

A new species of lace bugs from northern Iran *Tingis (Tingis) riegeri* sp. nov. (Hemiptera, Heteroptera, Tingidae)*

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Abstract

Tingis (Tingis) riegeri sp. nov. from northern Iran is described and illustrated. Diagnostic features which distinguish it from related species are discussed.

Key words: northern Iran, Heteroptera, new species, Tingidae.

Kurzfassung

Eine neue Netzwanzen-Art aus dem nördlichen Iran *Tingis (Tingis) riegeri* sp. nov. (Hemiptera, Heteroptera, Tingidae)

Tingis (Tingis) riegeri sp. nov. aus dem nördlichen Iran wird beschrieben und abgebildet. Die diagnostischen Merkmale, die sie von verwandten Arten unterscheidet, werden diskutiert.

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Introduction

A new species from the subgenus *Tingis* FABRICIUS, 1903, has been discovered during a study of the collection materials at the Zoological Institute RAS (St. Petersburg), where the holotype and two paratypes are deposited.

Tingis (Tingis) riegeri sp. nov., (figs 1, 3)

Holotype ♂: Iran, Shahrud (in the label: "Persia sept-or., Shachrud"), 20.05.1914 (KIRITSHENKO leg.).

Paratypes 2 ♂♂, same locality, 13.05., 03.06.1914 (KIRITSHENKO leg.).

Holotype and paratypes deposited in the collection of the Zoological Institute RAS, St. Petersburg.

Description

Imago (fig. 1): Small, not more than 3 mm. Body rather extended, 2.41-2.57 times as long as wide, dorsally dirty yellow, pronotum brown.

Brown spots are also present on the discoidal area and transverse veins of costal area of hemelytra. Pronotum and hemelytra covered by short light curved hairs; paranotal margins and anterior third of hemelytral margins with extremely short light hairs which are curved toward backwards.

Head black or brownish-black, with extremely short light curved hairs near the eyes and on the spines. Eyes with a very short and sparse pubescence. Head with five light elongate spines. Three frontal spines directed by their apices obliquely upwards and forwards, paired of them with convergent apices. Two occipital spines adjacent to the surface of the head, not longer than the frontal spines. Antennae rather thin, segments I-III brown or brownish-yellow, segment IV black or brownish-black, covered by very short, very slightly raised hairs. Antennal segment III 1.15-1.23 times longer than the width of the head and 2.0-2.11 times longer than the segment IV.

Pronotum with three low longitudinal carinae with extremely small, hardly visible one row of rounded areolae at the base of posterior pronotal process. Pronotal disc rather strong convex. Hood (vesicular) in the anterior part of pronotum tectiform, rather high, with rather strong projecting forwardly by angle. Paranota with 2 rows of small areolae, reflexed upwards and pressed to sides of pronotal disc in their lower half, but their upper half (along the outer margin) flattened obliquely laterally and upward, dorsally can one row of areolae be visible.

Macropterous form: Hemelytra with small areolae, reaching posteriorly beyond apex of abdomen. Costal area narrow, with one row of narrow and strongly elongate areolae for almost its entire length, only in its base with several small areolae of the second row. Subcostal area with two rows of areolae in the significant part of its length and with three rows (5-6 areolae) in the slightly extended anterior third of its length (fig. 3). Discoidal area with six rows of areolae in the widest part.

* Dr. CHRISTIAN RIEGER, honouring his 70th birthday.

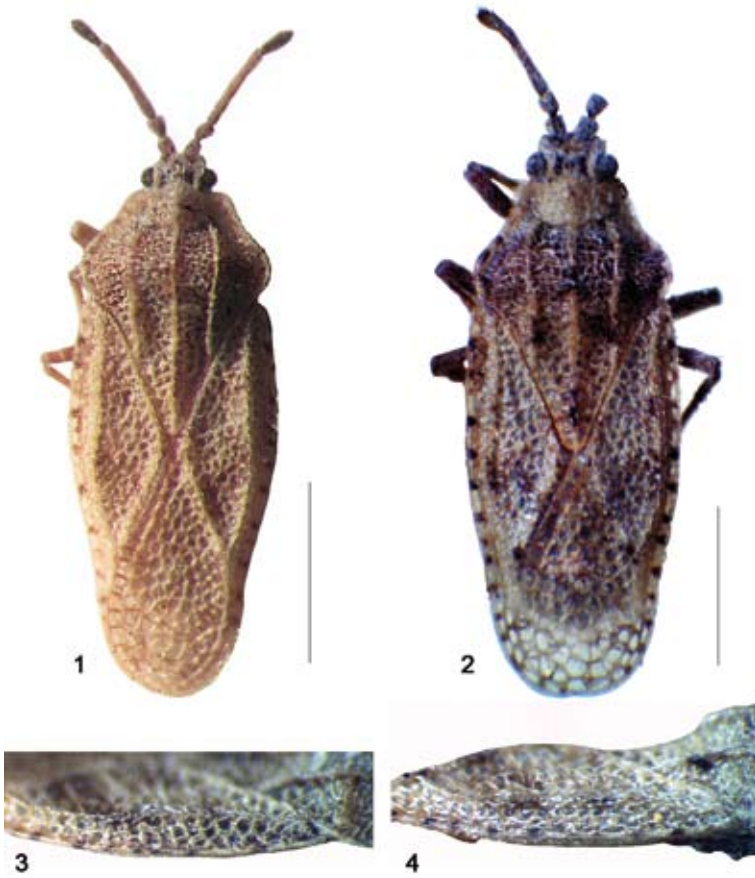


Figure 1. *Tingis (Tingis) riegeri* sp. nov., holotype, dorsal view. Scale = 1 mm.

Figure 2. *Tingis (T.) elongata* (FIEBER), ♂, dorsal view. Iran (environments of Teheran). Scale = 1 mm.

Figure 3. *Tingis (T.) riegeri* sp. nov., holotype, subcostal area of hemelytra.

Figure 4. *Tingis (T.) elongata* (FIEBER), ♂, subcostal area of hemelytra.

Membrane with nine rows of rectangular and pentagonal small areolae in the widest part.

Thorax ventrally brown or blackish-brown, abdomen brownish-yellow. Legs covered by very short light hairs. Femora brown, tibiae lighter, brownish-yellow, tarsi black.

Measurements (in mm):

Body length 2.93-3.0, body width 1.17-1.22, pronotum width 1.0-1.03, head width 0.41-0.42. Length of antennal segments (I-IV): holotype ♂: 0.12, 0.11, 0.48, 0.22, paratypes 2 ♂: 0.12, 0.11, 0.5-0.52, 0.2.

Diagnosis

The new species is closely related to *T. elongata* (FIEBER, 1861) (figs 2, 4), distributed throughout the Mediterranean, as well as in Iran. It differs from *T. elongata* by presence of intermediate

third row of areolae in the anterior part of subcostal area of hemelytra, flattened laterally upper half of paranota, shorter hairs on margins of paranota and hemelytra, shorter and very sparse pubescent of eyes. Occipital spines in the new species are not longer than the frontal spines, head narrower, antennal segments I and II shorter, on the average segment III is also shorter; the new species smaller than *T. elongata*.

Morphological features of *T. elongata* are as follows: subcostal area of hemelytra with two rows of areolae along the entire length, paranota strong, almost vertically curved upwards, the hairs on margins of paranota and hemelytra longer, pubescence of eyes longer and much denser, occipital spines longer than frontal ones; head width 0.48 mm, lengths of antennal segments 0.16, 0.13, 0.46-0.6, 0.24 mm (two first segments



Figure 5. *Tingis (Tingis) leptochila* HORVÁTH, ♂, dorsal view. Central Kazakhstan.

Figure 6. *Tingis (T.) zhadiana* GOLUB, paratype ♂, subcostal area of hemelytra. Tadjikistan. Scale = 1 mm.

distinctly longer than in *T. riegeri*), body length 3.3-3.7 mm.

Moreover *T. riegeri* sp. nov. is close to Central Asia species *T. leptochila* HORVÁTH, 1906, *T. zhadiana* GOLUB, 1978, *T. kerzhneri* GOLUB, 2006 and to *T. angustata* (HERRICH-SCHAEFFER, 1838) which is widely distributed in the West Palaearctis. *T. leptochila* (fig. 5), *T. zhadiana* (fig. 6) and *T. angustata* (fig. 8) differ from *T. riegeri* having two rows of areolae almost along the entire length of costal area of hemelytra, except the narrower uniseriate part in the middle of area length, areolae not very elongated. Macropterous forms of *T. leptochila* and *T. angustata* are larger: body length of *T. leptochila* – 3.1-3.6 mm, *T. angustata* – 3.2-3.7 mm. Body length of *T. zhadiana* 2.7-3.2 mm. Paranota of *T. angustata* wider and stronger curved upwards than in *T. riegeri* sp. nov.

T. kerzhneri (fig. 7) differs from *T. riegeri* sp. nov. having smaller sizes and more rounded contour

(body length 2.3-2.9, body width 1.06-1.28 mm, body 2.23-2.33 times as long as wide), costal area of hemelytra, apart from the base, often with several areolae of the second row in different locations.

Etymology: I dedicate this species and this paper to the well known heteropterologist and one of the editors of six-volume Catalogue of the Heteroptera of the Palaearctic Region Dr. CHRISTIAN RIEGER on the occasion of his 70th birthday.

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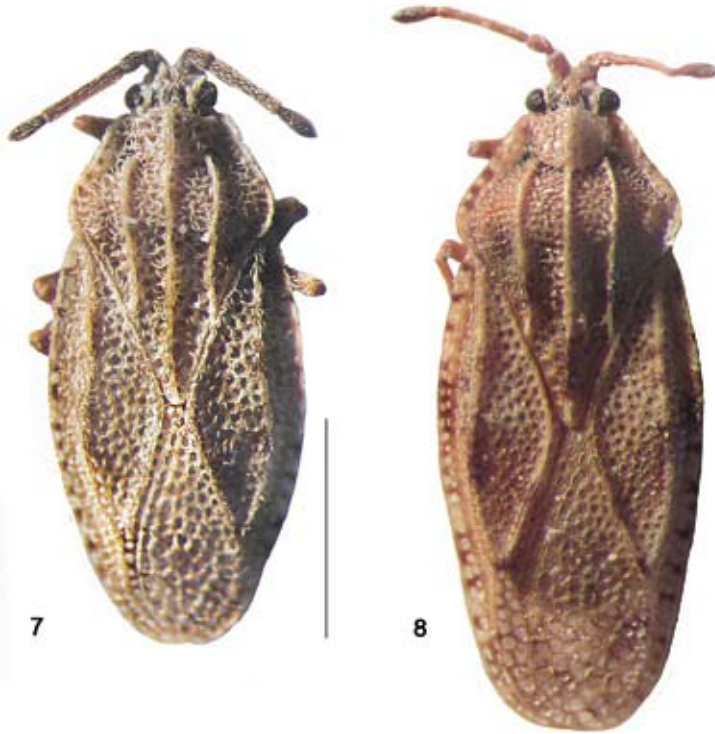


Figure 7. *Tingis (Tingis) kerzhneri* GOLUB, paratype ♂, dorsal view. Turkmenistan.

Figure 8. *Tingis (T.) angustata* (HERRICH-SCHAEFFER), ♂, dorsal view. Armenia.

Scale = 1 mm.

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