ACENTRELLA FEROPAGUS, NEW SPECIES (EPHEMEROPTERA: BAETIDAE): FORMAL NEW NAME FOR NORTH AMERICAN *A. LAPPONICA* SENSU MORIHARA AND McCAFFERTY[1]

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ABSTRACT: A new name *Acentrella feropagus*, new species, is proposed for the North American baetids that were previously known as *Acentrella lapponica* or *Baetis lapponicus* and which had been described in the larval stage by Morihara and McCafferty. The species is apparently confined to northern Canada and Alaska. Characteristics of the femora and tibiae as well as labial palps may be used to differentiate larvae of *A. feropagus* from those of the European species *A. lapponica*.

Bengtsson (1912) originally described the species *Acentrella lapponica* Bengtsson from Sweden. McDunnough (1936) first recorded the species in North America, based on the study of alate specimens collected from the Canadian tundra. The identification was confirmed by Bengtsson. Thereafter McDunnough's identification of the material was not questioned, and the distribution of the species has been considered as circumpolar (see McCafferty 1985).

In the revision of the North American larvae of the genus *Baetis* sensu lato, Morihara and McCafferty (1979) included a detailed description of the larvae of *A. lapponica*. Morihara and McCafferty (1979), however, pointed out some apparent differences between the larvae from North America and European larvae (see Müller–Liebenau 1970), commenting, for example, that, "... in N. A. the large dorsal setae of the femora and tibiae are more robust and shorter than those in European forms."

Morihara and McCafferty (1979) took a very conservative approach in their study with respect to naming new species. For example, although they described several unnamed species, those species were not named until later by others [see review by McCafferty and Silldorff (1998)]. During the preparation of a recent paper on the genus *Acentrella* (Alba-Tercedor and El Alami 1999), it became apparent that differences noted in North American larvae by Morihara and McCafferty (1979) were of species-level significance, and that *A. lapponica* sensu Morihara and McCafferty was a new species. That species is formally named herein.

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Acentrella feropagus, NEW SPECIES

Baetis lapponicus (Bengtsson), Morihara and McCafferty, 1979:149.

Material examined. HOLOTYPE: mature larva on slide: Canada, Northwest Territories, Keewatin, Bothia, VII-28-1977 (3WF229 S9) (deposited in the Canadian National Collection, Ottawa), identified in 1979 by D. Morihara as *Baetis lapponicus*. Additional larval material was examined from the Murchison River drainage system of the District of Keewatin, Northwestern Territories (Nunavut), collected by J. Collins in 1976 and 1977, and residing at the Freshwater Institute, Winnipeg, Manitoba.

Etymology. The epithet *feropagus*, literally "wild country" in Latin, is a noun in apposition in reference to the northern wilderness of North America from where the species is known.

Diagnosis. Larvae of the new species can easily be distinguished from those of *A. lapponica* by the shorter and more robust setae of the femora and tibiae, as was pointed out by Morihara and McCafferty (1979) (compare figures 9-14 with Müller-Liebenau, 1970: figures 46e, f, g). Moreover, there are clear differences between the two species in the shape of the apical segment of the labial palpi (compare figures 1-2 with Müller-Liebenau, 1970: figures 46d, and Jacob, 1991: figure 3a.). *Acentrella feropagus* larvae may be differentiated from other North American species of *Acentrella* by using the key provided by McCafferty et al. (1994) and substituting the name *feropagus* for *lapponica*. We do not know of differences in the adult stages of *A. feropagus* and *A. lapponica*.

Distribution. We provisionally consider all materials previously identified and reported as *A. lapponica* in North America to be *A. feropagus*. As such, the distribution includes Alaska (Harper and Harper 1981) and Newfoundland (Labrador), Northwest Territories, and Quebec in Canada [see recent review in McCafferty and Randolph (1998)].

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