NEW SPECIES OF HYDROPTILIDAE (TRICHOPTERA)

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During a survey of light trap collections from Florida several undescribed species of Trichoptera were encountered. The following four descriptions are based on the male genitalia. Two of the species are in the genus Hydroptila, and one each in the genera Neotrichia and Ochrotrichia. Holotypes and paratypes will be placed in the Illinois Natural History Survey Museum, Urbana, Illinois.

Appreciation is expressed to Dr. Maurice Provost, Dr. and Mrs. Robert Harrington, Miss Lucille Logan of the Florida State Board of Health and Mrs. M. Olson Blickle whose cooperation made it possible to complete the light trap survey.

Hydroptila lloganae, n. sp.

Male: Length from front of head to tip of wings 2.5 mm. The apico-mesal process of the seventh sternite short and pointed. Eighth segment with very dense, long hair concealing the genitalia. Genitalia (Fig. 1). Tenth tergite (Fig. 1D) composed of three lobes; dorsal lobe appearing broad and flat, lateral ones ear-shaped. Claspers broad at base, tapering towards apex; a row of hairs on the lateral margin; two small protuberances laterally near the apex. Aedeagus (Fig. 1B) 0.6 mm. long; basal part twice as long as apical; spiral small; apical part with a transparent, alate-like structure on one side.

In ventral view (Fig. 1C) this species resembles *H. latosa* Ross: however, the internal process of the ninth segment is shorter and the claspers do not have lateral processes on the base.

Holotype: Chattahoochee, Florida, 21 Apr. 1957. Paratypes: Chattahoochee, Florida, one, 15 Mar. 1957; one, 29 Mar. 1957; two, 19 Apr. 1957; one, 23 Apr. 1957; three, 3 May 1957; three, 21 May 1957; one, 13 June 1958. Goose Prairie, Florida, one, 9 May 1958. Highlands Hammock State Park, Florida, five, 22 Mar. 1958; one, 25 Apr. 1958; one, 9 May 1958; one, 13 June 1958; one, 13 Sept. 1957; one, 15 Sept. 1957; one, 25 Sept. 1957; two, 15 Oct. 1957; one, 25 Oct. 1957. Temple Terrace, Florida,

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one, 11 Apr. 1958; one, 29 Apr. 1958; one, 13 June 1958; one, 27 Dec. 1957.

Hydroptila molsonae, n. sp.

Male: Length from front of head to tip of wings 3 mm. The apico-mesal process of the seventh sternite short and pointed. The apico-lateral margin of the eighth tergite with two long spines on one specimen, three in the other; eighth sternite and tergite deeply incised; ventral and apical part of segment densely clothed with long hairs. Genitalia (Fig. 2): in lateral aspect (Fig. 2A) claspers broad and heavy, tapering to the apex which is bent down sharply; internal part of claspers large and projecting dorsally; claspers in ventral aspect (Fig. 2C) broad, parallel sided. Tenth tergite small, upcurved at apex; lateral to the tenth tergite two long upcurved arms, one on either side; these arms appearing sinuate in ventral view. Aedeagus with a sharp bend at apex; basal part slender for one-third its length then gradually widening.

This is a striking and easily recognized species due to the long spines on the eighth tergite. *H. lonchera* Blickle and Morse also has similar spines on the apico-lateral margin of the eighth tergite. The long upcurved arms (Fig. 2A), corresponding to the parameres of A. Nielsen, are also distinctive.

Holotype: Highlands Hammock State Park, Highlands Co., Florida, 25 Sept. 1958. Paratype: same date as holotype.

Neotrichia elerobi, n. sp.

Male: Length from front of head to tip of wings 2 mm. Eighth segment with a heavy brush of spines apically. Genitalia (Fig. 3). Tenth tergite membraneous, dorso-apical part projecting in lateral view. Two long pointed lobes below the tenth tergite; these lobes, when the specimen was placed in cellulose mounting media for observation, drew together below the aedeagus until their mesal margins touched; in alcohol the lobes spread apart (Fig. 3C). Claspers small and hooklike, appearing smooth in ventral view and toothed in lateral view. Aedeagus with long spiral process and an irregular, expanded membranous area around the apex.

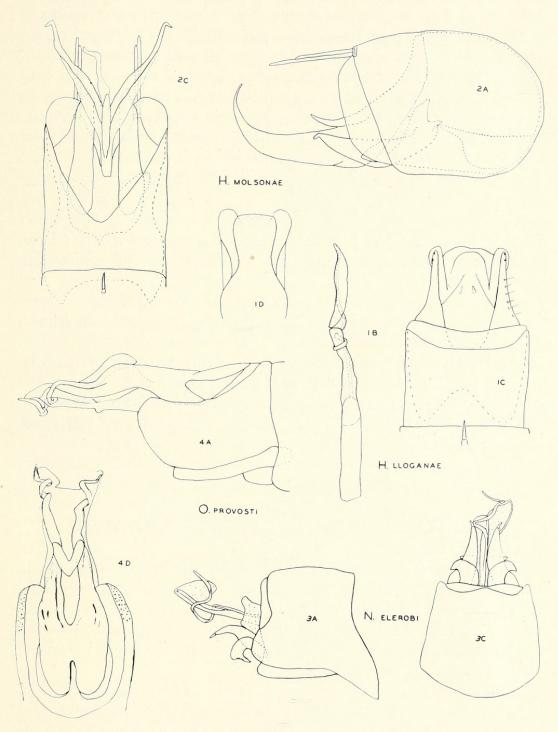
This species is closely related to *N. vibrans* Ross: however, it differs in the shape of the aedeagus and in the long pointed lobes beneath the tenth tergite.

Holotype: Laurel Hill, Florida, 30 Apr. 1957.

Ochrotrichia provosti, n. sp.

Male: Length from front of head to wing tip 3 mm. Tenth tergite (Fig. 4D) with two long sclerotized processes, one on each

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Male genitalia of *Hydroptila*, *Neotrichia*, *Ochrotrichia*: A, lateral view; B, aedeagus; C, ventral view; D, dorsal view.

side, of approximately equal length; these processes convoluted at apex; convolutions rotating in the same direction but differing in the number of turns; basally the sclerotized processes unite into two ovoid-like masses; in lateral view base of processes divided into upper and lower sclerotized parts; apex of convolutions connected by a sclerotized structure which extends basally to the ninth segment; this structure appearing as a thin sheet in dorsal view.

This species differs from others in the genus in that it possesses two sclerotized rods or processes on the tenth tergite.

Holotype: Temple Terrace, Florida, 12 July 1957.

LITERATURE CITED

- Blickle, R. L. and W. J. Morse. 1954. New species of Hydroptilidae (Trichopetera). Bul. Brooklyn Ent. Soc. 49(5): 121–27.
- Neilson, A. 1956. Trichoptera, pp. 88–96, in Tuxen, Taxonomists glossary of genitalia in insects. Ejnar Munksgaard, Copenhagen.
- Ross, H. H. 1944. The caddisflies or Trichoptera of Illinois. Ill. Nat. Hist. Surv. Bul. 23(1): 1–326.
- Trichoptera, with synoptic notes. Trans. Amer. Ent. Soc. 73: 125–168.

THE NEW CODE A LETTER FROM PROFESSOR BRADLEY

Dear Dr. Hanson:

It will interest your readers to know that the long-awaited newly revised International Code of Zoological Nomenclature is scheduled for publication the first week of November, 1961, and may be obtained, post free, for one pound sterling upon application to the Publication Office, The International Trust for Zoological Nomenclature, 19 Belgrave Square, London, S.W. 1.

This new revision was commenced at the Paris Congress in 1948, and has since then had incorporated in it the principles laid down in the Opinions of the International Commission on Zoological Nomenclature during the preceding half century, which had come to compromise a formidable body of case-law. It was the



Blickle, R. L. 1961. "New species of Hydroptilidae (Trichoptera)." *Bulletin of the Brooklyn Entomological Society* 56, 131–134.

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