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A NEW *STENOLEMUS* FROM THE PHILIPPINES (HETEROPTERA, REDUVIDAE, EMESINAE)

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With 18 text-figures

During investigations of fig-wasps in the Philippines in 1964, Dr. J. T. Wiebes collected a new species of bug, a small reduviid belonging to the genus *Stenolemus* Signoret: its description is presented here. For comparison, the type specimen of *Stenolemus crassirostris* Stål, 1870 (similarly from the Philippines) has also been studied, and supplementary descriptive notes, together with drawings of some important structures of this species are included.

I am indebted to Dr. Wiebes for presenting us with this interesting specimen, to Dr. P. I. Persson of the Naturhistoriska Riksmuseet, Stockholm, for loan of the Stål type, and to Mr. J. A. Grant, B. Sc., London, for his valuable criticism and for reading the manuscript.

Stenolemus wiebesi spec. nov. (figs. 1-12)

Female (fig. 1). Ground colour yellowish-brown, with some white and brown suffusions; eyes grey. Whitish are — rostrum proximally, antennal segment I proximally and also at annulus less than halfway along, pronotal calli, humeral projections, epicoxal lobes, coxae distally, trochanters, femora distally and at two annuli, tibiae proximally and at two annuli, tarsi proximally; some parts of fore-wing — proximal parts of costa and area alongside, an interrupted band near middle, and an area near the tip of the wing; sides and hind margin of the abdomen. Brownish are — antennal segment I distally and other segments entirely, meso- and metathorax, hind legs, most of the proximal third of the fore-wing, spots regularly along the side margin of the abdomen.

Body surface smooth, shining and densely pilose with rather short macro- and microchaetae. Head (figs. 3, 5) elongately ovoid with small eyes, anterior and posterior parts inflated without projections; dorsal interocular

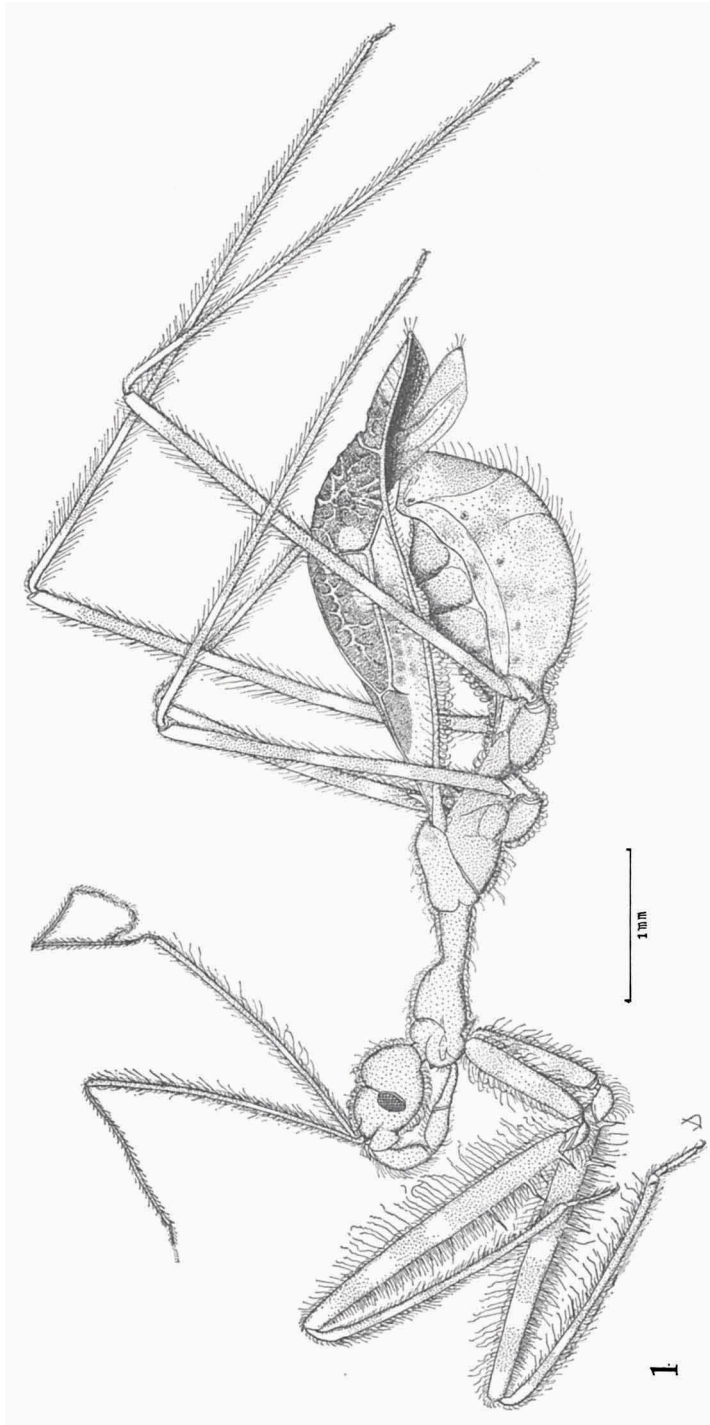


Fig. 1, *Stenolemus wiebesi* n. sp., female, holotype.

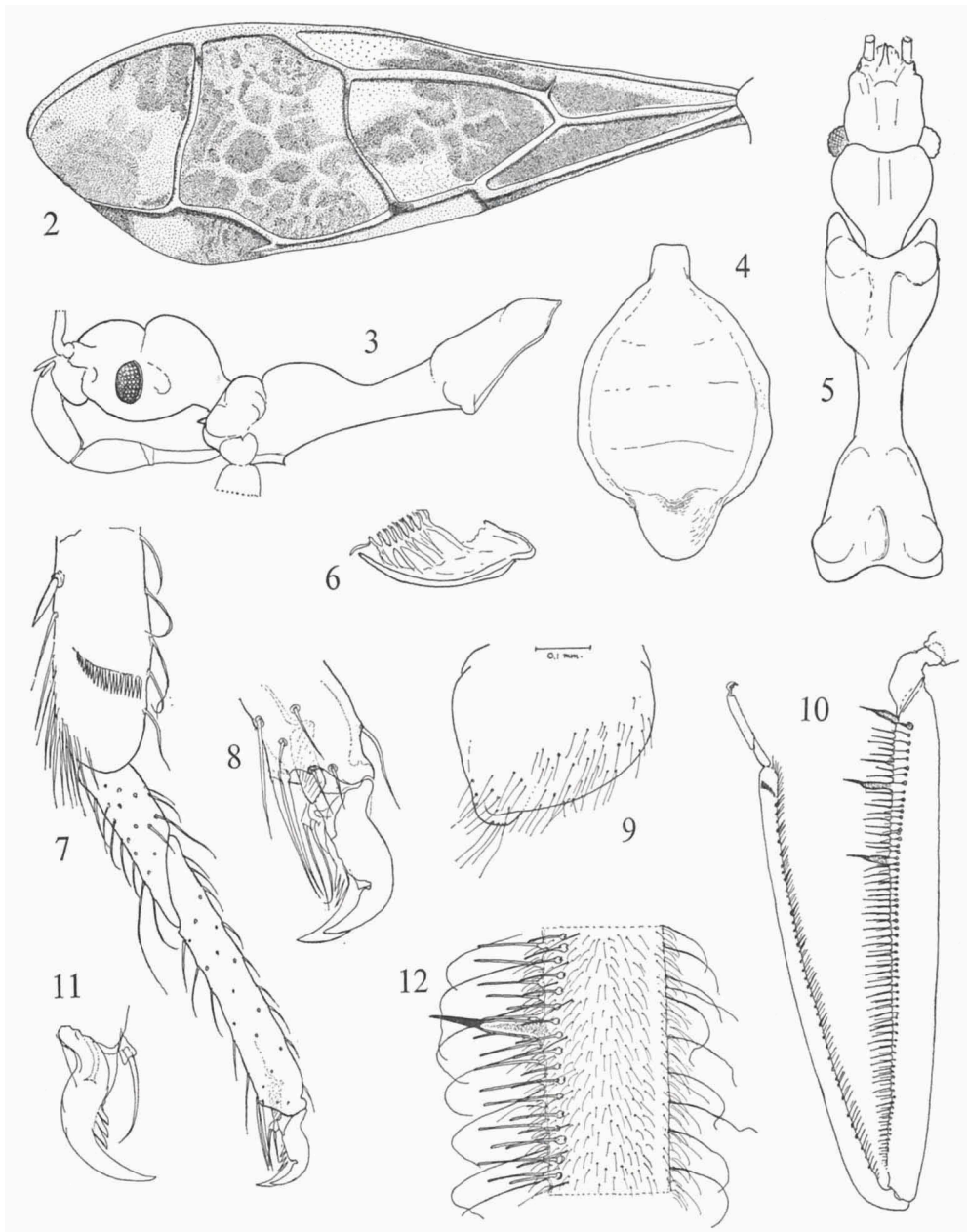
furrow curved backwards medially. Rostral segment I somewhat curved, II conical, about as thick but rather shorter than I, tapering distally, III more slender, a little curved and about as long as II. Antenniferous tubercle projecting anteriorly; antennal segment I long, slender and gradually curved, segment II shorter, III shorter than II, IV twice as long as III.

Thorax. Anterior lobe of pronotum (figs. 3, 5) globular with rounded calli; petiole shorter than anterior portion; posterior lobe of about equal size as fore-lobe (petiole not incl.) with moderately developed rounded humeral projections; hind margin inconspicuously bordered, excavated medially. Lateral margins of stridulatory furrow only moderately extended behind fore-coxae. Scutellar and metanotal horns well-developed, curved upwards and invested with short hairs. Fore-coxae long, rounded and somewhat tapering distally; underside of fore-femora (figs. 10, 12) with three (left) or four (right) black capitate spines in the proximal third, and with a dense row of long brown spines along the whole underside, longest proximally gradually shortening distally on the femur; antero-ventral row of spines starting with one (smaller) capitate spine; spines of these rows blunt. Fore-tibiae rather long and slender, on the underside with two rows of small spines of two types, the stouter darker ones separated by more numerous thinner spines. Calamistrum (fig. 7) curved, comprising about 20 spiculae. Fore-tarsus (figs. 7, 8, 11) slender, anterior claw blackish, with a small rectangular membranous lamella against the ventral incision; posterior claw more gradually curved, comprising three teeth. Mid- and hind-legs longer and more slender, hirsute but without substantial spines, etc.

Fore-wing¹⁾ slightly surpassing end of abdomen, bulging; basal cell large, longer than wide, its length about 0.29 of length of wing; discal cell larger, its distal boundaries (M, Cu) almost straight and enclosing a right angle; distal part of wing showing reduction. Pattern of fore-wing shown in fig. 2. Hind-wing strongly reduced, its length about 0.25 of fore-wing, its area about that of the proximal part of the 'costal cell' (between C-Sc-R and M-Cu) of fore-wing.

Abdomen (fig. 4) petiolate and strongly inflated ventrally, nearly hemispherical; first and last segments much narrower; connexival margins broad, vertical, slightly undulating, segmental boundaries hardly visible; spiracles not or hardly produced, spiracle VIII dorsal on a conical projection. Genitalia small, situated almost dorsally, gonocoxite and posterior gonapophysis shown in figs. 9 and 6, respectively.

¹⁾ For the terminology of the emesine fore-wing, the reader is referred to Wygodzinsky's excellent 1966 monograph, pp. 24-27.



Figs. 2-12, *Stenolemus wiebesi* n. sp., holotype. 2, left fore-wing. 3, head and pronotum, lateral view. 4, abdomen, ventral view. 5, head and pronotum, dorsal view. 6, left posterior gonapophysis. 7, left fore-leg, distal part of tibia and tarsus. 8, praetarsus and claws of left fore-leg. 9, left gonocoxite. 10, left fore-leg (coxa not. incl.). 11, outer claw of fore-leg. 12, detail of fore-femur showing setation.

Measurements (in mm). — Total length including wings, 5.55; without wings, 5.2; head width including eyes, 0.49; between eyes, 0.34; length antennal segment I, 1.93; II, 1.06; III, 0.46; IV, 0.92; pronotal length, 1.63; pronotal width anteriorly, 0.52, posteriorly, 0.59; fore-wing length, 3.26; hind-wing length, 0.83.

Material studied. — One female, holotype. Type locality: Atimonan, Quezon National Park, Quezon, Luzon, Philippines, leg. J. T. Wiebes, 23.xii.1964, in a bunch of figs (*Ficus minahassae*). The specimen is unilaterally entire, lacking only part of left antennal segment IV and the tarsus of the left hind-leg.

Observations. — This species seems to be the smallest *Stenolemus* ever recognized. At first, I hesitated to put it in this genus because of some aberrant features, viz., the very small size, the small eyes, the reduced, bulging fore-wings, the strongly reduced hind-wings, and the posterior claws of the fore-leg with only three teeth. But the setation of the fore-legs, the two-segmented fore-tarsi, the shape of the pronotum, and, above all, the typical venation of the fore-wings leave no doubt about its generic position, though assignment to a separate subgenus may be justified. But at present I am in agreement with Dr. Wygodzinsky that our knowledge is still too fragmentary to have a clear view on the evolutionary lines within the genus, and that "A critical revision of the genus on a world-wide basis is necessary for an interpretation of these trends" (Wygodzinsky, 1966: 318).

***Stenolemus crassirostris* Stål, 1870 (figs. 13-18)**

Additional description of the holotype, female.

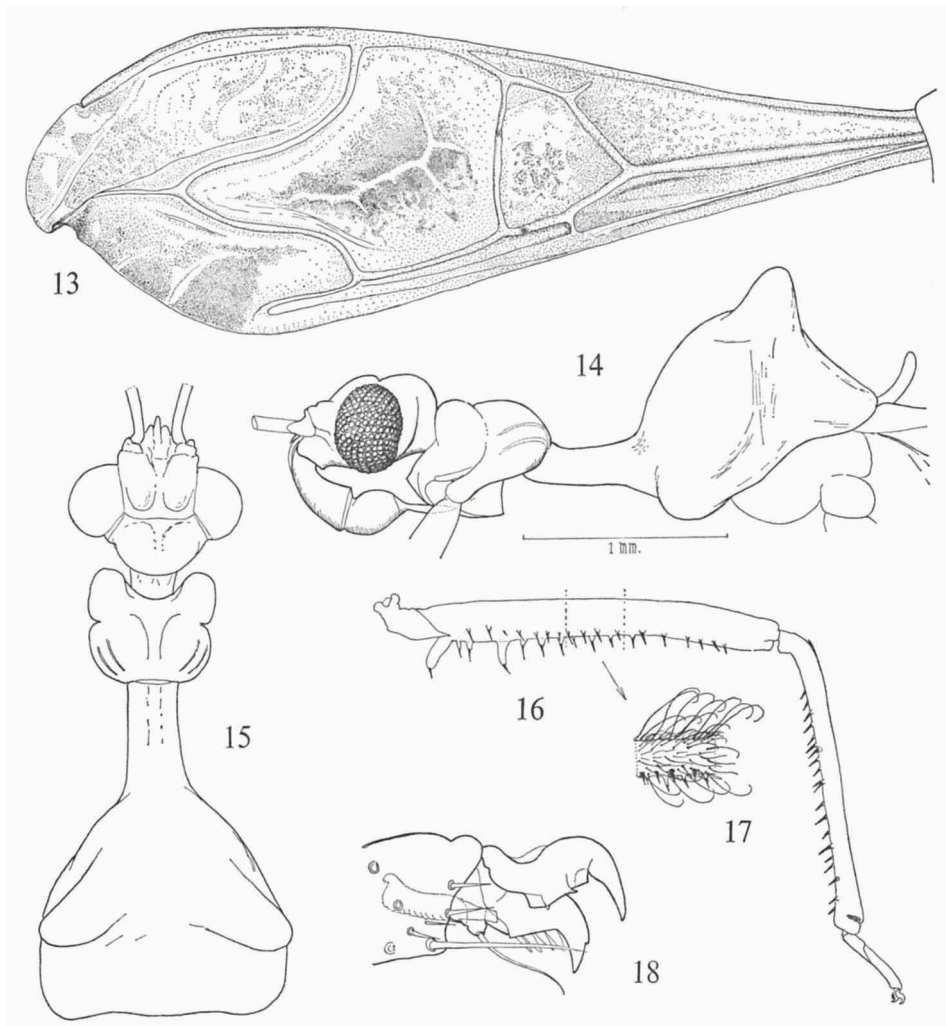
Ground colour light-brown, with white to yellowish-white markings, and dark-brown stippling at the bases of the macrochaetae. Body, antennae, legs and costal margins of the fore-wings densely invested with long macro- and microchaetae.

White or whitish are — a median dorsal stripe on postocular portion of the head; antennal segment I except for three indistinct light-brown annuli, segment II proximally; on the pronotum a median stripe, the anterior corners, 2-2 sublateral longitudinal stripes, the lateral border and 1-1 sublateral stripes on pronotal disc, epicoxal lobes, inner sides of mid- and hind-coxae, markings on fore-wings, spiracles, and some diffuse markings along the sides of the abdomen.

Head (figs. 14, 15) short with a slightly bisinuate dorsal constriction and 1-1 slight swellings anterior of it. Eyes large, protuberant; neck well-defined from head.

Anterior lobe of pronotum (figs. 14, 15) as large as the head; petiole

rather shorter than this lobe, its underside longitudinally concave, posteriorly ending in a slight swelling. Lateral margins of stridulatory furrow strongly extended behind fore-coxae. Scutellar and metanotal horns expanded, slightly curved upwards and hairy. Fore-legs (figs. 16-18). Fore-coxae subequal with petiole of pronotum. Fore-femora with two large and 9-10 smaller capitate spines in the postero-ventral row. Antero-ventral row with about 17 smaller capitate spines, otherwise covered with very long macro- and microchaetae.



Figs. 13-18. *Stenolemus crassirostris* Stål, female, holotype. 13, left fore-wing. 14, head and pronotum, lateral view. 15, head and pronotum, dorsal view. 16, left fore-leg minus coxa. 17, detail of fore-femur showing setation. 18, praetarsus and claws of left fore-leg.

Calamistrum-like structure straight, holding about 17 spiculae. Posterior claw of fore-tarsus (fig. 18) with four teeth.

Fore-wings (fig. 13) long, flat; basal cell small, shorter than wide, its length about 0.13 of length of wing. Discal cell large, its distal boundaries (M, Cu) strongly sinuate and produced to enclose a markedly acute angle. Hind-wings subequal to fore-wings.

Abdomen elongately ovoid with spindle-shaped extended stigmata, the last stigmata very long and somewhat curved.

Measurements (in mm). — Total length including wings, 7.3; head width across eyes, 0.84; between eyes, 0.35; antennal segment lengths I, 1.98, II, 1.57; pronotal length, 2.15; pronotal width anteriorly, 0.66, posteriorly, 1.17.

Note. — Stål stated the sex of this specimen as male, but the abdomen was so shrivelled that determination of the sex was rendered difficult. After a gentle softening of the specimen, the abdomen regained a good deal of its original shape, and clearly showed the female genital structures; furthermore, eggs were found inside. There is no doubt that this specimen is the one Stål described though it is female and not male as he stated. Besides, Bergroth (1912: 348) already remarked: "Signoret, Stål and Horváth in their descriptions of species of this genus have misinterpreted the females as males. The male sex was obviously unknown to these authors".

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