

New and additional records of the non-biting midges (Diptera: Chironomidae) with terrestrial and semiaquatic larvae from Ukraine.

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Baranov V. A. New records of the non-biting midges (Diptera: Chironomidae) with terrestrial and semiaquatic larvae from Ukraine.

Summary. Seven species of chironomid midges, *Bryophaenocladus furcatus* (Kieffer, 1916), *Hydrosmittia oxoniana* (Edwards, 1922), *Smittia edwardsi* Goethgebuer, 1932, *Smittia foliacea* (Kieffer, 1921), *Paraphaenocladus penerasus* (Edwards, 1929), *Paraphaenocladus impensus* (Walker, 1856), *Pseudosmittia forcipata* (Goetghebuer, 1921), are recorded for the first time from Ukraine based on adult specimens and larvae. *Camptocladus stercorarius* (De Geer, 1776) is recorded for the second time.

Keywords: Diptera, Chironomidae, non-biting midges, terrestrial larvae, adults, first record, Ukraine,.

Баранов В. О. Нові знахідки комарів-дзвінців (Diptera: Chironomidae) з наземними та напівводними личинками з України. Резюме. Вперше у фауні України відмічено сім видів комарів-дзвінців: *Bryophaenocladus furcatus* (Kieffer, 1916), *Hydrosmittia oxoniana* (Edwards, 1922), *Smittia edwardsi* Goethgebuer, 1932, *Smittia foliacea* (Kieffer, 1921), *Paraphaenocladus penerasus* (Edwards, 1929), *Paraphaenocladus impensus* (Walker, 1856), *Pseudosmittia forcipata* (Goetghebuer, 1921), базуючись на імагінальному матеріалі та личинках. *Camptocladus stercorarius* (De Geer, 1776) відмічено вдруге.

Ключові слова: Diptera, Chironomidae, комари-дзвінці, імаго, наземні личинки, перша знахідка, Україна.

Баранов В. А. Новые находки комаров-звонцов (Diptera: Chironomidae) с наземными и полуводными личинками из Украины.

Резюме. Впервые в фауне Украины отмечены семь видов комаров-звонцов: *Bryophaenocladus furcatus* (Kieffer, 1916), *Hydrosmittia oxoniana* (Edwards, 1922), *Smittia edwardsi* Goethgebuer, 1932, *Smittia foliacea* (Kieffer, 1921), *Paraphaenocladus penerasus* (Edwards, 1929), *Paraphaenocladus impensus* (Walker, 1856), *Pseudosmittia forcipata* (Goetghebuer, 1921), основываясь на имагинальном материале и личинках. *Camptocladus stercorarius* (De Geer, 1776) отмечен во второй раз.

Ключевые слова: Diptera, Chironomidae, комары-звонцы, наземные личинки, имаго, первая находка, Украина.

Orthocladinae is one of the largest subfamilies of the non-biting midges (Chironomidae) (Ashe & Cranston, 1990). Up to now only 91 species of Orthocladinae have been recorded from Ukraine (Baranov, 2011). Most of the data on Chironomidae occurring in Ukraine were resulted from hydrobiological studies (Baranov, 2011), and the terrestrial species of Chironomidae have got a little attention. By far, only one terrestrial species *Smittia aterrma* has been recorded from Ukraine (Baranov, 2011).

Current studies of the chironomids in Ukraine and particularly in the Dnipro and Siverskiy Donets basins revealed seven terrestrial and semiaquatic species previously not known from Ukraine: *Bryophaenocladus furcatus* (Kieffer, 1916), *Hydrosmittia oxoniana* (Edwards, 1922), *Smittia edwardsi* Goethgebuer, 1932, *S. foliacea* (Kieffer, 1921), *Paraphaenocladus penerasus* (Edwards, 1929), *Par-*

impensus (Walker, 1856), *Pseudosmittia forcipata* (Goetghebuer, 1921). *Camptocladus stercorarius* (De Geer, 1776) is recored for the second time

The newly recorded species were found in the upper part of the Dnipro basin (Chernihiv Region), in the city of Kharkiv and the city of Sevastopol'. Materials were collected by means sweep netting and by tacking larvae from substrate. Material is deposited in author's personal collection.

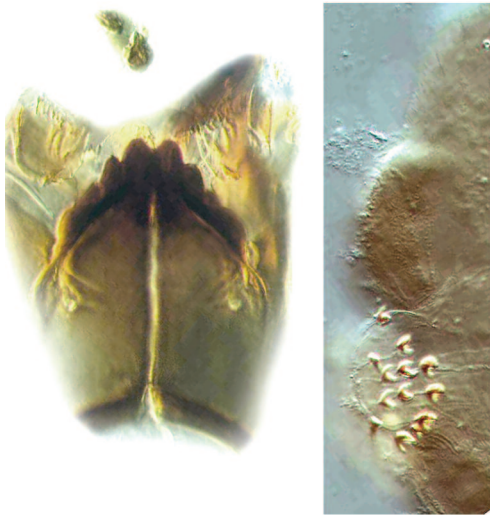
***Bryophaenocladus furcatus* (Kieffer, 1916) (Fig. 1-2).**

Material. Crimea, Sevastopol', city park, 44°61'38"N 33°60'17"E, 30.12.10, 2 larvae (4th and 3^d instar) (Baranov).

Distribution. Ireland, Sweden (Ashe & Cranston, 1991).

Location. Mosses at the trees.

Remarks. Larvae are terrestrial, in mosses.



Figs. 1–2. *Bryophaenocladus furcatus*. 1 – head capsule ventrally, 2 – posterior parapods.



Figs. 4–5 *Hydrosmittia oxoniana*: 4 – head capsule, ventrally; 5 – anterior parapods.

Camptocladus stercorarius (De Geer, 1776) (Fig. 3)

Material. Kharkiv, Kharkiv River near zoomarket, 49°95'76" N, 36°16'51"E, 21.08.11, 2 ♂, (Baranov).

Distribution: Europe, Canary Is., Azores; Asian Russia (including Far East); Australasian Region; USA; South America (Ashe & Cranston, 1991, Baranov, 2011).

Location. Floodplain of Kharkiv River.

Remarks. Larvae are terrestrial. in animal dung. Additional record.

Hydrosmittia oxoniana (Edwards, 1922) (Fig. 4-6)

Material. Kharkiv Region, Horila Valley near Kom-somolsk, 49°63'96"N, 36°49'53"E, 26.03.11, 12 larvae, (Baranov).

Distribution: Europe (Austria, Great Britain, Greece, Finland, France, Ireland, The Netherlands, Norway (including Bear Island), Sweden, Romania; Asian Russia (including the Far East), Turkey; North Africa, China, Japan



Fig. 6. Locality of *Hydrosmittia oxoniana* in the Horila valley.



Fig. 3. *Camptocladus stercorarius*: hypopygium. Scale= 50 μ.

(including Pacific parts), Greenland, Nunavut Canada, and South Dakota (USA) (Sæther & Spies 2004, Paasivirta 2007; Ferrington & Saether 2011).

Location. Small ponds in Horila Valley (Fig. 6).

Remarks. Larvae are terrestrial, in animal dung. Additional record.

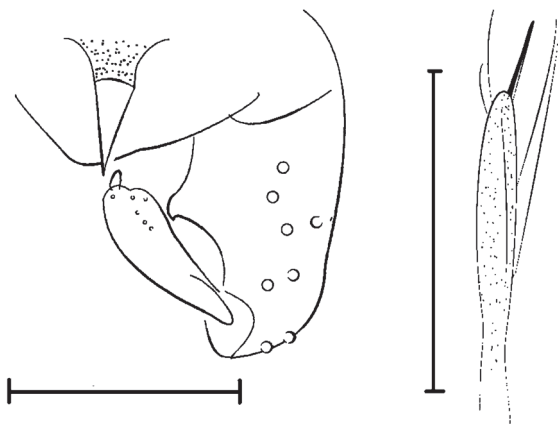
Paraphaenocladus impensus (Walker, 1856)

Material. Kharkiv, Sarzhin Yar, 50°01'36"N 36°13'51"E, 02.05.11, 2 ♂ (Baranov).

Distribution. W. Europe, Russia (including Far East); Lebanon; North Africa; Canada (Ashe & Cranston, 1991; Makarchenko, 2006).

Location. A small spring in city park with permanent t=9°C.

Remarks. Larvae are terrestrial or semiaquatic.



Figs. 7–8. *Smittia edwardsi*: 7 – hypopygium, 8 – antenna apex.
Scale = 50 μ .

Paraphaenocladus penerasus (Edwards, 1929)

Material. Chernihiv, Strizhen River, 51°50'27"N, 31°29'78"E, 08.01.2011, 4 larvae (Baranov).

Location. Floodplains.

Distribution. Europe (Austria, British Is., France, Switzerland); Russia (Far East) (Ashe & Cranston, 1991; Makarchenko, 2006).

Remarks. Larvae are semiaquatic.

Pseudosmittia forcipata (Goetghebuer, 1921)

Material. Chernihiv, Strizhen River, 51°53'43"N, 31°28'81"E, 11.06.2011, 1 ♂ (Baranov).

Location. Floodplains.

Distribution. Holarctic and Neotropical Regions (Ashe & Cranston, 1991; Makarchenko, 2006; Ferrington & Sæther, 2011).

Remarks. Larvae are hypopetric.

Smittia edwardsi Goetghebuer, 1932 (Fig. 7–8).

Material. Chernihiv Region: near Port Yakor on Dnipro River, 51°51'51"N, 30°59'63"E, 25.04.2011, 2 ♂, 4 larvae (Baranov).

Distribution. Austria, Belarus, British Is., Germany, The Netherlands, Romania, Sweden (Ashe & Cranston, 1991; Moller Pillot, 2008).

Location. Floodplains.

Remarks. Larvae are terrestrial. See Moller Pillot (2008) for ecological features.

Smittia foliacea (Kieffer, 1921)

Material. Kharkiv, Sarzhin Yar, 50°01'36"N 36°13'51"E, 02.05.11, 5 ♂ (Baranov).

Distribution. Belarus, British Is., Germany, Italy, The Netherlands, Russia; Lebanon (Ashe & Cranston, 1991; Moller Pillot, 2008).

Location. A small spring in city park with permanent $t=9^{\circ}\text{C}$.

Remarks. Larvae are terrestrial. See Moller Pillot (2008) for ecological features.

Acknowledgements

I express my sincere thanks to Dr. Henk Moller Pillot (The Netherlands) for sending important literature and reading early versions of this paper and to Dr. Valery A. Korneyev (I. I. Schmalhausen Institute of Zoology, National Academy of Sciences of Ukraine, Kiev) for useful critical comments and editing text and pictures. I thank Dr. Vitaly Kharchenko (I. I. Schmalhausen Institute of Zoology, NAS of Ukraine) for his kind assistance in taking photos at the center of collective usage of optical devices "Animalia" (Institute of Zoology NAS). Special thanks are due to my wife, Valentina V. Inshina for her constant support, assistance and inspiration for researches of the chironomids.

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