

SUBGENERIC CLASSIFICATION OF *STENONEMA*
(EPHEMEROPTERA: HEPTAGENIIDAE)¹

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ABSTRACT

Two subgenera, *Stenonema* s.s. and *Maccaffertium* n. subgen. are proposed for the genus *Stenonema* Traver based on the presence of distinct morphological differences in the larval stage.

Key Words: *Stenonema*, *Maccaffertium* n. subgen., Heptageniidae, mayflies, subgenera, classification

When Traver (1933) established the genus *Stenonema* for North American Heptageniidae with reduced seventh gills, she distinguished three groups of species in the genus ("*interpunctatum*", "*tripunctatum*", and "*vicarium*")³. The *interpunctatum* group differs from the others in gill and egg structure, and also in male genitalia and was placed in a new genus, *Stenacron*, by Jensen (1974).

The remaining species (genus *Stenonema*) constitute two monophyletic groups which approximate the "*tripunctatum*" and "*vicarium*" groups of Traver. Since these groups are separated by distinct gaps as larvae but only weakly as adults, it is appropriate to recognize them as subgenera (Edmunds 1962) as follows:

Subgenus *Stenonema* sensu stricto

Type species: *Heptagenia tripunctata* Banks, 1910 (= *Stenonema tripunctatum*), designated as type species for the genus *Stenonema* by Traver (1933).

Larvae of *Stenonema* s.s. possess gills on abdominal segments 1-6 which have rounded lamellae, and gills on segment 7 which are fringed with setae and have a single or once branched trachea.

This subgenus is made up of those species included in the "*femoratum*" group of Lewis (1974).

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³These species group names are not necessarily applicable as sub-generic names [See International Code for Zoological Nomenclature, 1964: Art. 42(d), 16(b); Amendments to Code, 1972: Art. 11(f) (ii)].

Subgenus *Maccaffertium* new subgenus

Type species: *Heptagenia integer* McDunnough, 1924 (= *Stenonema integrum*).

Larvae of *Maccaffertium* possess gills on abdominal segments 1-6 which have truncate lamellae, and gills on segment 7 which are fringed with setae and untracheated.

This subgenus is made up of those species included in the "pulchellum" group of Lewis (1974).

Etymology: named in honor of Dr. W. P. McCafferty.

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