SCIENTIFIC NOTE

NEW SYNONYMS OF SERRATELLA JINGHONGENSIS (EPHEMEROPTERA: EPHEMERRIDIDAE) FROM CHINA\(^1\)

C. F. Zhong, Uler M. Jacobson, and W. P. McCafferty\(^2\)

Xu et al. (1984) described Serratella jinghongensis (Xu, You, and Hsu) (Ephemeroptera: Ephemerellidae) based on adults from Yunnan Province, China. They placed their new species in the genus Ephemerella Walsh, sexism lato, and subgenus Serratella Edmunds. The species has since been listed in the genus Serratella, following the precedent of Teshirova (1972) and Allen (1980). Serratella is part of the subfamily Ephemerellinae of the Ephemerellidae (McCaflerty and Wang 2000).

Based on our examination of S. jinghongensis type material, we discovered that the apparent distinctiveness of the hindwing of S. jinghongensis (cf. e.g., Xu et al. 1984: Fig. 3) is an artifact of incorrect illustration. Rather than having gently-reduced venation and a prominent costal process, as indicated in the original illustration, the actual hindwing (Fig. 1) instead is the same as that of S. albostrata Tong and Dudgeon and S. hainanensis She, Gui, and You. Additional examination of the types of each of these three species described from southeastern China (Xu et al., 1984, She et al., 1995, Tong and Dudgeon 2000) revealed no differences in structure or color. Furthermore, larvae associated with S. jinghongensis adults from Yunnan Province are indistinguishable from those of S. albostrata (Tong and Dudgeon 2000: Figs. 1, 3–12). In light of all the evidence presented above, we consider S. albostrata and S. hainanensis junior subjective synonyms of S. jinghongensis and provide the following synonymy. In the synonymy given below, T refers to a provisional designation.

Serratella jinghongensis (Xu, You, and Hsu, 1984: 413)

Ephemeroptera T; Dudgeon, 1982: 225.
Serratella T; Dudgeon, 1990: 225.
S. hainanensis She, Gui, and You 1986: 77, new synonym.
S. albostrata Tong and Dudgeon, 2000: 198, new synonym.

Material Examined. Types: S. jinghongensis holotype, MA (male adult), and paratypes, 24A, IMS (submites), and SFA (female adult), China, Yunnan Province, Jinghong City, VIII, 1979, B Gai, J F Xu [deposited in the Nanjing Normal University Mayfly Research Collection, Nanjing, P. R. China (NSN)]. S. hainanensis holotype, MA, and paratype, IMS, China, Hainan Province, Mt. Li, 27.22° N, 186.10° E, J Zhang, S S Su [NSU]; S. albostrata paratypes, 21 (larvae), China, Hong Kong, Pak Ngar Sha, 1–9–1999, X Tong, paratype, IMS, Hong Kong, Tai Mo Shan, Tai Po District, 15 IX–1997, D Dudgeon [Purdue University Uromiayology Research Collection, West Lafayette, Indiana, USA]. Other material.

Received on March 4, 2005. Accepted on October 5, 2005.

\(^1\)Hingguo Key Laboratory for Biosource Technology, College of Life Sciences, Nanjing Normal University, Nanjing 210097, P. R. China. E-mail: jianhongfe@nju.edu.cn

\(^2\)Department of Entomology, Purdue University, West Lafayette, Indiana 47907 U.S.A. E-mail: kelson@purdue.edu, mccafferty@purdue.edu

Mainly on May 17, 2006
Fig. 1. *Serranella fangongensis* fanghong, male adult.

ACKNOWLEDGMENTS

In part, this material is based upon work supported under National Natural Science Foundation of China Grant numbers 30570500 and 30570037 to CZF, Wuxi Normal University fund project 2005104 XQ02B070 to CZF, and a U. S. National Science Foundation Graduate Fellowship to LML.

LITERATURE CITED

Allen, R. J. C. 1986. Geographic distribution and reclassification of the spinycheek Euphronotus (Eph- 


Dudgeon, D. 1982. Aspects of the microdistribution of river macroinvertebrates in forest streams in Hong 


Dudgeon, D. 1980. Determinants of the distribution and abundance of larval Ephoron (Ephemeroptera: 


sity Press. Hong Kong. 312 pp.


Takayama, O. A. 1977. Some new Asian species of mayfly (Ephemeroptera, Leuctridae, Ephemero-
