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New Species of Leafhoppers of the Genus *Celyphoma* Em. (Homoptera, Cicadinea) from Alai Valley, Kyrgyzstan

O. N. LUK'YANOVA

Institute of Zoology and Parasitology, Tajikistan
Academy of Sciences, Dushanbe

Abstract. Three species of leafhoppers, *Celyphoma modesta* sp. n., *C. furcata* sp. n., and *C. chelifera* sp. n. from the Alai Valley are described, and a key to *Celyphoma* is given.

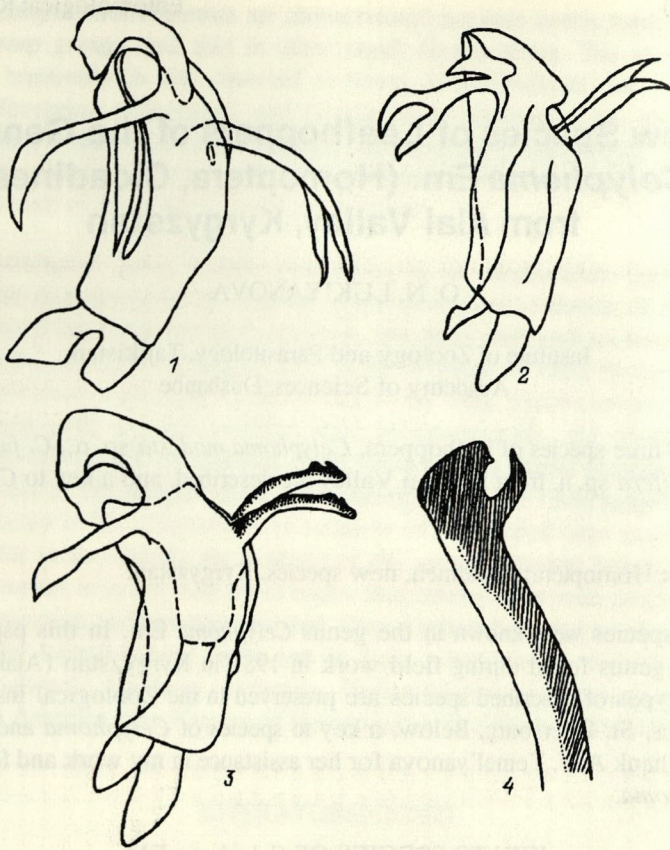
Key words: Homoptera; Cicadinea, new species, Kyrgyzstan.

Until now, 7 species were known in the genus *Celyphoma* Em. In this paper descriptions of 3 new species of this genus found during field work in 1981 in Kyrgyzstan (Alai lowland) are given. Holotypes and paratypes of described species are preserved in the Zoological Institute of the Russian Academy of Sciences, St. Petersburg. Below, a key to species of *Celyphoma* and descriptions of new species are given. I thank A. F. Yemel'yanova for her assistance in my work and for providing material on the genus *Celyphoma*.

KEY TO SPECIES OF *Celyphoma* EM.

- 1(14). On dorsum theca without extended lobes.
- 2(11). Apex of theca without teeth and process not forked.
- 3(4). Pair of long apical processes with blunt spatulate ends, lateral processes acute.
..... *C. atomata* Mit.
- 4(3). Pair of short subapical processes present.
- 5(6). Subapical processes with clavate, swollen apex, ventral processes narrow and short.
..... *C. nigromontana* Em.
- 6(5). Subapical processes without clavate swollen apex. Apex blunt or acute.
- 7(8). Apex of subapical processes blunt. *C. corrugata* Em.
- 8(7). Apex of subapical processes acute.
- 9(10). Hooks of penis simple, long and with acute apex. *C. modesta* sp. n.
- 10(9). Hooks of penis pincerlike apex. *C. chelifera* sp. n.

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Figs. 1-4. *Celyphoma* Em.: 1-3) penis, in lateral view: 1) *C. modesta* sp. n., 2) *C. furcata* sp. n., 3) *C. chelifera* sp. n., 4) *C. chelifera* sp. n., hook of penis in lateral view.

- 11(2). Apex of theca with 2 or 4 teeth and pair of forked processes.
- 12(13). Apex of theca with 2 teeth and pair of forked processes with branches of equal length.....
..... *C. furcata* sp. n.
- 13(12). Apex of theca with 4 teeth, pair of forked processes with branches of different length.
..... *C. fruticulina* Em.
- 14(1). On dorsum apex of theca with extended lobes.
- 15(18). On apex of theca notch absent and margins of processes dentate.
- 16(17). Lower margin of lobe dentate and 1 pair of subapical processes present.
..... *C. coelimontana* Em.
- 17(16). Anterior margin of dorsal lobe dentate and 2 pairs of subapical processes present.
..... *C. dilatata* Em.

- 18(15). On apex of theca notch present, lobe in form of hatchet with dentate margins.
..... *C. karatepica* Dlab.

Celyphoma modesta Lukjanova, sp. n. (Fig. 1).

Cervix weakly concave, length approximately 0.6 width, anterior margin evenly, arcuately convex, and posterior margin obtusely concave. Length of frons slightly greater than width. Frons convex, upper margin slightly concave, lower margin obtusely concave. Medial carina of pronotum present. On scutellum 2 lateral carinae and 2 medial carinae diverging near posterior margin. Hindtibia bearing in 1 lateral tooth. Forewings opaque, covered with dark brown specks. Body pale brown. Abdominal tergites dark brown, with light stripe in middle.

♂. Anal tube slightly elongate in shape, with rounded apex and straight posterior margin. Apex of theca oval-rounded. On stem of theca, closer to apex pair of long lateral processes with lanceolate-like apex present. Hooks of penis in form of long, narrow stripes, on apex slightly curved and pointed.

Body length of ♀ 3.3-4.0, ♂ 3.0 mm.

Material. Kyrgyzzistan. Alai Mts., right bank of Kyzyl-Su R., Kashak-Su gorge, 2850 m elevation, 12.VII.1981, 3 ♀s and 1 ♂ (Luk'yanova).

The described species is close to *C. karatepica* Dlab. In appearance the new species differs from it in the light color and in the structure of the aedeagus, in the absence of a notch on apex of theca, longer lateral processes of theca, and long hooks of the aedeagus.

Celyphoma furcata Lukjanova, sp. n. (Fig. 2).

Cervix concave, width almost 1.5 times length. Anterior margin obtusely convex. Frons weakly convex, anterior margin obtusely concave. Postclypeus obtuse corner protruding into frons. Pronotum with obtuse corner protruding anterior margin and straight posterior margin. Medial carina not sharp. Scutellum with pair of hyaline medial carina diverging downward. Forewings whitish, covered with dark brown specks, veins brown or orange brown. Body brown. Frons darkened with brown, sometimes fused, specks, carina light.

♂. Apex of theca wide, arcuately rounded, on distal part notch ending with tooth. Stem of theca in subapical part bearing pair of forked processes. On venter pair of not very long processes with acute apex. Theca highly sclerotized, except apical part.

Body length ♀ 3.2-3.5, ♂ 3.0 mm.

Material. Kyrgyzzistan, Alai Mts. along road to Nura, gorge at confluence of Ken-Su and Kobyl-Su rivers, 20.VII.1981, 2 ♀s and 2 ♂s (Luk'yanova).

The described species resembles *C. fruticulina* Em., but differs from it in lighter color and density of specks on forewings. Forked aedeagal process with branches of approximately equal length (in *C. fruticulina* branches of forked process of different length). Ventral process not recurrent.

Celyphoma chelifera Lukjanova sp. n. (Figs. 3-4).

Cervix concave, length 1/2 of width, lateral margins parallel, anterior margin arcuately convex, posterior margin obtusely concave. In place of medial carina, groove. Frons longitudinally slightly

concave. Upper margin obtusely concave, lateral margins slightly convex, and lower margin oval-concave. Medial carina of frons strongly expressed. Medial carinae of scutellum with diverging posterior margins. Venation typical of species of *Celyphoma*. Hindtibia bearing single lateral tooth. Forewings opaque, densely covered with dark brown specks and spots. Body pale brown, covered with dark brown specks, on pronotum arranged in rows along anterior margin, and on frons on lateral margins. Abdomen with dark brown tergites.

♂. Anal tube elongate, with narrowing posterior margin. Theca with clavate apex. Gonopore position on apex. Stem of theca closer to apex bearing pair of dorsal, not long, simple processes with acute apex. Hook of penis with apex in form of pincer.

Body length ♀ 4.6, ♂ 3.4 mm.

Material. Kyrgyzystan, spurs of Zaalaiskiy Mts. along road to Daraut-Kurgan, Berg-Su R. gorge, 9.VII.1981, 1 ♂ and 3 ♀ (Luk'yanova).

The new species is close to *C. karatepica* Dlab. in genitalic structure. It differs from *C. karatepica* in the apex of theca, which is rounded and does not have a notch, and also in hooks of the penis, apices of which are in form of pincer.

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