PROC. ENTOMOL. SOC. WASH.
109(3), 2007, pp. 737–738

NOTES

An Extreme Range Extension and Disjunction for the Ephemeroptera Family Potamanthidae in North America

As part of our inventory of mayflies of far western North American, we have studied materials held in several important collections. In a small California collection borrowed from the Illinois Natural History Survey, we identified larvae of *Anthopotamus verticis* (Say) (Potamanthidae) [2 larvae, El Dorado County, Upper Truckee River, Route 299, 2-X-1976, Furnish]. This is an important and unexpected discovery, because the family previously has been known in North America only from one genus and four species restricted to far eastern and east-Central North America (Bae and McCafferty 1991). *Anthopotamus verticis* along with *A. myops* (Walsh) are the most widespread of the species, with *A. verticis* having been known from 20 U.S. states and Canadian provinces, only as far west as Minnesota, Iowa, Missouri, and far eastern Oklahoma.

Life history, riverine habitat preferences, filter feeding, and interstitial burrowing behavior for *A. verticis* have been investigated by McCafferty and Bae (1992, 1994); Bae and McCafferty (1994), and Yanoviak and McCafferty (1995). The Upper Truckee River in east-central California would predictably provide an adequate environment for the larval development of this species.

Bae and McCafferty (1991) hypothesized that the origin of the North American genus *Anthopotamus* McCafferty and Bae within the Laurasian family Potamanthidae coincided with vicariance of North America and Eurasia in the Northern Hemisphere (probably the Eocene event). Whereas the resultant Eastern Hemisphere clade involving the genus *Potamanthus* Pictet is widespread across Eurasia, it was hypothesized that *Anthopotamus* also may have been widespread in North America at one time (Bae and McCafferty 1991). The discovery of *A. verticis* in California now supports that hyposthesis, with the highly disjunct occurrence in California possibly an isolated relict of a historically more widespread continental pattern. Although widespread transcontinental distribution patterns in today's mayfly fauna are becoming known for a growing number of species as central areas are investigated, extreme east-west disjunct patterns are evidently rare in mayflies at the species level. *Cinygmula subeaqualis* (Banks) (Heptageniidae), *Attenella attenuata* (McDunnough) (Ephemerellidae), and *A. verticis* are representative of the latter.

LITERATURE CITED

Bae, Y. J. and W. P. McCafferty. 1991. Phylogenetic systematics of the Potamanthidae (Ephemeroptera). Transactions of the American Entomological Society 117: 1–143.

———. 1994. Microhabitat of *Anthopotamus verticis* (Ephemeroptera: Potamanthidae). Hydrobiologia 288: 65–78.

McCafferty, W. P. and Y. J. Bae. 1992. Filter-feeding habits of the larvae of *Anthopotamus* (Ephemeroptera: Potamanthidae). Annales de Limnologie 28: 27–34.

———. 1994. Life history aspects of *Anthopotamus verticis* (Ephemeroptera: Potamanthidae). The Great Lakes Entomologist 27: 57–67.

Yanoviak, S. P. and W. P. McCafferty. 1995. Stream size and the distribution of selected Ephemeroptera, pp. 225–236. *In* Corkum, L. and J. Ciborowski, eds. Current directions in research on Ephemeroptera. Canadian Scholars' Press, Toronto.

W. P. McCafferty and M. D. Meyer, (WPM) *Department of Entomology,*

Purdue University, West Lafayette, IN 47907, U.S.A. (e-mail: mccaffer@purdue.edu); (MDM) *Department of Biology, Chemistry, and Environmental Science, Christopher Newport University, 1 University Place, Newport, VA 23606 U.S.A. (e-mail: michael.meyer@cnu.edu)*

PROC. ENTOMOL. SOC. WASH.
109(3), 2007, pp. 738

Kivuiops: A New Name for a Generic Homonym of Afrotropical Baetidae (Ephemeroptera)

Lugo-Ortiz and McCafferty (1996) proposed the generic name *Kivua* for two distinct Afrotropical species previously assigned to *Cloeon* Leach and *Rhithrocloeon* Gillies (Ephemeroptera: Baetidae). Forsius (1934), however, previously used the same generic name for certain sawfly species (Hymenoptera: Tenthredinidae) from Africa. Because our generic name was therefore preoccupied, we propose the replacement name *Kivuiops* (**new name**) [= *Kivua* Lugo-Ortiz and McCafferty 1996 (**new homonym**), nec *Kivua* Forsius 1934]. The two species included in *Kivuiops* are *K. elouardi* (Gillies) (**new combination**) and *K. insuetum* (Kopelke) (**new combination**)..—

We sincerely thank Andreas Taeger (Deutsches Entomologisches Institut, Müncheberg, Germany) for kindly informing us about the sawfly genus *Kivua.*

Literature Cited

Forsius, R. 1934. On some Tenthredinoidea from the Belgian Congo Museum at Tervueren. Revue de Zoologie et de Botanique Africaines 25: 389–406.

Lugo-Ortiz, C. R. and McCafferty, W. P. 1996. The *Bugilliesia* complex of African Baetidae (Ephemeroptera). Transactions of the American Entomological Society 122: 175–198.

C. R. Lugo-Ortiz and W. P. McCafferty, *(CRL) Department of Biology, Chemistry, and Environmental Sciences, Interamerican University, San Germán, PR 00683, U.S.A. (e-mail: crlo122@hotmail.com); (WPM) Department of Entomology, Purdue University, West Lafayette, IN 47907, U.S.A. (e-mail: mccaffer@purdue.edu)*