

New data on the weevil tribe Corimaliini (Coleoptera: Apionidae)

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To the diagnosis of the tribe Corimaliini the presence of mucro on male hind or middle and hind tibiae in some species is added. *Corimalia helenae* Korotyaev & Zherichin sp. n. is described. This species was formerly misidentified as *C. languida* Boh., but the latter name is actually a junior synonym of *C. tamarisci* Gyll. *C. obscuriceps* Pic and *C. pectoralis* Pic are not colour forms but distinct species.

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Tribe **Corimaliini** Alonso-Zarazaga, 1989

In the original diagnosis of the tribe, male tibiae are stated to be not mucronate, but several species from Asia (*C. aliena* Fst., *C. obscuriceps* Pic, *C. helenae* sp. n.) have a well-developed mucro on middle and hind tibiae. It arises on the apical margin of the tibiae; the row of spines on the tibial edge is interrupted at that place, and the apex of mucro is more or less distinctly bi- or tridentate. It is thus not unlikely, that mucro is formed from the connate spines of the corbels. In *C. tamarisci* Gyll., male hind tibiae are provided with a small denticle a little proximal of the corbels; probably, here we may assume another origin of this structure. A similar denticle is also found in the specimens of *C. sp. pr. fausti* Rtt. from S Turkey.

Corimalia tamarisci Gyllenhal, 1838

= *languida* Boheman, 1845, syn. n.

Lectotype of *Corimalia languida* (here designated) – ♂ in the C. Schoenherr collection in Naturhistoriska Riksmuseet, Stockholm, drawer No. 40, with bottom label "*languidus* Boh.", handwritten labels "*Orob: tamarisci* Helpe, Sicilia Falderm." and "*C. tamarisci* Gyll. (= *languida* Boh.), Dieckmann det. 1969". Penis is extracted and mounted on the card with the specimen; it has a strongly asymmetrical shape characteristic of *C. tamarisci*. The synonymy was not published by the late Dr. L. Dieckmann.

Examination of the type specimens of *C. languida* Boh., *C. obscuriceps* Pic, and *C. languida* var. *pectoralis* Pic (the latter two considered currently to be colour forms of *C. languida*) was initiated by Dr. V.V. Zherichin of Paleontological Institute in Moscow, who noticed that *C. languida* was originally described from Sicily, but never recorded from West Mediterranean later. I have found that both *C. obscuriceps* and *C. pectoralis* represent actually distinct species, discussed below. In this paper we describe together the species misidentified as *C. languida*.

Corimalia obscuriceps Pic, 1913

Lectotype (here designated) – ♂ in the M. Pic collection in the Museum National d'Histoire Naturelle in Paris, was originally mounted on a card, pinned with another M and a F and supplied with Pic's handwritten labels "Bords de l'Euphrate, Mesop. (Augustalis)", "type", "*obscuriceps* Pic", "*languidus* var." I have dissected the lectotype, mounted it on a card on a separate pin with my handwritten labels copying the original ones; the genitalia in a microvial with glycerine are pinned with the lectotype. Length of body of the lectotype 2.2 mm. Two other specimens are paralectotypes. There are also 2 unlabelled and 21 syntypes from Euphrates; they are all paralectotypes. The species is in all characters very similar to *C. helenae* sp. n. and differs noticeably only in the shape of penis (Figs 5-7).

Corimalia pectoralis Pic, 1929, stat. n.

Nanophyes (Corimalia) languidus var. *pectoralis* Pic, 1929.

The single male from Jericho in the M. Pic collection has hind tibiae not mucronate and looks much like *C. fausti* Reitter, 1890, differing in a little coarser pubescence. The specimen may probably belong to *C. latifrons* Pic, 1897, described from Egypt, reported from Jordan (Alonso-Zarazaga, 1989), and collected in Israel by M.G. Volkovich in 1994. The relations between this species and *C. fausti* need a special study; the beetles have very similar appearance, unusually broad frons (except the series of *C. fausti* from E Iran – see comparison of *C. helenae*), and do not differ noticeably in the structure of male genitalia. In S Turkey The specimens of a species of this group from S Turkey (Mersina) have a small, but distinct mucro on hind tibiae; in NE Turkey occurs typical *C. fausti* with hind tibiae not mucronate.

Corimalia helenae Korotyaev & Zherichin, sp. n.

(Figs 1-4)

Holotype. ♂, **Russia**, N Daghestan, Kochubei village, on *Tamarix ramosissima* Ldb. in semidesert near river, 5.V.1992 (Korotyaev).

Paratypes. **Russia**: 1 ♂, 15 ♀, Krasnoarmeisk nr. Volgograd (= "Sarepta"), Becker, No. 1785, 1872; 2 ♀, Sarepta, Becker, ex coll. Christoff; 1 ♂, 2 ♀, ?ex coll. Christoff, "*Nanophyes languidus*" + yellow circle; 1 ♂, 4 ♀, Sarepta, B[ecker]; 1 ♂, Sarepta, Becker, "*Nanophyes languidus* Boh.", ex coll. A. Yakovlev; 1 ♀, Sarepta, ex coll. Artobolevskiy; 2 ♂, 1 ♀, Sarepta, "*Nanophyes vestitus* Kiesw.", ex coll. Solsky; 5 ♂, 6 ♀, N Caucasus, sands at the boundary between Stavropol' Terr. and Daghestan, lower Kuma River, from jumping cecidia, VI.1911 (B.P. Uvarov). **Daghestan**: 4 specimens, lower Kuma River, 6.V.1992 (M.Sh. Ismailova, B.A. Korotyaev, V.N. Prasolov); 3 specimens, as holotype, but collectors as above, and 2 specimens, 26.V.1992 (M.Sh. Ismailova). **Armenia**: 1 ♀, Ararat Station, 28.V.1926 (Ryabov). **Azerbaijan**: N Mugan steppe: 3 ♀, Kalgainy, 19.V.1933 (F.K. Lukjanovich); 1 ♀, Petropavlovka, 18.V.1933 (F.K. Lukjanovich). **Kazakhstan**: 1 ♂, C Betpak-Dala Desert, Chekmen'kazgan, 14.VI.1961 (A.F. Emeljanov); *Dzhezkazgan Prov.*: 6 ♂, 29 ♀, 80 km S of Zhana-Arka, 6.VI.1958 (R.D. Zhantiev); 3 ♂, 2 ♀, 20 km from the Aktau Mts. to Koksenghir, 7.VI.1958 (M.M. Loginova); 1 ♂, 1 ♀, *Alma-Ata Prov.*, Sharyn River, Kurtogoi, 2.VII.1987 (A.F. Emeljanov). 2 ♂, 130 km E of Alma-Ata (= Almaty), 7 km before Chiliz, *T. ramosissima* Ldb., N 8884, N 8875, 8.VI.1995 (C.J. DeLoach). *Taldy-Kurgan Prov.*: 1 ♂, 1 ♀, Aydarly vill., lake, 9.V.1990 (V.N. Prasolov); 1 ♂, 2 ♀, Mynbulak, oasis, near spring, 20.V.1990 (V.N. Prasolov). **Uzbekistan**: Kyzyl Kum Desert, Kul'dzhuktau, Ayakguzhundy,

1 ♂, 3 ♀, 18.V.1965 (I.M. Kerzhner), and 2 ♂, 4 ♀ (1 with head missing), 20.V.1960 (L.V. Arnoldi); 1 ♀, SE Kyzyl Kum Desert, 140 km N of Navoi, desert, on *T. laxa* Willd., 18.IV.1983 (Kh.A. Nasreddinov). **Turkmenistan**: Ashkhabad: 1 ♂, 26.V.1902 (K.O. Ahnger); 1 ♂, 8.VI.1898 (K.O. Ahnger); 1 ♀, 1 ♂, Dry Sport Lake nr. Ashkhabad (= Ashgabat), young *T. ramosissima* Ldb. and *T. florida* Bge., No. 8754, 8762, 21.V.1995 (C.J. DeLoach); 2 ♀, same locality, flowering *T. ramosissima*; N 8729; *T. florida*, N 8742, 22.V.1995 (C.J. DeLoach); 2 ♂, 2 ♀, Kara Kum Canal nr. Ashkhabad (= Ashgabat), *Tamarix* sp., N 7274, 7275, 7276, 7539, 27.V.1994 (C.J. DeLoach); 1 ♂, same locality, *T. ramosissima*, No. 8789, 23.V.1995 (C.J. DeLoach); 5 ♂, 9 ♀, Geok-Tepe Distr., Kara Kum Canal, Babarab, 12.IV.1987 (V.N. Prasolov); 1 ♂, Kopet Dagh, Geok-Tepe, 17.IV.1987 (V.N. Prasolov); 1 ♀, Arman-Saad – Kizil-Arvat, V.-VII.1896 (K.O. Ahnger); Tedzhen: 1 ♀, 21.V.1889 (A.P. Semenov); 5 ♂, 4 ♀, 19.VIII.1896 (K.O. Ahnger); 3 ♂, Gyaurs Station – Bayram-Ali, 1896 (K.O. Ahnger); 2 ♂, 3 ♀, Bakharden Station, 21.V.1896 (K.O. Ahnger); 1 ♂, Molla-Kara nr Djebel, 9.VI.1934 (V.V. Popov); 1 ♂, Lake Sarykamysh, 4.X.1985 (L. Mitroshina); 1 ♀, the Sumbar River, 10 km WSW of Shirlauk, 10.VII.1973 (A.F. Emeljanov); Charshanginsk Distr., 45 km SE of Gaurdak, Karlyuk vill., 370 m: 12 ♂, 13 ♀, salt river, on *Tamarix laxa*, *T. meyeri* Boiss. and *T. leptostachys* Bge., 3.IV.1983 (B.A. Korotyaev); 2 ♂, 4 ♀, 4.IV.1983 (Kh.A. Nasreddinov); 4 ♂, 6 ♀, 5.IV.1983 (B.A. Korotyaev); 1 ♂, 7.IV.1983 (Kh.A. Nasreddinov); Chardzhou Prov.: 15 km W of Karabekaul, Amu Darya River: 1 ♂, 1 ♀, on *Tamarix meyeri*, 14.IV.1983 (B.A. Korotyaev); 2 ♀, on *T. sp.*, 14.IV.1983 (B.A. Korotyaev). **Tajikistan**: 1 ♀, Kabadian, steppe between the Vakhsh River and Aktau Ridge, 16.VI.1934 (V.V. Gussakovskiy); Beshkent Valley, Chilichor-Chashma W of Shaartuz: 1 ♂, 3 ♀, 6.IV.1958 (I.K. Lopatin); 2 ♀, 20.IV.1962 (E.L. Gurjeva & O.L. Kryzhanovskiy); 1 ♀, 9.V.1974 (Kh.A. Nasreddinov); 1 ♂, Karatau Ridge, Parkhar, 30.V.1963 (G. Sapozhnikov). **Iran**: 6 ♂, 12 ♀, Deshte-Lut Desert, Khebisv, IV.1859 (Keiserling). **Mongolia**: 1 ♂, *Gobi Altai Aimak*, 60 km SE of Bugat, Khaichi Bulak Spring, 19.VII.1970 (A.F. Emeljanov); 2 ♀, *Bayan Khongor Aimak*, 135 km S of Shine Dzhist, 25 km N of Ekhyin Gol Oasis, Tol' Bulak Takyr (= dry salt lake), sand dunes, on *Tamarix gracilis* Willd. or *T. ramosissima*, 11.IX.1981 (B.A. Korotyaev); 2 ♂, 1 ♀, *Uver Khangay Aimak*, eastern shore of Lake Tatsyn Tsagan Nur, 2-4.VIII.1969 (I.M. Kerzhner); 2 ♂, 1 ♀, *East Gobi Aimak*, S shore of the Lake Tenger Nur, 5.VIII.1977 (M.A. Kozlov).

Type material on *Corimalia helenae* is kept in the Zoological Institute, St.Petersburg, except 9 paratypes collected by Dr. C.J. DeLoach, which are sent to the Smithsonian Institution, Washington,

Description. ♂. Rostrum 1.19-1.34 times longer than pronotum, weakly curved, cylindrical, parallel-sided, forming a comparatively steep angle with frons. Rostrum in basal part with strong shining median keel, gradually widening slightly proximal and disappearing

distal of antennal insertion. Lateral keels also strong (except near base), shining, extending far beyond antennal base and reaching apical quarter of rostrum. Apical half of rostrum shining, with rather sparse, small to middle-sized elongate punctures. Antennae inserted in the middle of rostrum or just before it. Funicle 5-segmented, slender; 1st segment about 3 times longer than wide, 2nd segment slightly more than half as long as 1st, 3rd segment 0.6 times as long as 2nd, 1.5 times longer than wide; 4th segment a little shorter than 3rd, 5th as long as wide. Club spindle-shaped, acuminate, long, comprising about 0.8 length of the funicle; 1st segment of the club separated by a fairly deep, 2nd segment – by a less deep constriction; the rest of the club, about a half of its length, without distinct sutures. Eyes large, weakly convex. Frons less than half as wide as base of rostrum.

Prothorax subconical, about 1.5 times wider than long; sides very weakly rounded, disc weakly convex, more or less shining and densely punctate.

Elytra about 1.4 times longer than wide, at base as wide and at widest part, a little before the middle, 1.3 times as wide as prothorax. Shoulders weakly to moderately (in some males with less rounded sides of elytra) prominent, sides weakly and rather evenly rounded, preapical prominences very weak. Striae rather deep and wide. Intervals about 2-2.5 times wider than striae, slightly convex, weakly shining, rather densely punctate. Base of elytra finely reflexed and dentate. Femora thick, all with 1 large and 2 (middle and hind femora often with 1) small teeth. Fore and middle tibiae straight, hind tibiae moderately bent outwards in apical half. Middle and hind tibiae with a well-developed mucro perpendicular to the axis of tibiae, broad at base, with bi- or tridentate apex; denticles may be quite indistinct, or mucro may be splitted in a half of its length. Postero-interior part of tibiae weakly sinuate before mucro. Tarsi long and narrow, 1st segment of fore tarsi twice, 2nd segment 1.6-

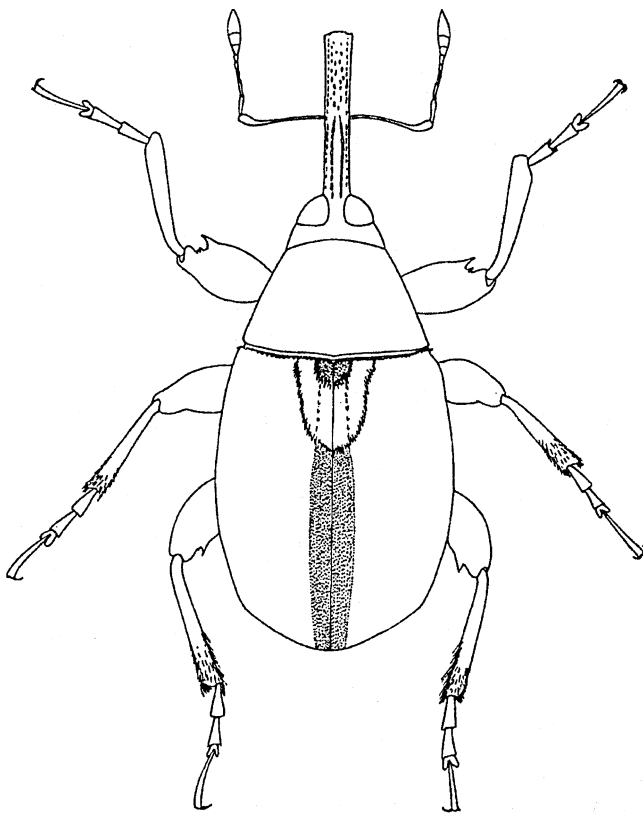
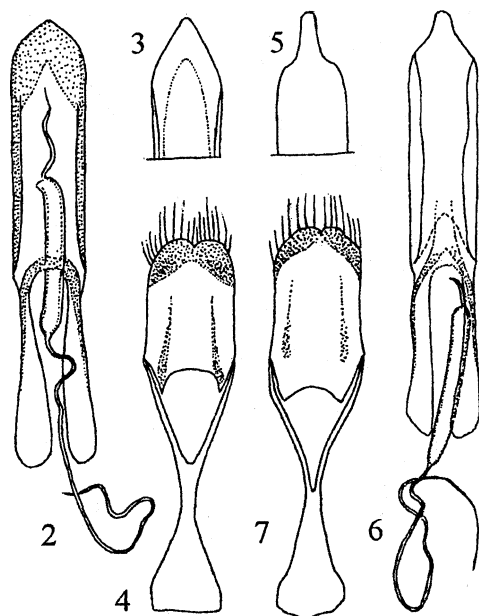


Fig. 1. *Corimalia helenae* sp. n., female, general view.

1.7 times longer than wide, 3rd segment not wider than 2nd; apical segment $\frac{3}{4}$ as long as 1st-3rd segments combined. Middle coxae weakly angulate and shortly setose postero-medially. Penis evenly narrowing to apex (Figs 2, 3); tegmen as in Fig. 4.

♀. Rostrum 1.46-1.55 times longer than pronotum, weakly dilated in apical third. Sculpture about as in male or slightly finer, surface a little more shining. Antennae inserted in the middle of rostrum or just behind it. Elytra slightly wider and more rounded than in male. Hind tibiae very weakly curved, their inner side with fairly long dark hairs in apical half. All tibiae not mucronate. Middle coxae nearly spherical.

Body pale brown, rostrum and pronotum slightly to considerably darker, sutural interval always mid brown; dorsal surface of fore femora more or less infuscate in apical part; metasternum and middle of mesosternum dark brown to black, abdomen more or less infuscate. Rarely head capsule and ventral side of rostrum dark brown, sides of elytra in such specimens also infuscate. Pubescence



Figs 2-7. *Corimalia*, male genitalia. 2-4, *C. helenae* sp. n., holotype; 5-7, *C. obscuriceps* Pic, lectotype. 4, 7, tegmen; 2, 6, penis, dorsal view; 3, 5, its apex, dorsal view.

dense, of adpressed, very narrow, lanceolate, parallel-sided or nearly hair-like, white or yellowish scales. Frons concealed by white scales. Pronotum with median stripe of broader lanceolate scales; the stripe widening in the middle, sometimes its apical half yellowish. Lateral stripes diffuse. Elytra with a well-defined white scutellar spot, a smaller spot on shoulder, and often with stripes of broader white scales on even intervals. The scutellar spot rounded, gradually narrowing from the curved outwards base of 2nd interval towards the suture. The area just behind scutellum always denudated. 7th interval with 1 specialized seta in apical third. Underside moderately densely covered with white hair-like scales.

Length of body 1.9-2.65 mm.

Comparison. The new species is similar to *C. fausti* Rtt., and to its large-sized Mongolian subspecies *C. fausti orientalis* Zherichin in particular. *C. helenae* differs in the coarser sculpture of rostrum – in *C. fausti* median keel, if present, never reaches the middle of rostrum, dorsum of rostrum not sulcate along keel; punctuation of apical half of rostrum in females of *C. fausti* minute, rostrum more slender, not dilated apically. Club of antennae in *C. fausti* shorter, com-

prising less than 0.70 length of the funicle. Frons in *C. fausti* broader, in *C. fausti orientalis* more than half as broad as base of rostrum (but in specimens of *C. ?fausti* from E Iran collected with the paratypes of *C. helenae* frons less than half as broad as rostrum). The new species may be easily distinguished by the rounded scutellar spot with denudated area at base – in *C. fausti* the scales in the spot are uniformly dense, sides of the spot on 2nd intervals parallel, and the stripes on 1st interval often shorter than on the 2nd one, so that the hind margin of the spot is sinuate. Striate elytral pattern, when developed, is also diagnostic for *C. helenae*. Males are easily recognized by the mucronate middle and hind tibiae and angulate middle coxae. Both in appearance, including the peculiar shape of the scutellar spot and leg structure in males, and in the structure of penis and tegmen, *C. helenae* is most similar to *C. aliena* Fst. The latter has larger size, 2.6-3.2 mm, a little broader and longer rostrum, in females 1.7 times exceeding length of pronotum; sculpture of rostrum coarser, antennae inserted a little closer to apex. *C. aliena* develops on *Myricaria*; in the type locality in western Tuva, on Chadan River, right tributary of the Khemchik River, it lives on *M. dahurica* (Willd.) Ehrenb.

Etymology. The species is named for Dr. Helene Perrin of the Museum of Natural History in Paris.

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