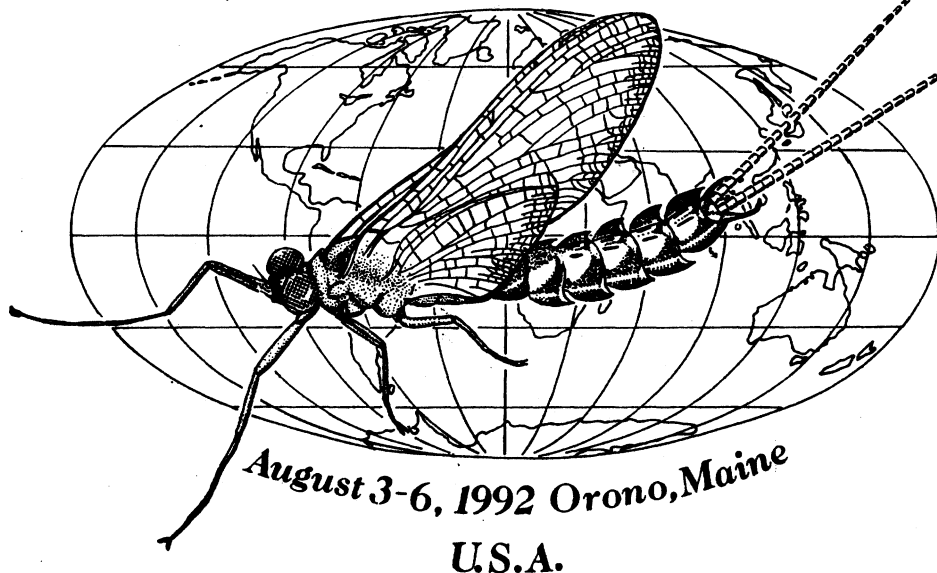


*VIIth International Conference On  
Ephemeroptera*



**VIIth INTERNATIONAL CONFERENCE  
ON EPHEMEROPTERA**

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**PROGRAM AND ABSTRACTS**

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A NEW SPECIES OF GENUS GILLIESIA PETERS & EDMUNDS (EPHEMEROPTERA: LEPTOPHLEBIIDAE) AND THE FIRST DISCOVERY OF ITS NYMPH. Gui Hong, et al. Department of Biology, Nanjing Normal University, 210024, China.

The present treatise treats of a new species of the Genus Gilliesia Peters & Edmunds--Gilliesia zijinensis sp. nov. collected in Nanjing City, Jiangsu Province, China. It gives a detailed description of its morphological characteristics. With hooked curves at the apical portion of ventral surface of penis and about near the 1/3 of the end being cleft as its striking feature, the said species is distinguishable from the rest of its congeners.

Mature nymph Length of body: male 6.5-7.5 mm, female 7.2 3.5 mm. Head hypognathous, length of antennae 2.0-2.3 mm. Mouthpart: dorsal hair on labrum, anteromedian emargination, lateral margins rounded; three branches on cisors of mandibles, outer one is stronger and inner with tufts; a row of teeth in anterior margin of maxillar, maxillary and labial palpi with 3 segments; lingua of hypopharynx and lateral processes well developed; glossae bearing long hair. Apex of claws hooked and narrow, inner margin of claws with a row of denticles, denticles progressively larger near the apical region. Gills on segments 1-7 alike, biforked type. Abdominal of pronotum yellow, on segments 1-9 brown speckle. Terminal filament slightly longer than cerci.

The nymph of Gilliesia zijinensis sp. nov. in this genus was first discovered in the world.

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PHYLOGENY AND ZOOGEOGRAPHY OF NEOCHOROTERPES (LEPTOPHLEBIIDAE: ATALOPHLEBIINAE). Brad C. Henry, Jr. Department of Biology, University of Texas - Pan American, Edinburg, Texas, 78539, USA.

The Choroterpes Complex, consisting of Choroterpes s.s., Euthraulius, and Neochoroterpes, is represented in North America by Neochoroterpes, a North American endemic, and Choroterpes s.s. The phyletic relationships and historical zoogeography of the complex are problematic. Results are presented that indicate Neochoroterpes and Euthraulius are sister taxa. Based on this phylogeny and the present distributions of the two taxa, it is inferred that Neochoroterpes originated by a northern, trans-Pacific migration through Beringia. Phyletic relationships among the four species of Neochoroterpes are presented and a historical zoogeography is proposed. The present species distributions are the result of vicariant events followed by dispersal and reflect the evolution of drainage patterns in southwestern North America. Phylogenetic relationships are derived by cladistic analysis of morphological and life cycle character states using the principle of maximum parsimony.

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NEW SPECIES AND NEW RECORDS OF EPHEMEROPTERA FROM THE ASSINIBOINE RIVER, MANITOBA. Robert G. Lowen, John F. Flanagan, and Donald G. Cobb.

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As part of an ongoing study, the Assiniboine River was sampled for emerging insects. Identification of the Ephemeroptera revealed three species new to science, two new Manitoba records and five new Canadian records. The new species belong in the baetid genera Apobaetis Day and Baetis Leach and the caenid genus Cercobrachys Soldan. The taxonomic position of the new species is discussed. The new Manitoba records are for the species Stenonema luteum (Clemens) and Tricorythodes stygiatus McDunnough. The new Canadian records are for the species Baetis elliotti (Daggy), B. longipalpus Morihara & McCafferty, Macdunnoa persimplex (McDunnough), Stenonema integrum (McDunnough), and Caenis hilaris (Say). S. integrum had been tentatively identified as occurring in the province and the record is herein confirmed. Range extensions of the new records are evaluated and the nymph of B. elliotti is described.