

AN ANNOTATED CHECKLIST OF THE CADDISFLIES
(TRICHOPTERA) OF MISSISSIPPI AND
SOUTHEASTERN LOUISIANA. PART II:
RHYACOPHILOIDEA

STEVEN C. HARRIS, PAUL K. LAGO, AND RALPH W. HOLZENTHAL¹

(SCH) Environmental Division, Geological Survey of Alabama and Department of Biology, University of Alabama, University, Alabama 35486; (PKL) Department of Biology, University of Mississippi, University, Mississippi 38677; (RWH) Department of Entomology, Fisheries and Wildlife, Clemson University, Clemson, South Carolina 29631.

Abstract.—Distributional records for 30 species of caddisflies in the superfamily Rhyacophiloidea (Glossosomatidae, Hydroptilidae, Rhyacophilidae) are presented, and the seasonal occurrence of each is indicated. Annotations include information on species habitat and relative abundance. All 26 of the species reported from Mississippi are new state records, and all but eight species are newly recorded from Louisiana.

This paper is the second of a three part series dealing with the Trichoptera of Mississippi and southeastern Louisiana. Representatives of all three families in the superfamily Rhyacophiloidea were collected during the surveys, but only members of the Hydroptilidae were common and represented by more than a single species. This superfamily was more poorly represented than the Hydropsychoidea of Part I and the Limnephiloidea of Part III in the study area.

LIST OF SPECIES

The Rhyacophiloidea were represented in the study area by 30 species in eight genera and three families. Of the reported 30 species, 28 belong to the Hydroptilidae and one each to the Rhyacophilidae and Glossosomatidae. Only eight species, all hydroptilids, were previously reported from the study area: *Hydroptila waubesiana* Betten, *Neotrichia minutisimella* (Chambers), *Oxyethira glasa* Ross, *O. verna* Ross, and *O. zeronia* Ross (as *O. walteri*)

¹ Address reprint requests to junior author (PKL).

by Denning (1947a); *Orthotrichia cristata* Morton by Denning (1947b); *Oxyethira janella* Denning by Denning (1948); and *Orthotrichia aegerfasciella* (Chambers) (as *O. americana* Banks) by Kingsolver and Ross (1961).

Collecting sites and seasonal occurrence designations in the following list follow that outlined in Part I. Since most of these species, particularly within the Hydroptilidae, have poorly known distributions, those with significant range extensions are indicated.

Glossosomatidae

Protoptila lega Ross. Sites 35, 57, 71, 80, 81. 23 May–13 Oct. Locally common. Collected along fast, clear streams with sand-gravel substrates. At several of the localities aquatic mosses and algae were encrusted on the rocks of the rapids.

Hydroptilidae

Hydroptila armata Ross. Sites 24, 60. 27 March, 8 May. Uncommon. Collected near swift, sand-bottom streams.

Hydroptila beneri Ross. Site 127. 20 March. A single specimen was collected along a small blackwater stream.

Hydroptila grandiosa Ross. Sites 60, 61. 7 Feb., 11 April. Rare. Collected along small, spring-fed streams. Primarily known from the northeastern and northcentral United States (Blickle, 1979).

Hydroptila gunda Milne. Sites 57, 61, 67. 11 April, 20 June, 1 Aug. Uncommon. Collected along Coastal Plain (CP) streams with moderately fast flow and sand-gravel bottoms.

Hydroptila hamata Morton. Sites 34, 60, 125. 30 Jan., 7 Feb., 1 April, 10 May. Occasional but probably widespread in study area. Collected along a variety of streams.

Hydroptila molsonae Blickle. Sites 99, 127. 20 March, 22 May. Uncommon. Collected along CP blackwater streams with abundant vegetation. Only known previously from the type-locality in Florida (Blickle, 1962).

Hydroptila n. sp. Sites 2, 38, 67, 71, 80, 81. 8 Sept., 1 Aug.–13 Oct. Common. Widely distributed in study area, usually occurring near clear, cool, fast-flowing streams. This species is being described by the junior author (RWH).

Hydroptila novicola Blickle and Morse. Site 97. 7 June. Uncommon. Collected near a small, sand-bottom blackwater stream. Beds of *Vallisneria* were abundant in stream. Primarily known from the northeastern United States (Blickle, 1979).

Hydroptila quinola Ross. Sites 24, 37, 60, 83, 86, 97, 103. 7 Feb., 7–28 May, 10 June. Common. Widely distributed in study area occurring along a variety of streams.

- Hydroptila remita* Blickle and Morse. Sites 37, 61, 120, 127. 11 April, 7–31 May, 17 Oct. Occasional. Collected near slow- to moderate-flowing streams primarily on the CP.
- Hydroptila strepha* Ross. Site 97. 7 June. Uncommon. Collected with *H. novicola*. Previously known only from northeastern United States (Blickle, 1979).
- Hydroptila tusculum* Ross. Sites 83, 122, 129. 9 April, 5–10 June. Uncommon. Associated with small, spring-fed blackwater streams. Previously only known from the type locality in Tennessee (Ross, 1947).
- Hydroptila waubesiana* Betten. Sites 51, 79, 86. 23 May, 9 June, 23 June. Uncommon. This widespread eastern species was collected near clear, fast-flowing streams with sand-gravel substrates.
- Mayatrichia ayama* Mosely. Sites 95, 97. 7 June. Locally common. This widespread North American species was collected near small, moderately flowing blackwater streams with sand substrates.
- Neotrichia minutisimella* (Chambers). Site 40. 23 Aug., 10 Oct. Locally common. Collected along the Mississippi River.
- Neotrichia vibrans* Ross. Sites 71, 95. 7 June, 30 Aug. Locally common. Collected along small blackwater streams with moderate flow and sand-gravel bottoms.
- Ochrotrichia tarsalis* (Hagen). Sites 2, 57, 67, 116. 20 June–20 Oct. Common. Collected near clear, fast-flowing streams with sand-gravel bottoms. This species as well as the two preceding are fairly widespread in the eastern United States (Blickle, 1979).
- Orthotrichia aegerfasciella* (Chambers). Sites 2, 16, 24, 25, 37, 40, 41, 49, 66, 71, 103, 126, 129, 131. 25 April–5 June, 16 July, 30 Aug–10 Oct. Common. Widely distributed in study area associated with a variety of streams and lakes.
- Orthotrichia cristata* Morton. Sites 31, 66. 28 May, 31 Aug. Uncommon. Collected near spring-fed, sand-bottom lakes. As with *O. aegerfasciella*, this is a widespread eastern species (Blickle, 1979).
- Orthotrichia curta* Kingsolver and Ross. Site 129. 5 June. Rare. Collected near a small, spring-fed blackwater stream with little flow. Previously only known from the type-locality in Florida (Blickle, 1962).
- Orthotrichia dentata* Kingsolver and Ross. Site 103. 26 May. A single specimen was collected along a large, swift-flowing blackwater stream of the CP. Previously only known from the type-locality in Florida (Blickle, 1962).
- Oxyethira glasa* (Ross). Sites 86, 99, 102, 129. 22 May–5 June. Locally common. Collected primarily along small, slow-moving blackwater streams of the lower CP.
- Oxyethira janella* Denning. Sites 71, 106, 129. 26 May, 5 June, 30 Aug.

Locally common. Collected from the CP near blackwater streams of various sizes and flow regimes.

Oxyethira novasota Ross. Sites 28, 37, 61, 83, 86, 129. 11 April, 7–23 May, 5–10 June. Locally common. Widespread in study area occurring along a variety of streams.

Oxyethira pallida (Banks). Sites 25, 106, 129. 6 May, 26 May, 5 June. Locally common. This widespread North American species was collected from both clear and blackwater streams of varying size and flow regimes.

Oxyethira sininsigne Kelley. Site 129. 5 June. Rare. Collected along a small, spring-fed blackwater stream with little flow.

Oxyethira verna Ross. Site 132. 14 May. Locally common.

Oxyethira zeronia Ross. Sites 31, 99, 102. 22–24 May, 31 Aug. Locally common. This widespread eastern species was associated with a variety of aquatic habitats including a lake, a marsh, and a swift-flowing, sand-bottom stream.

Rhyacophilidae

Rhyacophila glaberrima Ulmer. Site 2. 8 Sept. Rare. This primarily northern species was collected along a small, fast-flowing stream with rocky bottom in the Tennessee River Hills (TRH) region.

ACKNOWLEDGMENTS

We thank Steve Hamilton of Clemson University for his review of the paper. We also thank Irene Thompson for her typing and editing of the manuscript.

LITERATURE CITED

- Blickle, R. L. 1962. Hydroptilidae (Trichoptera) of Florida. Fla. Entomol. 45: 153–155.
- . 1979. Hydroptilidae (Trichoptera) of America north of Mexico. N. H. Agric. Exp. Stn. Bull. 509: 1–97.
- Denning, D. G. 1947a. Hydroptilidae (Trichoptera) from southern United States. Can. Entomol. 79: 12–20.
- . 1947b. New species and records of North American Hydroptilidae (Trichoptera). Psyche (Camb. Mass.) 54: 170–177.
- . 1948. New species of Trichoptera. Ann. Entomol. Soc. Am. 41: 397–401.
- Kingsolver, J. M. and H. H. Ross. 1961. New species of nearctic *Orthotrichia* (Hydroptilidae, Trichoptera). Ill. St. Acad. Sci. Trans. 54: 28–33.
- Ross, H. H. 1947. Descriptions and records of North American Trichoptera, with synoptic notes. Trans. Am. Entomol. Soc. 73: 125–168.