- partitioning by four Gelis spp. (Hymenoptera: Ichneumonidae) hyperparasites of the primary gypsy moth parasitoid Cotesia melanoscela (Hymenoptera: Braconidae). Ann. Entomol. Soc. Am. 88: 427-433.
- Wieber, A. M., S. P. Cook, R. E. Webb, R. C. Reardon and K. M. Tatman. 1996. Similarity of the hyperparasitoid communities attacking two strains of a primary gypsy moth parasitoid, Cotesia melanoscela (Ratzeburg) (Hymenoptera: Braconidae). Ann. Entomol. Soc. Am. 89: 47-52.
- Wieber, A. M., R. E. Webb, R. L. Ridgway, K. W. Thorpe, R. C. Reardon, D. M. Kolodny-Hirsch and K. M. Tatman, 1995b. Effect of seasonal placement of Cotesia melanoscela (Hymenoptera: Braconidae) on its potential for effective augmentative release against Lymantria dispar (Lepidoptera: Lymantriidae). Entomophaga 40: 281-292.

SCIENTIFIC NOTE:

ADDITIONAL ILLINOIS AND WISCONSIN MAYFLY RECORDS, INCLUDING HOMOEONEURIA AMMOPHILA (EPHEMEROPTERA: OLIGONEURIIDAE) IN ILLINOIS.¹

T. H. Klubertanz², C. R. Hess

Randolph and McCafferty (1998) summarized the literature and presented new records of mayflies from Wisconsin, Illinois, and four other Midwest states. In 1999 and 2000, streams in northern Illinois and southern Wisconsin were sampled to locate species suspected but not yet found in one or both of these states. These efforts resulted in 3 new Illinois and 4 new Wisconsin records. All specimens were collected by the authors. Newly reported materials are deposited at the Purdue Entomological Research Collection, West Lafayette, IN (PERC) and in the collection of the first author (THK).

New Wisconsin records include *Procloeon irrubrum* Lowen and Flannagan [larva, Turtle Creek, bridge on Smith Road between Shopiere and Tiffany, Rock Co., WI, VII-27-1999, PERC]; *P. rubropictum* (McDunnough) [2 larvae, Turtle Creek, bridge on Smith Road between Shopiere and Tiffany, Rock Co., WI, VII-27-1999, PERC]; and *Timpanoga lita* (Burks) [3 larvae, Sugar River, 100 yds N of Hwy 11 bridge, 1 mi SW of Brodhead, Green Co., WI, V-26-1999, PERC; larva, Sugar River, Albany, Green Co., WI, V-26-1999, THK].

New Illinois records include Centroptilum bifurcatum McDunnough [2 larvae, Sugar River, Sugar River Forest Preserve, Winnebago Co., IL, V-22-2000, PERC], P. irrubrum [larva, Sugar River, Sugar River Forest Preserve, Winnebago Co., IL, VII-5-1999, PERC] and Pseudocloeon ephippiatum (Traver) [larva, Sugar River, bridge on Yale Bridge Road, 3 mi NW of Shirland, Winnebago Co., IL, VII-9-1999, PERC].

In addition, we report the first recent record of *Homoeoneuria ammophila* (Spieth) from Illinois [19 larvae, 1 subimago, Sugar River, bridge on Yale Bridge Road, 3 mi NW of Shirland, Winnebago Co., IL, IX-24-1999, PERC and THK]. Lillie (1992) also found this species in the Sugar River, but about 6 mi upstream in Wisconsin. *H. ammophila* is known from a number of other Midwest states, including Indiana, Iowa, and Kansas (McCafferty and Hubbard 1998; Pescador and Peters 1980; Randolph and McCafferty 1998). The only published records from Illinois are of specimens taken from the Rock River in 1925 (Burks 1953). We collected larvae from a sand bar in the center of the river channel using a D-framed aquatic net, occasionally yielding several larvae per sample.

(continued on page 284)

- Beal, R. S., Jr. 1956. Synopsis of the economic species of *Trogoderma* occurring in the United States with description of a new species (Coleoptera: Dermestidae). Ann. Entomol. Soc. Amer. 49:559-556.
- Campbell, J. M., M. J. Sarazin, and D. B. Lyons. 1989. Canadian beetles (Coleoptera) injurious to crops, ornamentals, stored products, and buildings. Agric. Can. Publ. 1826. Ottawa. 491 pp.
- Downie, N. M. and R. H. Arnett, Jr. 1996. The beetles of northeastern North America. Volume 2: Polyphaga: Series Bostrichiforma through Curculionoidea. Sandhill Crane Press, Gainesville, Fla. 891-1721.
- Hatch, M. H. 1962. The beetles of the Pacific Northwest. Part III: Pselaphidae and Diversicornia I. Univ. Wash. Press, Seattle, Wash. 268 pp.
- Hinton, H. E. 1945. A monograph of the beetles associated with stored products. Vol. I. Harrold and Sons, Norwich, England. 443 pp.

(continued from page 254)

ACKNOWLEDGMENTS

We thank N. Wiersema for assistance in identifying the Centroptilum bifurcatum larvae from Illinois. We also thank B. Kondratieff and M. Petro for reviewing the manuscript prior to submission.

LITERATURE CITED

- Burks, B. D. 1953. The mayflies, or Ephemeroptera, of Illinois. Bull. Ill. Nat. Hist. Surv. 25: 1-216.
- Lillie, R. A. 1992. New and additional distribution records for several rare mayflies (Ephemeroptera) in Wisconsin. Gr. Lakes Entomol. 25(2): 135-136.
- McCafferty, W. P. and T. Hubbard. 1998. Additions to Iowa mayflies (Ephemeroptera). Entomol. News 109(4): 268.
- Pescador, M. and W. L. Peters. 1980. A revision of the genus Homoeoneuria (Ephemeroptera: Oligoneuriidae). Trans. Amer. Entomol. Soc. 106: 357-393.
- Randolph, R. P. and W. P. McCafferty. 1998. Diversity and distribution of the mayflies (Ephemeroptera) of Illinois, Indiana, Kentucky, Michigan, Ohio, and Wisconsin. Ohio Biol. Surv. Bull. New Ser. 13(1): 1-188.

Received July 29, 2000. Accepted August 30, 2000.

² Department of Biological Sciences, University of Wisconsin - Rock County, 2909 Kellogg Ave., Janesville, WI 53546.