

Type: Zaglyptonotus schwarzi Crawford.

Zaglyptonotus schwarzi new species.

Female: Length about 3 mm.; ovipositor about 3.5 mm. Green with a brassy tinge; antennæ brown, the scape and pedicel green; vertex and dorsum of mesothorax rugoso-punctate on front of mesoscutum and parasidal areas the sculpture aciculate in somewhat diamond shapes as in many species of *Monodontomerus*; wings hyaline; legs green, the tibiae brown, with only a slight greenish tinge, the tarsi testaceous.

Type locality: San Diego, Texas. Type specimen, Cat. No. 18178 U. S. N. M. Described from three females labelled "24.4" (April 24) E. A. Schwarz, collector.

DESCRIPTIONS OF TWO NEW SPECIES OF STREPSIPTERA PARASITIC ON SUGAR CANE INSECTS.

BY W. DWIGHT PIERCE, *Bureau of Entomology.*

Although the order Strepsiptera is composed entirely of parasitic insects, the majority of the species of which the hosts are known attack insects of no great economic importance. For a number of years the entomologists of Hawaii sought in various parts of the world parasites of the sugar cane leaf hoppers, including the Strepsiptera in their searches. They brought to light several interesting species, parasitic on different leaf hoppers (Homoptera).

I am now able to describe two additional species of Halictophagidæ important as enemies of sugar cane leaf hoppers from the two hemispheres. One was obtained in very large numbers by Mr. Thomas H. Jones of Porto Rico at Rio Piedras, as a parasite of the destructive *Stenocranus saccharivorus* Westwood, the other was found by Mr. C. S. Misra, at Pusa, India, as a parasite of the sugar cane fly of India, *Pyrrilla* sp. The sugar cane leaf hopper of Fiji, *Perkinsiela vitiensis* Kirkaldy has already been recorded as commonly parasitized by an Elenchid, *Elenchoides perkinsi* Pierce.

The genus *Stenocranus* belongs to the Fulgorid family Delphacidæ, and the genus *Pyrrilla* belongs to the Fulgorid family Lophopidæ.

Family Halictophagidæ.

SUBFAMILY ANTHERICOMMINÆ.

STENOCRANOPHILUS new genus.

Male: Head excavated behind, seen from above consisting of a narrow arcuate rim supporting the eyes and produced considerably in front of these

to form the tip of the sulcate frontal projection, at the sides of which the antennæ are inserted. Eyes very large, convex, reaching and touching the base of the clytra. Mandibles very short, broad and blunt, not reaching within their own length of each other. Maxillæ a little longer, two jointed, cylindrical, the first joint almost twice as thick as the second, and neither quite as long as the mandibles. Antennæ elongate, seven jointed, flattened foliaceous, with large sensory pits; first two joints simple, third to sixth moderately elongate, each produced just before the attachment of the succeeding joint into a broad flattened lamina not much more than twice as long as the main stem; seventh joint also produced, laminate. Pronotum subquadrate, cut off at sides by head. Mesonotum band-like, also included within the cavity of the head. Elytra elongate. Metanotum with præscutum elongate, convex at base, sides roundly approximate toward apex, where they almost meet; scuti narrow, elongate, only a little longer than præscutum; scutellum broad, quadrate, basally convex, apically bisinuate, not much longer than postlumbium; postlumbium at least two-thirds as long as wide; postscutellum long, broad; femoralia reaching to middle of postscutellum. Wings with radial vein meeting the costal margin beyond the middle, a small detached cloudy vein behind the tip of the radius, medius strong, with a long anterior cloudy branch, cubitus missing, first anal merely a cloudy vein, second anal strong, third anal missing. Tarsi three-jointed, the first joint of different shape from the following; claws absent. Oedeagus strongly bent; the under side being twice bent and the upper thrice; the last bend being a very strong reflexion at apical fourth; apex very acute.

The generic name is derived from *Stenocranus* (the host genus) + $\phi\acute{\iota}\lambda\omicron\varsigma$ (loving), signifying a parasite of *Stenocranus*.

Type of genus, *quadratus* n. sp.

***Stenocranophilus quadratus* new species.**

Described from one type and five paratype males bred by T. H. Jones, October 19, 1912 from two female and four nymphal *Stenocranus saccharivorus* Westwood collected October 14, and 16, 1912 from sugarcane at Rio Piedras, Porto Rico, and bearing the Porto Rico Sugar Planter's Association accession number "847-1912." One paratype was returned to the association. The specific name is intended to draw attention to the quadrate form of the pronotum and the scutellum. This form of scutellum has not heretofore been found in the Halictophagidæ.

Male: Length 0.9 mm., wing expanse 2 mm. Color golden brown. Very few points not mentioned in the generic description remain to be noted. The first tarsal joint is broad, apically broadest and somewhat acute on outer angle, the point of attachment of the second is subapical at the inner angle; the point of attachment on the second joint is dorsal and very near

its base, this joint and the third are both slender at base, gradually enlarged, pulvillate beneath, apically truncate. The antennæ are quite long, the stem portions of the joints being longer than usual. The last joint reaches as far back as the scutellum. The length of the præscutum and scutellum about equals that of the postlumbium and postscutellum.

Female: Cephalothorax about 0.2 mm. long, golden yellow, not much darker behind the opening of the brood canal; almost one quarter longer than wide; sides constricted at base, parallel at middle, angulate and convergent from anterior third, sinuate at apex. Mandibles large, obtuse with outer edges marginal; front convex extending beyond mandibles and separating them by a little more than their width. Opening of brood canal broad, trapezoidal. Spiracles ventral, close to margin.

Type, four paratype males, and allotype female in U. S. Nat. Mus., Cat. No. 18813.

SUBFAMILY HALICTOPHAGINÆ.

PYRILLOXENOS new genus.

Male: Head not conspicuously excavated behind. Eyes large, convex with very large facets. Mandibles short, triangular, glabrous. Antennæ short, seven-jointed, flattened foliaceous, with large sensory pits; first two joints simple, the second shorter; the remaining five joints crowded, each broadened laterally in a broad lamina, the apices of which are about even with each other, the entire antennæ not longer than width of head.

Pronotum very short, transverse bandlike. Mesonotum a little longer, also bandlike. Elytra pedunculate, spatulate, sensitive, pubescent. Metanotum with præscutum rounded, keystone-shape, truncate, sinuate at apex, longer than scutellum and postlumbium together; scuti oblique, considerably surpassing præscutum at outer angles and supporting it by a tiny projection at inner angles; scutellum broad, irregular in outline, narrower at base than præscutum, broadening in a concave line behind scuti, with anterior angles rounded, almost rectangular, and posterior angles diagonally produced as quadrate peduncles, apex otherwise truncate; postlumbium short, transverse, fitting in between and scarcely surpassing the posterior peduncles of the scutellum; postscutellum large, convex, broadly rounded.

Tarsi three-jointed, the first joint mucronate; claws absent. Eighth ventral segment acutely produced beneath ninth. Anal segment small, flaplike. Oedeagus strongly bent, broad near base, rectangularly bent near apex, apical process slender and very acute.

The generic name is derived from *Pyrilla* (the host genus) + *Xenos* (the typical Strepsipterous genus), signifying a Strepsipterous parasite of *Pyrilla*.

Type of genus, *compactus* n. sp.

***Pyrilloxenos compactus* new species.**

Described from a type female, and allotype male, and two paratype females from Pusa, Behar, India, collected by C. S. Misra.

The material was collected in August, 1907, March 15, 1913 and May 23, 1914. The host is an undetermined species of *Pyrilla*. The specimens collected in August, 1907 consist of allotype male, male pupa cephalotheca, and three paratype females with triungulinids. This material is the property of the Entomological Section, Agricultural Research Institute, Pusa. The type is deposited in the United States National Museum, and a paratype female is in the author's collection. The author is indebted to Mr. T. Bainbridge Fletcher, Imperial Entomologist, for the material. The specific name is intended to draw attention to the compact appearance of the antennæ.

Male: Length 1.5 mm. The tarsi are very small. The anterior tibiæ are very robust and shorter than on the other legs. The antennæ are much more compact than is usual in this family. The mandibles can not meet. The remainder of the description is to be drawn from the generic description. The specimen was unfortunately boiled in caustic potash and is therefore very hard to study.

Female: Cephalothorax, golden yellow to brownish, broader than long; constricted behind spiracles; sides quite evenly rounded; apex sinuate. Mandibles obtuse, separated by almost three times their width. Front convex. Spiracles just touching margin.

Type in U. S. Nat. Mus.—Cat. No. 18814.

**A NEW TACHINID PARASITE OF DIAPHEROMERA
FEMORATA SAY.**

BY W. R. WALTON, *Bureau of Entomology.*

Two species of Tachinidæ parasitic upon the Phasmidæ are at present known to science. The first species was described by Pantel¹ in 1898 as having been reared from *Leptynia hispanica* Bal. in Europe. The second has been recently described by Mr. C. H. T. Townsend² reared by the brothers Severin from *Diapheromera femorata* Say. in Wisconsin. A third parasite of this same host is herewith described. It is generically closely related to *Hallidaya* Egger, but is apparently distinct because of the position of the antennæ above the center of the eye and of the greater

¹ La Cellule XV-290.

² Annals Ent. Soc. Am. Vol. II, p. 243.