## Scientific Note

## NEW SYNONYM OF APOBAETIS ETOWAH (TRAVER) (EPHEMEROPTERA: BAETIDAE)

Larvae of a minute and infrequently collected mayfly Apobaetis indeprensus Day were recently discovered from South Carolina. Because this is the first known representation of the species east of Missouri, and because A. etowah (Traver), one of two other North American species that have been assigned to Apobaetis Day, has been known only from Georgia and only in the adult stage (Traver, J. R. 1935. Part II, Systematic. Pp. 237-739. In The Biology of Mayflies by Needham, J. G., J. R. Traver, and Y.-C. Hsu. Comstock Publ. Co., Inc., Ithaca), it appeared possible that the two names were equivalent. To resolve this question, we obtained and comparatively examined for the first time adult type material of A. etowah and a series of topotypical adults from the California type locality of A. indeprensus. No consistent differences could be found in males and females, including the male genitalia, which in the type series of A. etowah varied from the slightly rounded form of the dorsal penes cover associated with A. indeprensus (see fig. 359, Edmunds, G. F., S. L. Jensen, and L. Berner, Mayflies of North and Central America, Univ. Minn. Press, Minneapolis) to the various truncate forms of the dorsal penes cover, which were shown in fig. 168 of A. etowah by Traver (1935. Part II, Systematic. Pp. 237-739. In The Biology of Mayflies by Needham, J. G., J. R. Traver, and Y.-C. Hsu. Comstock Publ. Co., Inc., Ithaca) and fig. 13 of A. indeprensus in the original description of that species (Day, W. C. 1955, Pan-Pac, Entm., 31: 121–137).

As a result of this study, *A. indeprensus* is placed as a subjective junior synonym of *A. etowah* (Traver) 1935 [= *A. indeprensus* Day 1955, NEW SYNONYM]. *Apobaetis etowah* is thus currently known from California, Colorado, Georgia, Idaho, Kansas, Missouri, Saskatchewan, South Carolina, and Texas, as well as Tamaulipas, Mexico. The only other North American congener, *A. lakota* McCafferty, is known only from highly distinctive larvae from Nebraska, North Dakota (McCafferty, W. P. 2000. Entm. News, 111: 265–269) and Kansas (see below). Material examined is housed in the Purdue Entomological Research Collection (PERC), California Academy of Sciences (CASC), and Cornell University (CUIC).

Material Examined.—A. etowah: CALIFORNIA. STANISLAUS Co. Tuolumne R, 6 mi E Modesto, 14 Aug 1954, topotypical adults, WC Day (CASC). GEORGIA.—FLOYD Co. Etowah R, Rome, 16, 18 Aug 1931, holotype and paratype adults, PW Fattig (CUIC). KANSAS.—DOUGLAS Co. Kansas R at Eudora Bridge, 24 August 1978, larvae, P Liechti (PERC). SOUTH CAROLINA.—FLORENCE and MARION Co. Pee Dee R, 800 m upstream of Hwy 76/301 bridge, 12 Aug 1999, upstream of entrance to Staples Lake Landing, 11 Aug 1999, larvae, RW Smith (PERC). A. lakota: KANSAS.—DOUGLAS Co. Kansas R at Eudora Bridge, 24 August 1978, larvae, P Liechti (PERC). Acknowledgments.—We thank E. Hoebeke (Ithaca, NY), R. Smith (New Hill, NC), and W. Pulawski and R. Zuparko (San Francisco, CA) for providing study material. This study was funded in part by NSF grant DEB-9901577 to WPM.

M. D. Meyer and W. P. McCafferty, *Department of Entomology, Purdue University*, West Lafayette, IN 47907.

Received 25 Apr 2003; Accepted 18 Feb 2004.