

from Panama. The specimen is labelled "Mobile, No. 1984."

The prominent lamella at tip of arista, together with the long prolongation arising from near the base of the hypopygial lamella will readily distinguish *flagellatus*, new species from the known species of *Hercostomus*. This species has been assigned to the genus *Hercostomus* despite the fact that the curvature of the last section of the fourth vein resembles that of certain species of *Paraclius*.

### MECYNOTHRIPS SNODGRASSI, A NEW THRIPS FROM THE SOLOMON ISLANDS

(THYSANOPTERA)

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Everyone who has taken a college course in insect anatomy knows of the work of R. E. Snodgrass. If the student's contact with the subject fired a permanent interest, he has used Snodgrass's papers as a pattern for his own, because of their objectiveness and thoroughness, and the inimitable drawings with which they are always so generously illustrated. Perhaps Mr. Snodgrass is our greatest living American entomologist. Such at least is my own opinion, borne out by the number of honorary memberships which have been accorded him by the entomological societies of the world.

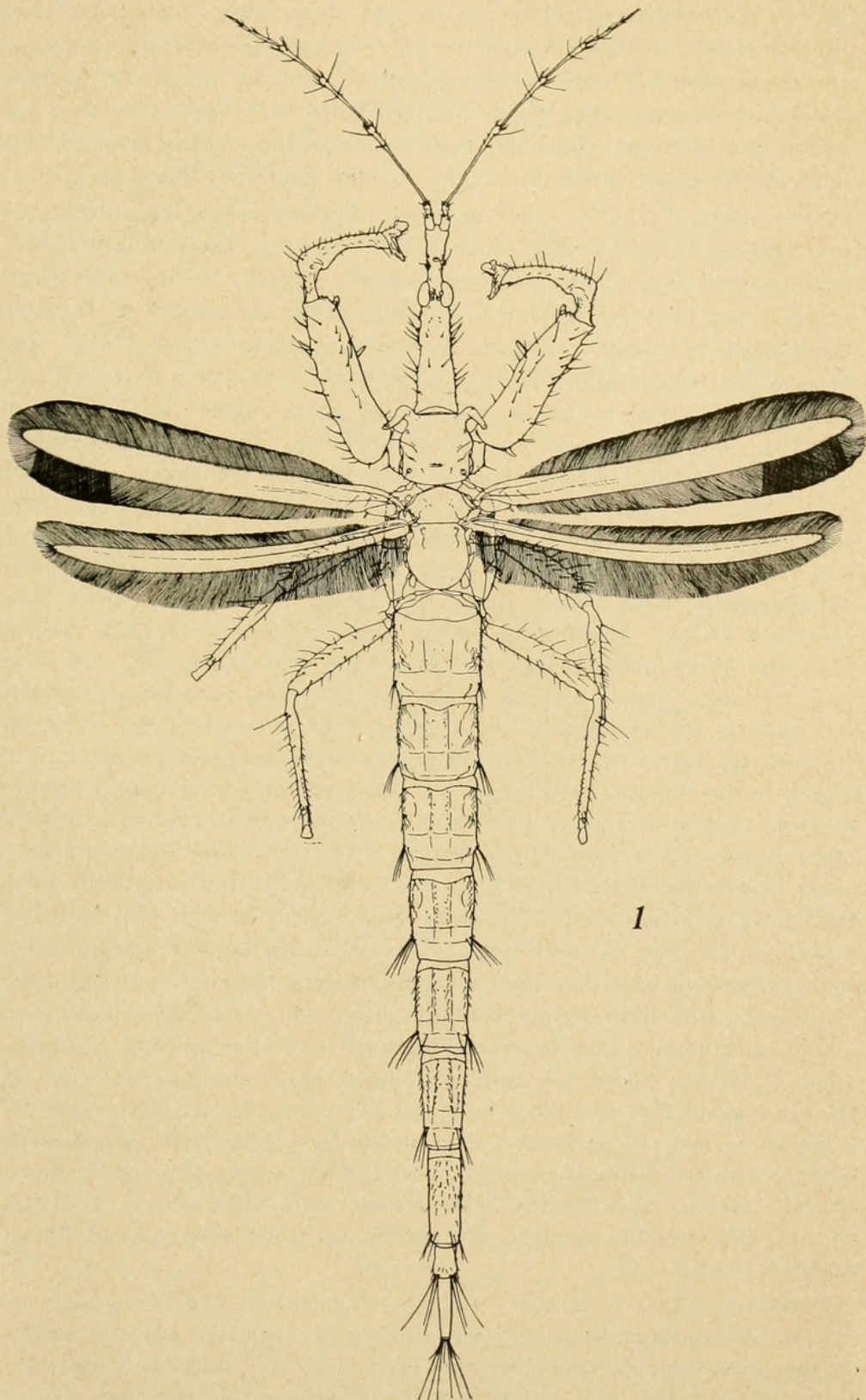
Some time ago I mentioned to him that I had long intended to name a new species after him—an empty honor to the recipient, of course, but always a source of satisfaction to the describer himself—but that I had not been able to turn up one of sufficient stature. The present species meets this specification quite well, for it is a veritable giant among thrips, measuring nearly a half inch in length.

#### ***Mecynothrips snodgrassi*, new species**

Figs. 1-9, 12-14

*Male* (macropterous).—Length about 10.3 mm. (fully distended, 12.22 mm.). Color nearly black, with red internal pigmentation showing through membranous areas and through pale areas of the integument at the lateral margins of abdominal segments II-VII in front of middle; all coxae, trochanters, and femora about concolorous with body; all tarsi yellow, with the usual dark cups, the fore pair brownish; fore tibiae broadly yellow along the morphologically inner and outer surfaces nearly to base, the upper and lower surfaces and the base blackish brown; middle and hind tibiae pale yellow in distal half and dark yellow in narrowed basal sixth, blackish brown between; antennae about concolorous with head in segments I, II, VII, and VIII, I yellowish basally and II apically, the intermediate segments yellow basally and blackish brown apically; III lightly shaded in basal two-thirds, dark





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PLATE I. MECYNOTHRIPS SNODGRASSI

Fig. 1. Male, holotype, length 10-12 mm.



in only the swollen apical tenth; IV and V similarly colored, but more heavily shaded in basal three-fifths and one half, respectively (especially at extreme base), V dark in apical third; VI dark in apical half or more, shaded at extreme base; wings heavily shaded with brown, the fore pair brown in about basal third and with a dark median vein in most of basal half, the hind pair brown to middle, darkest behind a submedian vein.

*Head* (figs. 1, 2, 4, 5, 7, 14).—About 5.2 times as long as width across eyes and 4.3 times the width just in front of base, where it is broadest; head-process (measuring from front margin of eyes) 0.3 the total length of head and 2.4 times as long as greatest width, its breadth at eyes 0.64 its breadth at bases of antennae; cheeks tapering rather evenly from base to near eyes, slightly flaring to latter, set with 8 or 9 pairs of large, strongly-projecting tubercles which bear stout, blunt, yellowish setae 170-213 $\mu$  long; a pair of prominent tubercles (fig. 4) behind median ocellus, projecting beyond outline of head and bearing each a long (199-227 $\mu$ ), strong, blunt, nearly black seta; another pair of large tubercles (fig. 7) immediately behind posterior ocelli, these also setigerous, the setae themselves nearly black and 122-166 $\mu$  long; postocular and dorso-cephalic setae nearly black and blunt, the former (much fore-shortened in figs. 1, 2) about 148 $\mu$  long, 125 apart, and 252 behind eyes, the dorso-cephalic ones 146-197 $\mu$  long, 112 apart, and 448 from base of head; dorsal surface of head with a few minute setae, finely and sharply cross-striate in about basal tenth, the remainder obscurely transversely furrowed, the furrows barely visible when observed at right angles to the surface, but distinct on the ascending surface just posterior to eyes; ventral surface of head with a conspicuous excavation at middle (figs. 5, 14). Eyes rounded, protruding, with small, closely-packed facets, much longer dorsally (260 $\mu$ ) than ventrally, their width at ocelli 102 $\mu$ , their interval across ocelli 146 $\mu$ , their least ventral interval 87 $\mu$ . Ocelli of posterior pair (fig. 7) much larger (50 $\mu$ ) than the median ocellus (19 $\mu$ ) and encroaching upon the inner margins of eyes, their interval 56 $\mu$ , their distance from median ocellus 322 $\mu$ , the latter (fig. 4) borne at the tip of a rounded tubercle which is directed forward as well as upward. Antennae (figs. 1, 12, 15) about 1.6 times as long as head, more slender than in the other species of the genus, segment III more than 12 times, and IV 9 times, as long as greatest width; setae on III-VI dark, conspicuous because directed strongly outward from the segments; sense-cones short, slender, curved, and pointed. Mouth-cone with sides almost perfectly straight, tip broadly rounded and extending about 309 $\mu$  beyond dorsal margin of head.

*Prothorax* (figs. 1, 2, 3, 6, and 9).—Typical in bearing a pair of curious, hollow, horn-like processes which arise from the anterior angles of the pronotum, curving backward and outward, these not perfectly symmetrical in the type, but each with a small seta at tip (figs. 3, 6); antero-marginal and antero-angular setae minute (12-26 $\mu$ ), not identifiable with certainty, the other major setae short and arising from tubercles, the midlaterals 39 $\mu$ , epimerals (fig. 9) 121 $\mu$ , postero-marginals 90 $\mu$ ,



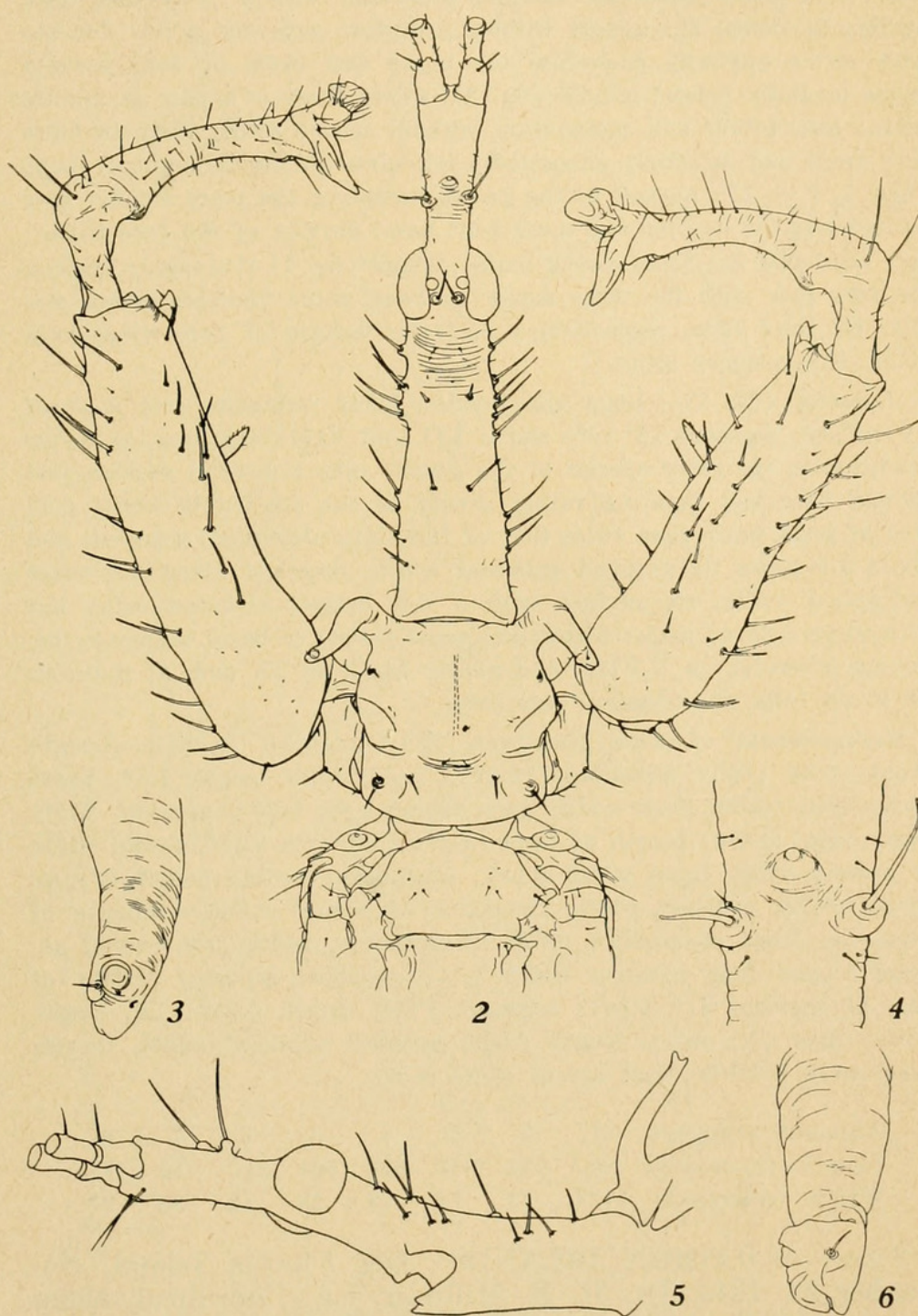


PLATE II. MECYNOTHRIPS SNODGRASSI

Fig. 2. Male, holotype, head and prothorax; fig. 3, tip of left pronotal horn; fig. 4, region of median ocellus; fig. 5, head, ventro-lateral aspect; fig. 6, tip of right pronotal horn.



coxals  $136\mu$ ; epimeron and episternum only partially separated by sutures from each other and from notum; pronotum with a prominent dark median apodeme, but almost without sculpture save for a few delicate dark striae partially encircling the horns and three or four arcuate striae medially behind middle (fig. 2), where there is a pair of minute setae; mesonotum and metanotum without major setae, their surfaces very finely and delicately polygonally reticulate almost throughout. Legs (figs. 1, 2, 8, 13) normal to the genus, excepting the more slender fore femora and the heavier and more bent basal portion of the fore tibiae; fore tarsi with the usual strong tooth. Wings (fig. 1) thoroughly typical, the fore pair with the three major subbasal setae blackish brown and  $164$ ,  $134$ , and  $190\mu$ , respectively; posterior margin of fore wings with about 65 accessory setae.

*Abdomen* (fig. 1).—Long and slender, finely reticulate over most of its surface; segment IX very short, VII and VIII very long, as is the condition in the other species of the genus; tube somewhat swollen just beyond base and tapering rather evenly to tip, its length about 0.37 that of head, more than twice that of the ninth abdominal segment, and about 4.5 times its greatest subbasal width, this last about 1.6 times the apical width, its surface with a few minute colorless setae but without sculpture; major abdominal setae yellow in basal segments, becoming brownish on V-VIII, and nearly black on IX and X, those on IX about  $630\mu$ , the terminal ones  $588\mu$ .

*Measurements of male* (holotype, KOH-treated), in mm.—Length about 10.33 (fully distended, 12.22); head, total length 1.82, width across eyes 0.349, least width just behind eyes 0.266, greatest width (near base) 0.420; length of head in front of eyes 0.546, apical width of process 0.288, basal width 0.147; prothorax, median length of pronotum 0.714, greatest width (inclusive of coxae) 0.883, exclusive of coxae (in front of middle) 0.707; pterothorax, width just behind anterior angles 1.04, greatest width 1.11; abdomen, greatest width (at base of segment II) 0.861; segment VIII, length 0.855; IX, length 0.308; tube (X, only), length 0.669, greatest subbasal width (across basal collar) 0.150, least apical width 0.093.

Antennal segments:	1	2	3	4	5	6	7	8
Length (microns):	$164^1$	154	895	658	504	309	133	115
Width (microns):	$112^2$	73	73	73	58	43	35	23

*Type*.—SOLOMON ISLANDS: Big Florida Island, November 29, 1944, Dr. H. E. Milliron, 1 ♂, "on shrub along jungle trail."

*Mecynothrips wallacei* Bagnall, the type of the genus, was described in 1908 from a unique male specimen taken by Alfred Russell Wallace at Dorey, New Guinea. Suspecting that

<sup>1</sup>The dorsal exposed length is  $140\mu$ .

<sup>2</sup>This is the greatest (diagonal) basal width.



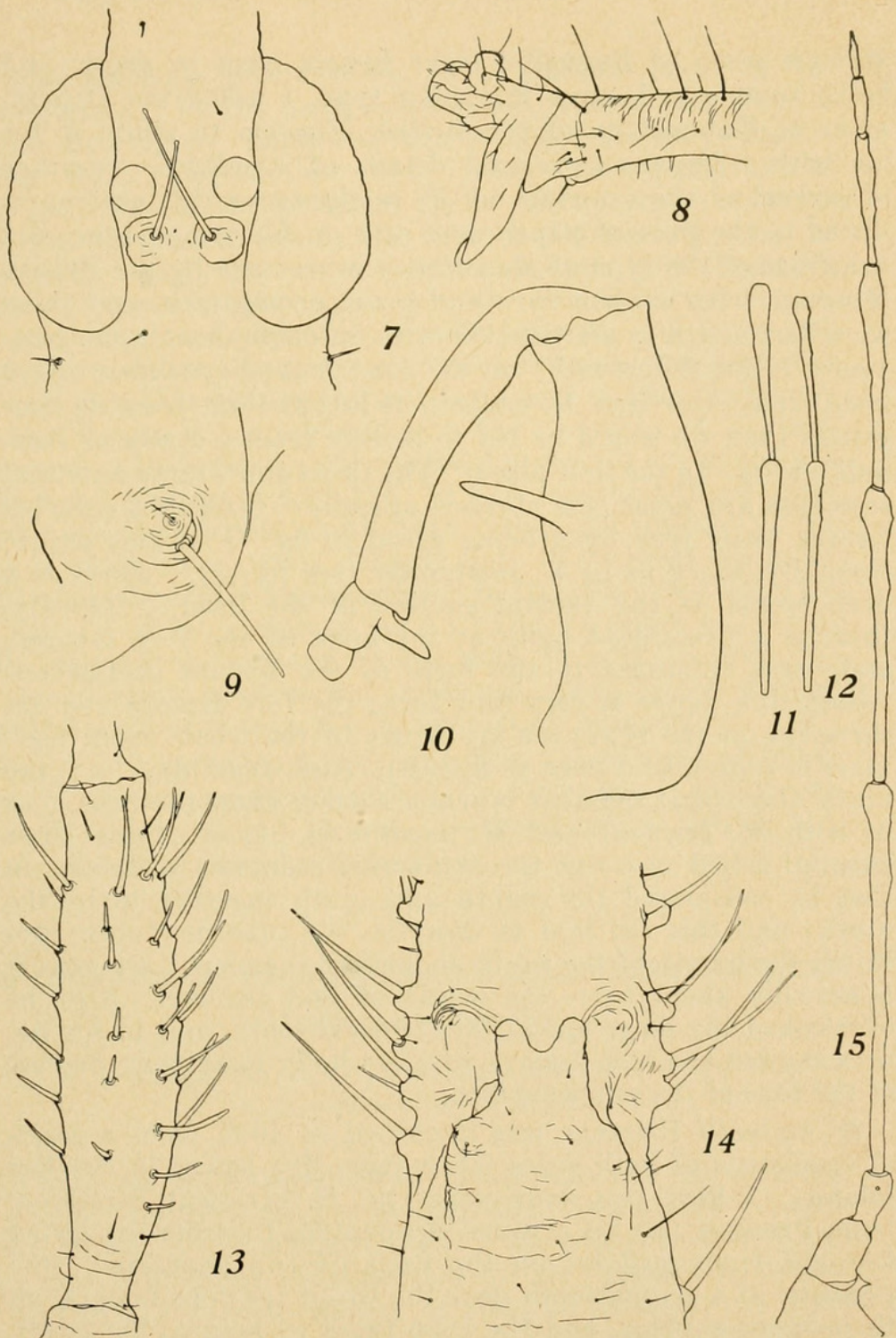
PLATE III. MECYNOTHRIPS SNODGRASSI AND *M. WALLACEI*

Fig. 7, *M. snodgrassi*, region of eyes; fig. 8, *M. snodgrassi*, right fore tarsus and tip of tibia; fig. 9, *M. snodgrassi*, region of epimeral seta of prothorax; fig. 10, *M. wallacei*, left fore leg, ventral aspect; fig. 11, *M. wallacei*, segments III and IV of antenna; fig. 12, *M. snodgrassi*, segments III and IV of antenna; fig. 13, *M. snodgrassi*, left middle femur; fig. 14, *M. snodgrassi*, head, middle portion, ventral aspect; fig. 15, *M. snodgrassi*, left antenna.



at least some of Bagnall's eight figures were in error, and being unable to borrow Bagnall's type, I asked the Department of Entomology of the British Museum to study it for me with reference to several details of structure. Tracings of several of the drawings of *M. snodgrassi* which are reproduced in the present paper were sent on for comparison. Six drawings of the type of *M. wallacei* were made by the British Museum, with evident care and great promptness, and these were forwarded to me together with valuable descriptive comments (quoted herewith) on the carded type specimen. As a result it is clear that *M. wallacei* is less distinct from its congeners than we would be led to believe from a study of Bagnall's work. In the first place, "The third and fourth antennal segments are much less clubbed apically" than shown in his figures, their true form being given in fig. 11 of this paper. Secondly, much as in *M. snodgrassi* (see fig. 5), "There is a deep recess on the ventral surface of the head." Thirdly, there is a prominent tooth at the apex of the fore femora; and, with reference to the form of the femora themselves, "Bagnall's figure is very bad here; the fore femora are not shrunken in the type; see my figure of the whole front leg" (this is reproduced here as fig. 10). And, fourthly, "... the ninth abdominal segment is much shorter than the tube," as in both *M. bagnalli* and *M. snodgrassi*. It is evident that Bagnall failed to count the abdominal segments correctly, in that he considered the eighth and ninth together to be the ninth; and this led him to describe the tube as "only two-thirds the length of the ninth abdominal segment," whereas it is actually about twice the length of that segment. Also, he overlooked the large apical fore-femoral tooth, and in his figures showed the fore femora with a wholly imaginary process at the base of the outer surface.

*M. bagnalli* Priesner was described in 1935 from a series of specimens of both sexes taken from dry leaves in the Kei Islands. I have one male paratype, in excellent condition, from Priesner. In his original description Priesner separated *bagnalli* from *wallacei* on the basis of two characters—the presence of a strong tooth near the tip of the fore femora, on their inner surface, and the tube twice as long as the ninth abdominal segment. He did not know, of course, that Bagnall's description of *wallacei* was in error, and that that species was precisely like his in these respects. However, I think that *bagnalli* is distinct, though it will be necessary to study Bagnall's type in comparison to make sure and to effect a separation.

*M. snodgrassi*, from the Solomon Islands, differs from *wallacei*, it would seem, by the much more slender third and fourth



antennal segments (compare fig. 11, of *wallacei*, with fig. 12, of *snodgrassi*); by the more slender fore femora and tibiae—though heterogony doubtless affects these parts (compare figs. 10 and 2); by the less evenly setose cheeks; and by the different form of the pronotal horns. However, it must be admitted that here, again, the last two structures may be heterogonic; and, too, we are *now* assuming that Bagnall's figures of these structures are correct. The first two characters just mentioned ally *wallacei* with *bagnalli*, and if the two species are either identical or closely related, the following features should isolate *snodgrassi* from both, as the characters are based upon a comparison with the paratype of *bagnalli* before me: (1) In *snodgrassi* the head process is 0.3 the length of the head, instead of 0.22-0.26; (2) the length of this process is 2.4 times its greatest width, rather than 2.0 times; (3) the head is finely cross-striate dorsally only in its basal tenth, instead of in the whole area posterior to the eyes; (4) segments III and IV of the antennae are 12.2 and 9.0 times as long as wide, respectively, instead of less than 10 and 7.6; and (5) the prothoracic episternum, epimeron, and notum are all largely fused with each other, instead of separate.

The drawings which accompany this paper were all made with the camera lucida from the male holotypes of the species involved. Figs. 10 and 11 were prepared at the British Museum; the others are by the author.

## THE IDENTITY OF *STENOCEPHALUS MEXICANUS* ASHMEAD

(HEMIPTERA, COREIDAE)

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In 1886 Ashmead described *Stenocephalus mexicanus*, based on a single specimen said to be from the "Isthmus of Tehuantepec, Mexico, F. Sumichrist [sic]." He reported that it had been sent to him for identification by Mr. Samuel Henshaw, curator of the Boston Society of Natural History. In 1893 Distant included the species in his volume of the *Biologia Centrali-Americana*, and Lethierry and Severin listed *mexicanus* in their catalogue published in 1894. No further reference has been made to the species since that time, and there is no evidence that anyone has reexamined the specimen on which the name is based.

Recently I had the good fortune to discover a specimen in the National Museum Collection which certainly is the type of *mexicanus*. The evidence must remain somewhat circum-





1952. "Mecynothrips snodgrassi, a new thrips from the Solomon Islands (Thysanoptera)." *Proceedings of the Entomological Society of Washington* 54, 294–301.

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