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A first fossil *Helius* (*Diptera, Limoniidae*) from North America.

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Abstract. A description of the new fossil species *Helius constenius* KRZEMIŃSKI (*Diptera, Limoniidae*) from Oligocene of Montana (USA) is given.

Key words: *Diptera, Limoniidae, Helius constenius*, fossil, Oligocene, North America.

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The fossil representatives of the genus *Helius* from North America were recorded by SCUDDER (1894). The author described 3 species from Florissant, Colorado (Lower Oligocene): *Rhamphidia saxetana* SCUDDER, *Rh. faecaria* SCUDDER, *Rh. loewi* SCUDDER (the generic name *Rhamphidia* is synonymous to *Helius*). MELANDER (1949) recorded from Florissant one more specimen classified to *Helius faecarius* (SCUDDER).

These four specimens were made available to me and the re-study of them revealed that all they belong to the genus *Dicranomyia* and will be redescribed in the revision of this genus.

The only specimen representing really the genus *Helius* was sent to me from North Montana, Kishenehn Formation, dated Lower Oligocene by radiometrical means (CONSTENIUS, 1989). However, the dating is not completed yet and some finds suggest Middle Eocene (personal communication from Kurt CONSTENIUS). It is the first statement of this genus from the American continent.

The information on the European fossil *Helius* species are presented in the works of LOEW (1850), MEUNIER (1906), HENRIKSEN (1922), ALEXANDER (1931), STATZ (1934, 1944), KRZEMIŃSKI (1985) and are summarized in the work of KRZEMIŃSKI (in press).

The present fauna comprises about 200 species of this genus, from which in North America 2 species are known. The adults are living in the moist vegetation in the vicinity of stagnant water. Larvae amphibious, living in the muddy soil in the water and earth border.

Family: *Limoniidae*

Subfamily: *Hexatominae*

Genus: *Helius* LEPELETIER et SERVILLE, 1828

Synonym: *Rhamphidia* MEIGEN, 1830

Helius constenius n. sp.

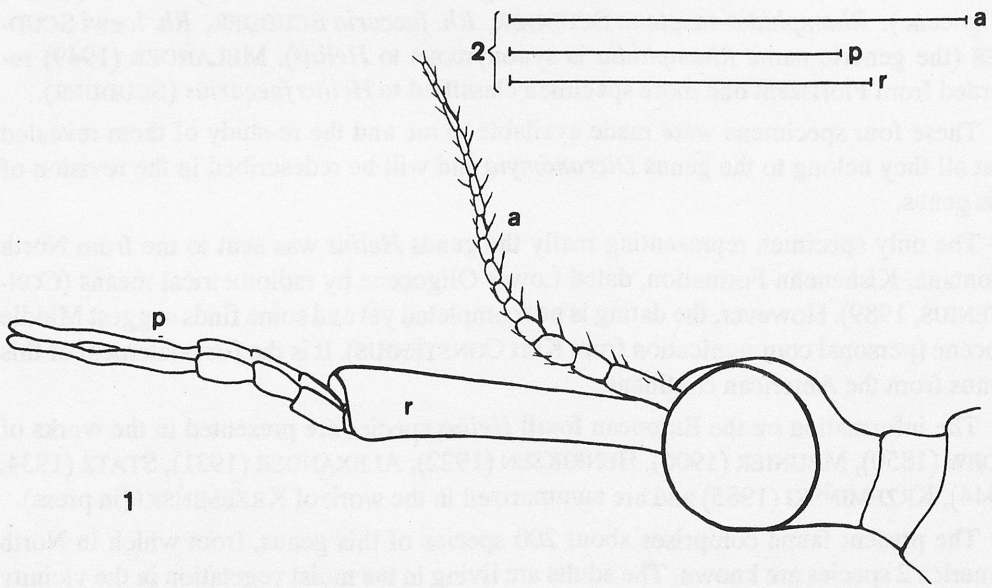
Diagnosis. Body length with rostrum ab. 7 mm. Wing length 5,7 mm. Palpi somewhat longer than rostrum.

Derivatio nominis: the new species is named after John N. CONSTENIUS who had found the specimen.

Description. Head (Fig. 1) small, eyes big, oval. Rostrum 1,7 times longer than the head, slightly widened apically. Palpi slightly longer than rostrum; the last segment very long, longer than all the preceding taken together. Antennae 16-segmented, 1/3 longer than rostrum; scape 1/2 longer than pedicel; basal flagellomeres big, oval, narrowing and getting smaller gradually, with bristles not much longer than the segments that bear them.

Wings only partially preserved, venation poorly visible. The distal part of the abdomen is lacking.

Material examined: holotype No. 34935, sex unknown (possibly female), collected by John M. CONSTENIUS, Kisheneh Formation, North Montana, USA. Housed in the Carnegie Museum of Natural History, Pittsburgh.



Figs. 1-2. *Helius constenius* n. sp.: 1 – head; 2 – proportions of a (antennae), p (palpi) and r (rostrum)

Remarks: in spite of bad state of preservation the specimen posesses the characters distinguishing it from other fossil species of this genus. It is similar to *Helius* - indet. from Baltic amber, presented in the work of KRZEMIŃSKI (1985) as the specimen No. 212/116. However, the palpi of the latter are proportionally shorter.

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