ANOPHELES ACANTHOTORYNUS, A NEW SPECIES OF THE SUBGENUS STETHOMYIA FROM PERU.

(Diptera, Culicidae.)

W. H. W. Komp, Gorgas Memorial Laboratory, Ancon, Canal Zone

During April, 1931, Mr. Raymond C. Shannon, of the International Health Division of the Rockefeller Foundation, made an Anopheles survey around Iquitos, Peru, as part of a survey of the Amazon Valley (1). He reported collecting Anopheles (Stethomyia) nimbus Theobald and thomasi Shannon (2) from this locality, stating that nimbus was abundant near San Juan, and that four males of thomasi were collected in the region. Through the courtesy of Dr. E. A. Chapin and Dr. Alan Stone, of the U. S. National Museum, the writer was permitted to examine the single male Stethomyia from this region, which was deposited by Shannon in the U. S. National Museum. This male proves to be of a new species, allied to nimbus and thomasi, but quite distinct on the characters of the terminalia, particularly those of the harpago (claspette lobes). The formal description of this species follows.

Anopheles (Stethomyia) acanthotorynus, n. sp.

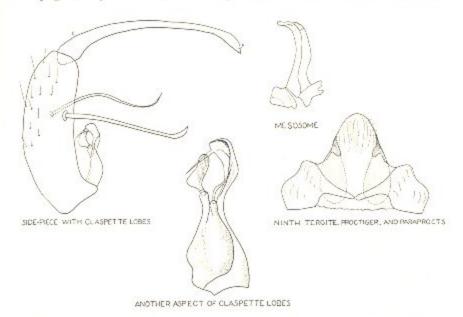
(Fig. 1)

Female.—No material of this sex is available for description. Shannon deposited a large number of female specimens of Stethomyia collected near Iquitos, Peru, in the U. S. National Museum. Specimens of the females of A. acanthotorynus n. sp. may be among this material. As all the species of the subgenus are very much alike, it is impossible to distinguish the females of the new species, if they are present in the collection. Presumably the female has the distinguishing characters of the subgenus, a general blackish appearance, slender form, long black legs, scaleless thorax and abdomen, and the narrow silvery-white longitudinal stripe in the dark mesonotal integument, extending from neck to scutellum. It may also have the whitish edging of the mesonotum, which is pronounced in nimbus, but much less evident in kompi.

Male.—The single male type is in poor condition, lacking three legs. It is much like the males of nimbus, having the characteristic silvery

mesonotal stripe, and whitish edging of the mesonotum.

Male terminalia: Style (clasper) very long, evenly curved, slender, longer than the coxite, with small terminal spine. Coxite (sidepiece) slender, somewhat laterally compressed, without scales. A single long parabasal spine, with hooked tip, inserted slightly distad of middle of coxite, from a chitinized ring. A very long, slender, sinuate internal spine on ventral aspect, set at about the same level as the parabasal spine. Apodeme of coxite very large, nearly filling the basal aperture. Harpago (claspette lobes) consisting of two lobes, the outer (dorsal) lobe



Pig. 1. Anopheles (Stethomyla) acantholorynus, n. sp. Male terminalia.

shorter than the inner, columnar, bearing at its tip a flat blade-like leaf, in outline somewhat like a baby's sock. Inner (ventral) lobe longer, columnar, elbowed dorsally beyond middle, the distal portion apparently composed of two or more closely appressed plates, forming an elongated, narrow, spoon-shaped tip. Near the apex, from the dorso-lateral part, arises a long, slender, curved process, directed laterad towards the flat leaf of the outer lobe. This spine-like process is very characteristic of the species. Between the outer and inner lobes, on the mesial aspect of the harpago, is a long, slender, sinuate spine, from a low conical pedicel, extending to the middle of the spoon-shaped portion of the inner lobe. Mesosome (phallosome) much like that of A. nimbus, the shaft a V-shaped trough, not chitinized dorsally; base narrow, basal lateral arms not developed. In lateral view, the mesosome is nearly L-shaped, the tip bent over at right angle to the shaft. The tip is

nearly flat, with a circular opening posteriorly; at the junction of the shaft with the tip are two small triangular chitinized plates, representing the lateral arms of the mesosome, which are so prominent in the mesosome of A. kompi. Anal lobe (proctiger) moderate, conical, villose; paraprocts well developed, basally expanded, ventrally with paired chitinized triangular processes with rounded tips, directed ventrally towards the claspette lobes. Ninth tergites narrow towards mid-line, widely expanded towards sides, with no processes.

Type, one male, the terminalia mounted in a Cobb mount.
(U. S. N. M. No. 52020)

Type locality, Iquitos, Peru, April, 1931 (R. C. Shannon,

collector).

REFERENCES

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PREPARATION OF SCIENTIFIC AND TECHNICAL PAPERS, by Trelease and Yule. Third Edition, pp. 1-125, 1936. Published by The Williams and Wilkins Company, Mount Royal and Guilford Aves., Baltimore, Md. Price, linen bound, \$1.50.

In the September issue of the Annals, 1934, we gave an extended notice of the previous edition of this very useful book. At that time we had reviewed the standard books of this type and had decided that "Trelease and Yule" was the most useful of all we had studied. This, the third edition, is packed with the items a writer of scientific articles wishes as a guide to better writing. It is a thorough revision and shaking down of an already very useful book.

This is the one book we recommend without reservations to each and every productive biologist. We can go farther and recommend it to the unproductive ones who will enjoy it as by its study they will be better able to criticize the work of their productive brothers. It is packed from cover to cover with those, usually elusive, items in good exposition which tend to slip away from the writer of scientific papers. Here they are assembled and arranged in such a system as to be easily found. This is the one book every research man should "know by heart." It costs only one dollar and fifty cents, the price of three movies.

—C. H. K.