paratypes taken on sugar cane at Molokai, T. H., January 25, 1929 by Mr. O. H. Swezey and on Panicum maximum at Baragau, Cuba, August 20, 1926 by Mr. L. C. Scaramuzza. Types in author's collection, one paratype deposited with the Hawaiian Entomological Society at Honolulu. (Moulton Nos. 1846 and 3272.)

Type Locality: Molokai, T. H.

This species is distinct from all other members of the genus known to me because of the shape of the head, produced somewhat in front of the eyes as found in the genus Chirothrips and by the arrangement of spines on the fore vein of fore wings,
there being three basal spines, a series of nine or ten distributed
over the center of the wing and two at the tip. The series of
distal bristles in T. minutissimus, Linn. is not broken at end as
in this species. The long sixth and slightly shorter fourth an-
tennal segments are also characteristic. A new genus might be
erected to include this species but for the present I am placing
it in the genus *Thrips*.

**TUBULIFERA, 1886**

*Family Phloeothripidae, Hood*

*Subfamily Phloeothripinae, Priesner*

*Tribe Hoplothripini, Priesner*

*Eurythrips cornutus, Moulton, n. sp.*

Female holotype: Color chestnut-brown with head, prothorax
and tip of abdomen somewhat darker. Antennal segment one
and two concolorous with head, pedicel of three yellow, remain-
der of segment three and four to eight dark brown. Legs con-
colorous with body, joints lighter, all tarsi yellow. Wings uni-
formly brownish gray. All prominent spines clear yellow ex-
cept only the large curved wing retaining spines which are dark
brown.

Total body length 1.82 mm.; head, length .183 mm., width .13
mm.; prothorax, length .13 mm., width, including coxae, .25
mm.; pterothorax, width .30 mm.; abdomen, width .36 mm.;
tube, length .135 mm., width at base .075 mm. Segments of an-
tennae: length (width) I, 39 (33); II, 45 (30); III, 60 (30); IV,
60 (30); V, 57 (25); VI, 57 (24); VII, 42 (22); VIII, 30; total
length 390 microns. Length of spines: postoculars 60 μ, on an-
terior angles of prothorax 60 μ, mid-laterals 60 μ, on posterior
angles, outer 60 μ, inner 72 μ, on ninth abdominal segment 105
μ, at end of tube 90 microns.

Head 1.5 times longer than width across cheeks, front of head
narrowed into a triangular process projecting in front of eyes
and bearing antennae. Cheeks strongly constricted immediately
behind eyes and with a prominent short, broad-seated horn-like
growth immediately behind the constriction, behind this the
cheeks are roughened and slightly arched. The surface within
the ocellar triangle is shaded to appear distinctly reticulate and
the entire head is stippled with white dots but without markings.
Postocular spines approximately as long as eyes, with broadly
dilated tips. Eyes moderately small, with large facets, outer sur-
face including only four or five facets. Ocelli placed far for-
ward, posterior ocelli clearly contiguous with anterior inner margins of eyes, as large as facets of eyes. Mouth cone short and broadly rounded, extending not over half way across pro-
sternum. Antenna more than twice as long as head, segments three to six each with narrowed pedicel, seven with wider pedicel, eight broadly joined to seven but distinct. The prothorax has long and fully developed spines as follows: one at each anterior angle, one in the middle of each side and a pair at each posterior angle, those along anterior and posterior margins are vestigial. All prominent spines with dilated tips. The suture which separates the plate at each posterior angle of the prothorax is incomplete, it curves backward, outward and ends abruptly in front of inner prominent angular spine. These plates are thus coalesced with the pronotum.

Pterothorax with evenly formed sides. Legs reasonably short, fore femora not noticeably enlarged, fore tarsi unarmed except for the long hook-shaped claw. Wings fully developed but short, reaching only to base of fifth abdominal segment, without double fringe hairs.

Abdomen considerably wider than pterothorax. The posterior pair of wing-holding spines on segments three to seven inclusive strongly developed and dark brown in color, anterior pair weak. Tube about .7 as long as head and twice as long as width at base.

Type Material: Female holotype, one female paratype collected April 15, 1927 by Mr. L. C. Scaramuzza from an unknown host plant. Types in author's collection. (Moulton No. 1852.)

Type Locality: Baragua, Cuba.

This species appears to be most closely related to E. macrops. Hood, found in Florida, but separated from it as follows: postocular spines about .33 as long as head, sides of head clearly constricted behind eyes, cheeks arched, fore tarsi unarmed. Tube .7 as long as head. Postocular spines half as long as head in the species macrops, sides of head almost straight and parallel, fore tarsus armed with a minute tooth and tube as long as head. The abdomen is rather widely distended in the holotypic specimen while in a second paratype it is contracted and the total body length is 1.2 mm., and in this latter specimen the wings reach to the eighth abdominal segment.

*Eurythrips varius*, Moulton, n. sp.

Female holotype. Color of head, thorax and last three abdominal segments dark brown, segment two light yellowish brown,
three to seven gradually becoming darker. Legs dark brown with all tarsi and tips of all tibiae yellowish, fore wings darkened at base, only slightly grayish beyond, antenna uniformly dark brown except pedicel of three which is yellow.

Total body length (abdomen distended) 1.66 mm.; head, length .18 mm., width .144 mm.; prothorax, length .13 mm., width including coxae .25 mm.; pterothorax, width .28 mm.; tube, length .144 mm., width at base .072 mm. Segments of antennae (beyond second segment): length (width) III, 57 (33); IV, 54 (33); V, 54 (28); VI, 54 (27); VII, 45 (27); VIII, 36; total length 390 microns. Length of spines: postoculars 69 μ, prothorax, at anterior angles 60 μ, mid-laterals 54 μ, at posterior angles 75-75 μ, on ninth abdominal segment 195 μ, at end of tube 120 microns.

This species was found in the same collection with *E. corvatus*, previously described but may be separated by the following characters: head slightly constricted behind eyes, cheeks arched only a little and without short, horn-like projections immediately behind eyes. Facets of eyes small, not over half as large as ocelli. Each fore tarsus armed with a short tooth. Wings darkened at base only and clear or slightly gray colored beyond. First two or three abdominal segments lighter than the rest of the body. Spines on the ninth abdominal segment and at tip of tube are much longer than in the former species, namely 195 and 120 m. as compared with 105 and 90 m. respectively. This species is separated from *E. cinetus*, Hood by its clearly dilated-tipped spines and from *harti*, Hood by the shorter postocular bristles and armed fore tarsi. In *harti* the postocular bristles are pointed, .5 as long as head and fore tarsi are unarmed. It may also be separated from *E. maccopus*, Hood by the darker brown color of legs, the lighter shading of wings beyond the basal fifth and the shorter tube.

Type Material: Female holotype collected April 15, 1927 from an unknown host plant by Mr. L. C. Scaramuzza. Types in author's collection. (Moulton No. 1852 B.)

Type Locality: Baragua, Cuba.

*Eurythrips fuscipennis*, Moulton, n. sp.

Female holotype. Color chestnut brown with fore legs and tips of middle and hind tibiae and middle and hind tarsi almost clear yellow. Antenna uniformly dark brown, except segments
one and two which are lighter and base of three which is yellowish, wings uniformly grayish brown.

Total body length 1.48 mm. (abdomen distended); head, length .166 mm., width .14 mm.; prothorax, length .12 mm., width including coxae .25 mm.; pterothorax, width .283 mm.; abdomen width .30 mm.; tube, length .135 mm., width at base .075 mm. Segments of antennae: length (width) I, 30 (23); II, 45 (30); III, 54 (30); IV, 48 (30); V, 51 (27); VI, 48 (28); VII, 42 (27); VIII, 39; total length 360 microns. Length of spines: postoculars 54 μ, on anterior angles of prothorax 51 μ, mid-laterals 60 μ, on posterior angles, outer 66 μ, inner 60 μ, on ninth abdominal segment 120 μ, at end of tube 90 microns.

This species resembles E. cornutus, rather closely but is at once separated by the strong, broad-seated tooth on fore tarsus, sides of head almost straight and parallel, and the intermediate antennal segments are shorter. It may be separated from maccrops, Hood by the shorter postocular bristles and the position of the ocelli which are placed far forward and clearly separated from the inner anterior margins of eyes, also the fore tarsal tooth is large and distinct in this species. The tube is much shorter than head, while in maccrops, the tube is equal to the length of the head.

Type Material: Female holotype taken April 15, 1927 from an unknown host plant by Mr. L. C. Scaramuzza. Type in author’s collection. (Moulton No. 1852 C.)

Type Locality: Baragua, Cuba.

The three new species described in this article were all collected from the same host plant at the same time.

Cornutus and fuscipennis are closely related but apparently distinct in that the former has unarmored fore tarsi and a projection behind each eye and the latter has a clearly developed tarsal tooth. Varius has differently formed eyes, the facets are smaller and more compact, the wings are dark only at the base and lighter beyond, while in cornutus and fuscipennis the wings are almost uniformly light grayish brown. Varius also has much longer spines on the ninth abdominal segment and at tip of tube. The postoculars and principal spines of the prothorax are long and have clearly dilated tips in all three of these species. Fore wings are without double fringe hairs and the posterior wing-holding spines are strong while the anterior ones are weak.