Tingis (*Tropidocheila*) *ribesi*, a new species of lace bug (Heteroptera: Tingidae) from Iran

Tingis (*Tropidocheila*) *ribesi* – новый вид клопа-кружевницы (Heteroptera: Tingidae) из Ирана

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Tingis (*Tropidocheila*) *ribesi* **sp. nov.** (Heteroptera: Tingidae) from Iran is described.

Описан новый вид *Tingis* (*Tropidocheila*) *ribesi* **sp. nov.** (Heteroptera: Tingidae) из Ирана.

Key words: Iran, Heteroptera, lace bugs, Tingidae, new species

Ключевые слова: Иран, полужесткокрылые, Heteroptera, клопы-кружевницы, Tingidae, новый вид

INTRODUCTION

Twenty-seven Palaearctic species of the subgenus *Tropidocheila* Fieber, 1844 of the genus *Tingis* Fabricius, 1803 are presently known. However, only four species of this subgenus distributed in the Western Palaearctic Region were known to occur in Iran: *Tingis ciliaris* (Puton, 1879), *Tingis liturata* (Fieber, 1844), *Tingis ragusana* (Fieber, 1861), *Tingis seidenstueckeri* Péricart, 1981 (Péricart, 1983; Péricart & Golub, 1996; Linnavuori, 2004; Ghahari et al., 2010). Besides, the record of *Tingis* (*Tropidocheila*) *maculata* (Herrich-Schaeffer, 1838) as *T. stachydis* (Fieber, 1844) from Iran by Wagner (1968) requires confirmation according to Péricart (1983).

A new species from the subgenus *Tropidocheila* was revealed on the basis of material collected in Iran by R.E. Linnavuori. Holotype of the new species is deposited in the collection of R.E. Linnavuori (Raisio, Finland).

RESULTS

Order **HETEROPTERA**

Family **TINGIDAE**

Subfamily TINGINAE

Tingis Fabricius, 1803

***Tingis* (*Tropidocheila*) *ribesi* sp. nov.**
(Fig. 1)

Material examined. *Holotype*. **Iran**, *Fars*, 16 km of Sa'adatshahr, alt. 1680 m; 6 July 1996; R. Linnavuori coll.; female, forma macroptera.

Description. Body oval, elongate, 2.67 times as long as wide, dorsally dirty yellow, pronotal disc slightly darker than the rest of dorsal surface.

Anterior and lateral margins of pronotum, its longitudinal carinae, lateral margins of hemelytra and their raised longitudinal veins, separating the areas of corium, with thin, straight or slightly curved pale setae. Length of setae on pronotum and at the base of lateral margins of hemelytra approximately equal to length of second antennal

segment. Length of these setae gradually decreases toward the apex of hemelytra, setae being almost absent in their apical parts. In addition, pronotal disc with sparse, very thin, curved, adpressed and slightly erected light hairs.

Head blackish brown, 2.26 times as wide as long. Antennal tubercles and all the five head spines pale yellow. Head spines with light straight erected hairs. Three frontal spines rather short, straight, directed forward. Paired frontal spines parallel and rather apart from each other, at a distance approximately equal to their length. Unpaired frontal spine shorter than paired ones. Occipital spines located along the inner margin of eyes, slightly raised above head surface and slightly curved in the vertical plane, their apices extending anteriorly beyond the middle of eye.

Antennae moderately long, their first and second segments rather thick, brown, third segment slender, yellowish brown, fourth segment quite thick, fusiform, brownish black. All antennal segments covered with light thin adpressed or slightly erected short hairs that are shorter than the thickness of their segment. In addition apical half of fourth segment bears a few longer erected setaceous hairs. The length of antennal segments (I : II : III : IV) is described by the ratio 0.125 : 0.1 : 0.375 : 0.2 mm.

Pronotum with low tectiform hood that significantly angulately protrudes anteriad. Disc of pronotum significantly convex. Pronotum with three low longitudinal carinae bearing one row of small oval or round areolae. Paranota strongly curved upward, almost vertical, rather narrow, with one row of areolae in sizeable part of their length, and few areolae in a second row (well visible on lateral angles of pronotum) in widest part of each paranotum. Lateral margins of paranota concave in their anterior half.

Macropterous form. Hemelytra extend considerably backward beyond apex of abdomen. Costal area relatively wide, its greatest width approximately equal to length of first antennal segment. This area

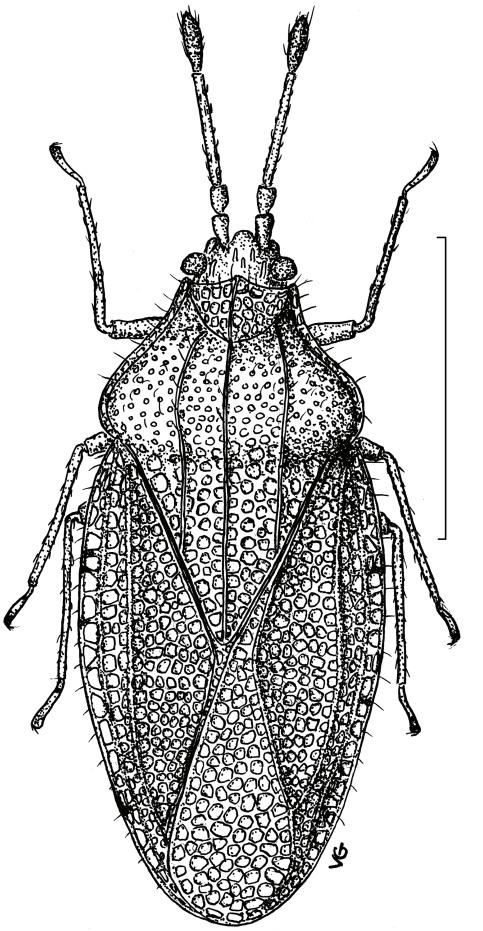

Fig. 1. *Tingis* (*Tropidocheila*) *ribesi* **sp. nov.** (holotype), body, dorsal view. Scale bar: 1.0 mm.

has one row of areolae and a few areolae in the second row at the base and near apex (in preapical sinus), and only one row of areolae in the middle part or single areolae in the second row.

Subcostal area along most of its length with two rows of areolae, only in its widest part (in the middle part of its length) with two or three areolae in the third row. Discoidal area and membrane in their widest part with six and seven rows of areolae, respectively.

Body ventrally brown, with very short light adpressed hairs.

Femora brown, tibiae and base of tarsi dirty yellow, apical half of tarsi brown, apex

of tarsi and claws black. Femora and tibiae with very short light erected hairs.

Measurements (in mm). Length: body 2.38, head 0.19, pronotum 1.29. Width: body 1.05, head 0.43, pronotum 0.95.

Distribution. Iran.

Etymology. This species is named in honor of the eminent Spanish heteropterologist Jordi Ribes.

Comparison. The presence of rare long straight setaceous hairs on the lateral margins of the paranota, hemelytra and the main longitudinal salient veins of hemelytra, as well as the tectiform hood indicate that the new species belongs to the subgenus *Tropidocheila*.

The new species is most similar to *Tingis* (*Tropidocheila*) *ajugarum* (Frey-Gessner, 1872) and especially to *T.* (*Tropidocheila*) *cornigera* Golub & Akramovskaja, 1975. All the three species share the following features: paranota rather narrow, strongly curved upwards, almost vertical, with one row of areolae in sizeable part of their length, and with few cells of the second row on the widest part of each paranotun; pronotal disc, excluding carinae, with thin light raised hairs; subcostal area of hemelytra in the sizeable part of its length with two rows of areolae and only in the widest part with few cells of the third row.

Tingis (*Tropidocheila*) *ribesi* **sp. nov.** differs from either of the above species by a significantly smaller body. Dimensions of *T. ajugarum* (mm): length: body 3–4.2, antennal segments 0.17–0.22, 0.12–0.16, 0.56–0.63, 0.34–0.39; width: body 1.2–1.6; head 0.48–0.58. Dimensions of *T. cornigera* (mm): length: body 3.25–3.5, antennal segments 0.17, 0.14, 0.5, 0.31; width: body 1.36–1.6; head 0.53–0.58.

In addition, the antennae of *T. ajugarum* are entirely light while the fourth antennal segment of *T. ribesi* **sp. nov.** is brownish black; the costal area of *T. ajugarum* hemelytra in sizeable part of its length has two rows of areolae, in *T. ribesi* **sp. nov.** it has two complete rows of areolae only at the base of hemelytra and near the apex (at the level of preapical sinus); the ratio of the length of the third antennal segment to the head width in *T. ajugarum* is 1.05–1.2, in *T. ribesi* **sp. nov.** it is 0.87.

The hemelytra and pronotum of *T. cornigera* are covered with rather dense pale raised hairs; in *T. ribesi* **sp. nov.** hairs on the elytra, except the carinae, are almost absent.

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