Acentrella feminalis, New Combination for an Oriental Baetis (Ephemeroptera: Baetidae)

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Aquatic Insects, Vol. 18 (1996), No. 2, pp. 111-112.

The Sri Lankan mayfly species *Baetis feminalis* is newly combined in *Acentrella* based on the distinctive anterior process of the mesothorax of the adult type material.

Keywords: Ephemeroptera, Baetidae, Acentrella, new combination.

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The species, *Baetis feminalis* Eaton, 1885, was described from Sri Lanka several years prior to the description of *Pseudocloeon* Klapálek, 1905. Eaton placed the species in *Baetis* Leach presumably based on the paired marginal intercalaries of the forewings, even though this species lacked hindwings.

In 1984, I had the opportunity to review and redescribe the type material of *Baetis feminalis* Eaton (Waltz and McCafferty, 1985). In that review, *Baetis feminalis* was retained in *Baetis*, although it was suggested that doubt surrounded the correct generic assignment until the larva of *B. feminalis* could be associated with adults and the generic assignment confirmed.

In lieu of a larval association for this species, an adult character has been recently identified to assist in the recognition of adults of *Acentrella* Bengtsson and *Heterocloeon* McDunnough from other baetid genera (Waltz, 1994). This character is the anterior process of the mesonotum. The character state identified as an apomorphic, highly pronounced and pointed, anterior process of the mesonotum is unique to Holarctic and Oriental *Acentrella* and to Nearctic restricted *Heterocloeon*. Reconsideration of the type material of *Baetis feminalis* has resulted in the recognition that the character state of the anterior process of the mesonotum is the same as that in *Acentrella* and *Heterocloeon* (see Waltz and McCafferty, 1985: Fig. 1). Therefore, I propose the formal new combination *Acentrella feminalis* (Eaton), new combination.

This represents one of the few recognized species of Acentrella in the Orient (Waltz and McCafferty, 1987). However, adults of the closely related, Oriental genus Liebebiella Waltz and McCafferty, are as yet unknown. It is possible that the apomorphic character state of the mesonotal process applies also to Liebebiella. Based on the degree of relatedness in the larval stages, sharing of the apomorphic adult character state may be anticipated. Therefore, until adults of

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Liebebiella are characterized, some question must remain open as to a final generic assignment for this species. However, for purposes of phylogeny, it is important to indicate that *Baetis feminalis* is clearly assignable to *Acentrella* or to its cognates and not to *Baetis* s. str.

REFERENCES

- McCAFFERTY, W.P. and R.D. WALTZ (1990): Revisionary synopsis of the Baetidae (Ephemeroptera) of North and Middle America. Trans Am. Entomol. Soc. 116: 769-799.
- WALTZ, R.D. (1994): Field recognition of adult *Acentrella* and *Heterocloeon* (Ephemeroptera: Baetidae). Great Lakes Entomol. 26: 321-323.
- WALTZ, R.D. and W.P. MCCAFFERTY (1985): Illustration and lectotype designation for *Baetis feminalis* Eaton (Ephemeroptera: Baetidae). Oriental Insects 18: 335-337.
- WALTZ, R.D. and W.P. MCCAFFERTY (1987): Systematics of *Pseudocloeon, Acentrella, Baetiella*, and *Liebebiella*, new genus (Ephemeroptera, Baetidae). J. New York Entomol. Soc. 95: 553-568.