with this smaller size is a relatively longer antennal scape and a slightly duller integument (especially on the head). The western populations are highly plastic (perhaps in response to greater variation in habitats and climate) and individuals within a single colony sample may possess either a long or short scape, or one of intermediate length.

References


THE MAYFLY GENUS HEXAGENIA IN MEXICO
(Ephemeroptera: Ephemeraeidae)

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All reported records of the genus Hexagenia Walsh in Mexico, Central and South America are of species of the subgenus Pseudoeatonica Spieth, while those species known from America north of Mexico are all of the subgenus Hexagenia s.s. During the course of a generic study of the family Ephemeridae, specimens of Hexagenia (Hexagenia) bilineata (Say) and H. (H.) limbata (Serville) from Mexico have been studied as follows:

H. bilineata: El Banito Valles, San Louis Potosi, June 26, 1940, H. Hoogstraal and K. Knight, 1 male imago in the collection of the University of Utah.

H. limbata: Ajijic, Lake Chapala, Jalisco, August 23, 27, 28, 1966, Marion E.
Smith, 2 males and 1 female imago in the collection of the University of Utah; Rio Guayalejo, Tamaulipas Province, December 22, 1939, Lewis Berner, 8 immature nymphs in the collection of Jay R. Traver.

The above records represent a considerable extension of the reported range of both these species (see Spieth, 1941; Hamilton, 1959), yet the distributional extension appears to follow the pattern of many species. Spieth (loc. cit.) indicates localities in Texas where both species have been taken and also cites a New Mexico record for H. bilineata. H. limbata is also reported from Colorado, Utah, and California.

Type material of Hexagenia (Pseudoneotonica) mexicana Eaton were the only specimens of the genus previously reported to occur in Mexico, and Eaton (1883-1888) cites only "Mexico" as the type locality for this species. It is probable that H. (P.) mexicana is restricted to the Neotropical regions of Mexico and that there is a natural geographic separation of the respective subgenera. Additional collecting in both Mexico and Central America is needed before our understanding of this distributional problem is complete.

It is of interest here to note that Kimmins (1960) regards Pseudeatonica as a full genus. This may well be the case; however, since the nymphs of Pseudeatonica are unknown at the present time, it remains a question as to which ranking of the taxon is correct. Edmunds and Allen (1966) have pointed out the importance of knowing the nymphal stage of mayflies before a proper classificatory arrangement can be constructed. Undoubtedly the nymphs, when known, will help clarify the status of Pseudeatonica.

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References


