

A new species of the genus *Acerocnema* Becker, 1894 (Diptera: Scathophagidae) from Buryatia, Russia

Новый вид рода *Acerocnema* Becker, 1894 (Diptera: Scathophagidae) из Бурятии, Россия

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Ключевые слова: Diptera, Scathophagidae, *Acerocnema*, новый вид.

Abstract. *Acerocnema richterae* sp. n., from the family Scathophagidae (Diptera) is described from Buryatia, Russia. Key to species of *Acerocnema* Becker, 1894 of Russia is given.

Резюме. Описан новый для науки вид двукрылых, *Acerocnema richterae* sp. n., из семейства Scathophagidae с территории Бурятии, Россия. Дан ключ для определения видов рода *Acerocnema* Becker, 1894 фауны России.

Acerocnema Becker, 1894 is one of the small genera within the family Scathophagidae, which until the present time has comprised 11–12 species distributed in the Holarctic Region [Gorodokov, 1986; Vockeroth, 1987; Iwasa, 2014]. Six species are registered in Russia [Stackelberg, 1952; Ozerov, 2006, 2013, 2014]. The data on the biology of *Acerocnema* species are very poor. Adults were mainly captured on flowering *Corydalis* plants but only for *Acerocnema macrocera* (Meigen, 1826) females ovipositing eggs on fruits of *Corydalis solida* were observed [Mortelmans, Devillers, 2014].

The genus *Acerocnema* is characterised by the combination of next characters: arista bare or short pubescent; palpus distinctly spatulate, without strong apical/subapical seta; proepisternum covered with hairs at middle or in anterior part; fore femur ventrally without short black spines; anepisternum covered with setulae usually along dorsal margin and in posterior part only, without setulae posterior to anterior spiracle; katepisternum with one strong seta in posterodorsal corner; anepimeron bare; postmetacoxal bridge absent; scutellum with two pairs of setae, basal and apical; male sternite 5 usually long and bilobate posteriorly, directed downwardly and perpendicularly to the other sternites (Fig. 1).

Terminology follows McAlpine [1981] and Cumming and Wood [2009], except that 'postpedicel' is used for antennal flagellomere 1 (third antennal segment) [Stuckenberg, 1999].

Acerocnema richterae Ozerov, sp. n. (Figs 1–5)

Material. Holotype, ♂: Russia, Buryatia, Chamney, 50.402N 103.8681E, bottom land of Shibertuy River, 29.04.1971, V. Richter (Zoological Institute, Russian Academy of Sciences, St. Petersburg, Russia).

Description. Male (Fig. 1). Length of body 5.3 mm. Length of wing 4.2 mm.

Head in profile higher than long. Frontal vitta matt, yellow; fronto-orbital plate yellow. Face, parafacial and gena yellow, with delicate whitish reflection. Ocellar triangle black. Postcranium yellow completely, delicate whitish dusted. Height of gena slightly less than vertical diameter of eye. Setae: 3 orbital, 4 frontal, 1 ocellar, 1 post-ocellar (short and thin, divergent), 1 inner vertical, 1 outer vertical; 1 pair of strong vibrissae; all setae yellow. Scapus, pedicel and postpedicel yellow. Postpedicel with acutely angled upper apical corner, approximately 3 times as long as wide. Arista black, widened throughout its length, very short pubescent. Palpus clavate, yellow.

Thorax yellow in ground colour, delicate whitish dusted, only scutum in central part and mediotergite black. Acrostichals very short, in three–four rows, prescutellar pair not differentiated from other hairs on scutum, dorsocentrals 2 + (2 – 3), intra-alars 0 + 2, supra-alars 1 + 2, postpronotals 2, notopleurals 2, postalaris 2. Proepisternum with hairs in central part, with long seta near lower margin. Proepimeron with long seta. Anepisternum covered with hairs in posterior half and with 5 setae along posterior margin. Katepisternum covered with hairs, with long setae in ventral corner and strong seta in posterodorsal corner. Anepimeron bare. Scutellum yellow, with pair of lateral scutellar and pair of apical setae. All thoracic setae and hairs yellow.

Legs yellow. Mid femur with long ventral seta basally, row of anterodorsal setae in apical third, anteroventral seta in apical quarter, and posterior preapical seta. Mid tibia with 2 anterodorsal setae, 1 posterodorsal in basal third, 1 anterior seta in apical third, 2 very long curved preapical posterior setae and posterior apical seta. Hind femur with row of anterodorsal setae and 3–4 anteroventral setae in apical quarter. Hind tibia with 2 anterodorsal setae, 1 posterodorsal/dorsal seta in basal third, 1 anteroventral seta in apical third, 1 preapical dorsal seta and apical setae: anterodorsal, posterodorsal and anteroventral. All setae and hairs of legs yellow.



Figs 1–5. *Acerochnema richterae* Ozerov, **sp. n.**, holotype, male.

1 – habitus, lateral view; 2 – sternite 4; 3 – sternite 5; 4 – epandrium, cerci and surstyli, dorsal view; 5 – epandrium, cerci and surstyli, lateral view.

Рис. 1–5. *Acerochnema richterae* Ozerov, **sp. n.**, голотип, самец.

1 – внешний вид, сбоку; 2 – стернит 4; 3 – стернит 5; 4 – эпандрий, церки и сурстили, вид сверху; 5 – эпандрий, церки и сурстили, вид сбоку.

Wing clear, with yellow veins. R1 bare apically on dorsal surface. Calypters and their margins yellowish. Halter yellowish.

Abdomen yellow, covered with yellow hairs. Male sternites 4 and 5 as in Figs 2–3. Epandrium and surstyli as in Figs 4–5.

Comparison. The new species is more similar to *Acerocnema barkalovi* Ozerov, 2006 and *Acerocnema arctica* Ozerov, 2013 by the color of male postpedicel (yellow in all species), but easily differs by completely yellow head (see key below).

Distribution. Russia: Buryatia.

Etymology. The species is named in the honour of the Russian dipterist Dr. Vera Andreevna Richter, who made substantial contributions to the study of Asilidae and Tachinidae.

Key to species of *Acerocnema* of Russia

1. Vein R1 bare 2
 - Vein R1 setulose on apical third of dorsal surface *A. lobanovi* Ozerov, 2006
2. Postpedicel yellow, if darkened (female of *A. arctica*) then fronto-orbital plate yellow 3
 - Postpedicel black, fronto-orbital plate black 5
3. Postcarnium completely yellow *A. richterae* sp. n.
 - Postcarnium black in upper half and yellow in lower half .. 4
4. Scutellum grey dusted dorsally. Postpedicel approximately 4–5 times as long as wide *A. arctica* Ozerov, 2013
 - Scutellum shining dorsally. Postpedicel approximately 2.5 times as long as wide *A. barkalovi* Ozerov, 2006
5. Legs yellow 6
 - Hind femur black, fore and mid femora black at least in basal half *A. paradoxopyga* Stackelberg, 1952
6. Scutum densely grey dusted *A. macrocera* (Meigen, 1826)
 - Scutum mostly shining *A. breviseta* (Zetterstedt, 1846)

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