

NEW SPECIES OF DELPHACIDAE (HOMOPTERA, FULGOROIDEA) FROM KAZAKHSTAN*

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Three new species collected by the present author in various years in the mountains of central, eastern and southern Kazakhstan are described. The types and paratypes of the species described are preserved in the collections of the Institute of Zoology, Academy of Sciences of Kazakh SSR, and a part of the paratypes in the collection of the Zoological Institute, Academy of Sciences of the USSR (Leningrad).

Gravesteiniella vallicola Mitjaev, sp. n. (Fig. 1-4).

Male. Hindmargin of vertex at level of midpoint of eyes, anterior margin slightly swollen and distinctly projecting before eyes. Transverse carina poorly developed; vertex posterior to it yellowish brown or yellow. Frons and vertex between carinae dark brown, carinae of same color or lighter. Forks of mesal keel on vertex slightly continued on frons; latter slightly narrowed toward apex and base. Eyes with one or few dark roundish spots on general gray background. Genae and antennae dark or light brown.

Pronotum and scutellum of same color as vertex. Scutellum 1.5-2 times as long as pronotum, its carinae smoothened. Elytra translucent, with moderately developed longitudinal carinae reduced, reaching abdominal tergite V, their apices broadly rounded. Thorax and legs light brown, abdomen black, shining, tergite VII light, dirty yellow, tergite VIII yellow-brown. Pygophore long, equal to combined length of tergites VI-VIII; dark brown to black, with deep dorsal depression, reaching hindmargin of tergite VIII. Anal tube yellowish brown, not extending beyond margin of pygophore depression less processes. Genital phragma of pygophore with 2 ventrally convergent serrate carinae in middle. Styli falcate. Aedeagus lamellate, strongly narrowed at base, tubular, its maximal width in middle; apex notched; gonopore roundish, subapically ventral, teeth on dorsal margin from apex to narrowing and on ventral margin from slightly before apex and beginning of basal bend.

Female. Color of head, scutellum, and pronotum as in ♂. Frons dark brown between carinae, with longitudinal gaps. Abdominal tergites brown, with light brown transverse gaps, larger on tergites III-VI, equal sized, and in form of small spots on tergite VII and VIII. Sternites, pygophore and ovipositor dark brown, anal tube yellow-brown.

Length of ♂ 1.8-1.9, ♀ 2.9 mm.

The species described above is very similar in its external appearance and genital structure to *G. lapilla* Em., 1982, which was separated under subgenus *Atropidius* by Emel'yanov (1982).

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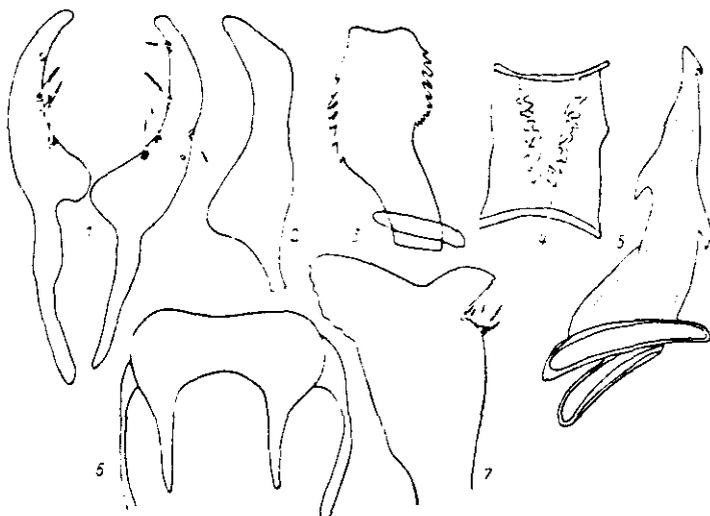


Fig. 1-7. *Gravesteiniella vallicola* sp. n.: 1) styli in rear view; 2) stylus in lateral view; 3) aedeagus in lateral view; 4) suture of genital phragma; 5-7) *Scottianella lucida* sp. n.: 5) aedeagus in lateral view; 6) anal tube in rear view; and 7) stylus.

Material. Talas Alatau, Talas valley, environs of Talas, 3.VIII.1983, 5 ♂, 1 ♀, including ♂ holotype. Collected in a saline meadow among growths of *Achnatherum splendens*.

Scottianella lucida Mitijaev, sp. n. (Fig. 5-8).

Vertex white or dusty yellow, lateral carinae sharp and high near eyes; anterior (furcal) and posterior pits darkened. Frons parallel-sided, only slightly narrowed toward apex, of same color at vertex; carinae sharp, fork of middle carina small, smooth. Tempora dark brown, genae white, clypeus brownish yellow. Antennae light brown. Pronotum white, with sharp carinae. Scutellum dark brown to black, its apex light. Thorax and legs brownish yellow, epimera with dark brown spots. Elytra reduced, translucent, with roundish apices and large streak along claval suture. Abdomen dark brown to black, shining; tergite VIII yellow-brown. Pygophore with deep dorsal depression, brown, dark brown, with lighter hind margin, especially in dorsal part. Anal tube white above, brown below, its processes wide apart, sclerotized, dark brown. Anal valve white. Styli short, divergent, with strongly broadened bilobate apices. Aedeagus short, with pointed apex, and 2 thick teeth in middle and one thin subapical tooth.

The species is described on the basis of ♂, there being no ♀ in the collection.

Length of ♂ 1.8-1.9 mm.

Material. Central Kazakhstan, 85 km SE of Karkaralinsk, 21.VI.1978, 6 ♂, 1 ♀ holotype. Collected in hummocky ravine in a moist meadow glade in willow forest.

Javesella compacta Mitijaev, sp. n. (Fig. 9-12).

Short-winged form of ♂. Vertex brown, slightly longer than wide, distinctly protruding above eyes; carinae sharp, high, hindmargin straight, basal part behind

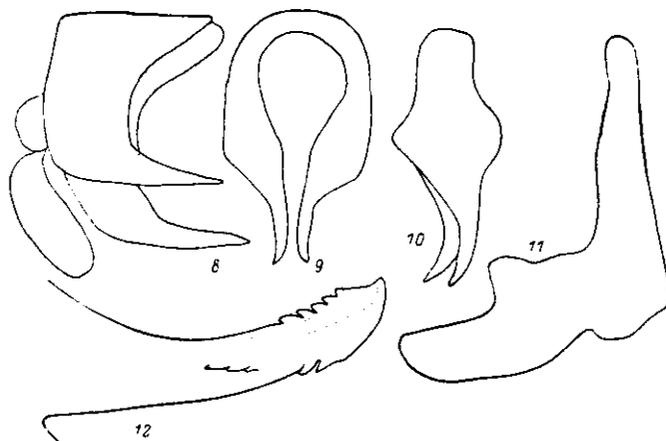


Fig. 8-12. 8) *Scotianella lucida* sp. n., anal tube in lateral view; 9-12) *Javesella compacts* sp. n.; 9, 10) anal tube in rear and lateral view; 11) stylus; and 12) aedeagus in lateral view.

transverse carina concave, especially in region of posterior cavities. Frons variegated, slightly narrowed toward apex, carinae sharp. Clypeus brown with light carinae. Vertex, antennae, genae, and antennae brown or light brown. Pronotum and scutellum dark brown, with lighter carinae and hindmargins. Hindmargin of pronotum smoothly concave in middle. Thorax and legs brownish, with light spots and streaks. Elytra opaque, dark brown, with light border at apex and reaching tergites VII-VIII. Abdomen brown, with light hindmargins of tergites and sternites. Pygophore brown to dark brown, with light hindmargin; anal tube brown, its valve white, strongly extended into pygophore. Styli long, strongly divergent, dark brown.

Female. Similar to σ in color. Distinctly differing in larger size and lighter colored (variegated) abdomen.

Length of σ 1.8-1.9 mm, ? 2.4 mm.

Material. Eastern Kazakhstan, environs of Bol'shenarymskiy, NE spurs of Narymskiy Range, Balgyn ravine, 6.VIII.1979, 5 σ , 1 ? , including σ holotype, humid meadows with sedge and clover near streams and rivers; Semipalatinsk Prov., environs of Semipalatinsk (Staraya Krepost'), 21.VII.1978, 1 σ , varied grass meadow in Irtysh floodland; Zayshan basin, Buran, floodland of Chernyg Irtysh, 16.VII.1980, 1 σ , among growths of sedge and grasses.

The collections include 2 σ s of the macropterous form. They differ from the short-winged insects by more slender body and unicolorous translucent elytra.

LITERATURE CITED

- EMEL'YANOV, A. F. 1982. Fulgoroid leafhoppers (Homoptera, Fulgoroidea) of the Mongolian People's Republic based on the collections of the entomofaunistic sections of the Joint Soviet-Mongolian Expedition of 1970-1975. [In Russ.]. *Insects of Mongolia* 8: 69-122.