

Review of the Palaearctic subgenus *Rugodiaparsis* Horstmann, 1971
of the genus *Probles* Förster, 1869
(Hymenoptera: Ichneumonidae: Tersilochinae)

Обзор палеарктического подрода *Rugodiaparsis* Horstmann, 1971
рода *Probles* Förster, 1869
(Hymenoptera: Ichneumonidae: Tersilochinae)

A.I. Khalaim
А.И. Халаим

Zoological Institute, Russian Academy of Sciences, Universitetskaya nab., 1, St. Petersburg 199034 Russia. E-mail: hymenopt@zin.ru
Зоологический институт РАН, Университетская наб., 1, Санкт-Петербург 199034 Россия.

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КЛЮЧЕВЫЕ СЛОВА: Ichneumonidae, Tersilochinae, *Probles*, *Rugodiaparsis*, Палеарктика, новые виды, систематика.

ABSTRACT. Two new species are described: *Probles (Rugodiaparsis) kotenkoi* sp.n. from Transcaucasus and *P. (R.) kunashiricus* sp.n. from the South of the Russian Far East. New data on the distribution of *P. (R.) crassipes* (Thomson, 1889) and *P. (R.) ruficornis* (Szépligeti, 1899) are presented. A key to all four species of the subgenus is given.

РЕЗЮМЕ. Даны описания двух новых для науки видов: *Probles (Rugodiaparsis) kotenkoi* sp.n. из Закавказья и *P. (R.) kunashiricus* sp.n. с юга Дальнего Востока России. Приводятся новые данные о распространении *P. (R.) crassipes* (Thomson, 1889) и *P. (R.) ruficornis* (Szépligeti, 1899). Дается определительная таблица для всех четырех видов подрода.

Introduction

Rugodiaparsis Horstmann, 1971 is a small Palaearctic subgenus of the genus *Probles* Förster, 1869 [Yu, Horstmann, 1997] containing four species, two of them being described in the present paper: *P. (R.) kotenkoi* sp.n. from Transcaucasus and *P. (R.) kunashiricus* sp.n. from the South of the Russian Far East. This subgenus differs from other subgenera of *Probles* by having a long, strongly rugose propodeum with the basal keel, slightly elongate thyridia, and a rather short and an ovipositor with a needle-like tip (Fig. 6).

The European fauna of Tersilochinae was revised by Horstmann [1971, 1981]. In the first part of his revision Horstmann [1971] described the new genus *Rugodiaparsis* for two species, *R. crassipes* (Thomson, 1889) and *R. ruficornis* (Szépligeti, 1899). In the second part

of the revision [Horstmann, 1981] *Rugodiaparsis* was established as a subgenus of the genus *Probles*.

The biology of *Rugodiaparsis* is unknown.

The material deposited at the Zoological Institute of the Russian Academy of Sciences (St. Petersburg, Russia — ZISP), Institute of Zoology (Kiev, Ukraine — SIZK) and Institute of Ecology (Vilnius, Lithuania) has been studied. Geographical distribution of *P. (R.) crassipes* and *P. (R.) ruficornis* is given according to Horstmann [1971, 1981] or other sources; new data on distribution are marked by an asterisk (*).

KEY TO FEMALES OF THE SUBGENUS *RUGODIAPARSIS*

1. Head almost entirely smooth, face and frons with fine punctures; malar space 0.75–0.85 times as long as basal width of mandible. Antenna with 28 segments (Fig. 5) *P. (R.) kotenkoi* sp.n.
— Head granulate and usually impunctate; malar space at least as long as basal width of mandible 2
2. Distance between propodeal spiracle and pleural carina equal to 3–4 diameters of spiracle; antenna with 23–24 segments *P. (R.) crassipes* (Thoms.)
— Distance between propodeal spiracle and pleural carina approximately equal to the diameter of spiracle; antenna with 25–32 segments 3
3. Middle and subapical antennal segments distinctly longer than wide; clypeus sparsely punctate, distance between punctures 2–5 their diameters; metasoma dark brown to black; antenna with 25–27 segments
..... *P. (R.) ruficornis* (Szépl.)
— Middle and subapical antennal segments as long as wide or slightly shorter; clypeus densely punctate, distance between punctures about their diameter; metasoma (excluding first segment) yellow to rufous; antenna with 30–32 segments (Fig. 1) *P. (R.) kunashiricus* sp.n.

Probles (Rugodiaparsis) crassipes (Thomson, 1889)

MATERIAL. Hungary, Rithahaza, 18.VI.1994, Kotenko, 1 ♀.

DISTRIBUTION. France, Belgium, Germany, Northern Italy, Austria, Czech Republic [Šedivý, 1989], *Hungary.

Probles (Rugodiaparsis) ruficornis (Szépligeti, 1899)

Fig. 6.

MATERIAL. Lithuania: Vilnius, 12.VI.1975, Jakimavičius, 1 ♀. Moldova: 20 km S Kagul, Flemina locality, forest, 18.VI.1974, Kasparyan, 4 ♀♀ (1 ♀ — Horstmann det.); Kishinev, bank of Bychyok River, 2.VI.1983, Kotenko, 1 ♀. Ukraine: Odessa Prov., 25 km S Kauzhany, Lesnoe, forest, 13.VI.1974, Kasparyan, 1 ♂; Crimea, Crimean Nature Reserve, Asport locality, garden, 17.VI.1978, Kasparyan, 1 ♀; Crimea, Crimean Nature Reserve, Svetlaya Polyana locality, 18.VI.1978, Kasparyan, 1 ♀; Crimea, Alushta, Luchistoe, 12.VI.1976, Jonaitis, 2 ♂♂. Russia: Novgorod Prov., 20 km NW Pestovo, Tychkino vill., 22.VI.2001, Tobias, 1 ♀; Severnaya Osetia, Ordzhonikidze [Vladikavkaz], spurge, 4.VI.1960, Guliy, 1 ♀; Bashkortostan, Belebey, 24.VI.1907, Grigoriev, 1 ♀; Chelyabinsk Prov., Il'mensk Nature Reserve, 1–3 km N Il'ma Lake, steppe slopes, 16.VII.1958, Tobias, 1 ♀; Buryatia, 13 km E Kudara-Somon, Dungay, forest, 9.VIII.1970, Kasparyan, 1 ♀; Khabarovsk Terr., lower flow of Amur River, Udyl' Lake 31.VIII.1970, Kasparyan, 1 ♀.

DISTRIBUTION. Germany, Czech Republic [Šedivý, 1989], Hungary, Yugoslavia, Bulgaria [Kolarov, 1987], *Lithuania, *Ukraine (Odessa Prov., Crimea), Moldova, *Russia (Novgorod Prov., Severnaya Osetia, Bashkortostan, Chelyabinsk Prov., Buryatia, Khabarovsk Terr.).

Probles (Rugodiaparsis) kotenkoi sp.n.

Figs 2, 5.

MATERIAL. Holotype: ♀, Armenia, Megri Distr., Gudemnis, 1500–2000 m, oak forest, 20.06.1981, Kotenko (SIZK). Paratype: Azerbaijan, Lerik Distr., Dzhoni, 8.VI.1981, Kotenko, 1 ♀ (ZISP).

DESCRIPTION. Female. Body length about 4.0 mm. Head width 0.87 mm; head roundly narrowed behind eyes in dorsal view (Fig. 2), almost entirely smooth. Temple slightly longer than eye width (Fig. 2). Antenna with 28 segments (Fig. 5); all segments longer than wide. Mandible densely punctate basally; upper tooth of mandible longer than lower tooth. Clypeus flat, smooth, finely and sparsely punctate on upper part, distance between punctures 2–5 their diameters. Malar space 0.75–0.85 times as long as basal width of mandible. Face and frons finely punctate; punctures on frons more sparse. Vertex and temples with very fine and sparse punctures.

Mesosoma length 1.5 mm, width 0.7 mm; mesosoma more or less granulate and partly finely punctate. Mesonotum slightly granulate, laterally almost smooth. Sternaulus wide, deep and strongly rugose, almost reaching hind coxa. Metapleuron densely granulate. Mesosternum more or less smooth. Propodeum strongly rugose, distance between propodeal spiracle and pleural carina approximately equal to the diameter of spiracle. Basal keel of propodeum indistinct, about as long as apical area. Fore wing length 3.0 mm. Metacarp not reaching apex of fore wing. Vein 2m–cu postfurcal.

Tergite 1 length 0.83 mm; this tergite distinctly longitudinally striate laterally and smooth dorsally. Tergite 2 length 0.47 mm, anterior width 0.36 mm. Thyridia slightly elongate. Ovipositor sheath 0.54 mm, distinctly shorter than tergite 1. Ovipositor short and needle-shaped apically.

Body black. Antenna brownish yellow basally, gradually darkening towards apex. Palpi, mandible (except teeth),

tegula and legs brownish yellow. Lower part of clypeus brownish yellow to brown. Pterostigma brown. Middle and hind coxae darkened (hind coxa sometimes black). Metasoma dark brown to black.

Male. Unknown.

DIAGNOSIS. Closely resembles *P. (R.) ruficornis* and differs from this and all other species of the subgenus by having smooth head and short malar space.

ETYMOLOGY. This species is named in honour of the Ukrainian entomologist A. Kotenko, an expert in Braconidae and collector of the type material.

Probles (Rugodiaparsis) kunashiricus sp.n.

Figs 1, 3, 4.

MATERIAL. Holotype: ♀, Kuril Islands, Kunashir Island, Tretyakovo, 4.VIII.1973, Kasparyan (ZISP). Paratypes: same label, 1 ♀ (ZISP); same locality, 3.VIII.1973, Kasparyan, 2 ♀♀ (ZISP).

DESCRIPTION. Female. Body length 4.7 mm. Head width 1.0 mm; head straightly narrowed behind eyes in dorsal view (Fig. 3), entirely granulate. Temples almost as long as eye width (Fig. 3). Antenna thick, with 30–32 segments; middle and subapical segments as long as wide or slightly shorter (Fig. 1). Mandible densely coarsely punctate at the base; upper tooth of mandible longer than the lower. Clypeus flat, densely punctate on upper 2/3, distance between punctures about their diameter. Clypeus separated from face by a narrow deep groove which is rather distinct laterally. Malar space 1.0–1.2 times as long as basal width of mandible (Fig. 1). Face and frons with distinct elevation extending from middle of face to median ocellus.

Mesosoma length 1.65 mm, width 0.84 mm; mesosoma more or less granulate and partly punctate. Mesopleuron dorso-posteriorly and mesosternum almost entirely smooth and sparsely punctate. Sternaulus wide, shallow and rugulose. Propodeum rugose, distance between propodeal spiracle and pleural carina approximately equal to the diameter of spiracle. Basal keel of propodeum indistinct, 0.65–0.75 times as long as apical area. Fore wing length 3.3 mm. Metacarp almost reaching apex of fore wing. Vein 2m–cu postfurcal, mostly unpigmented.

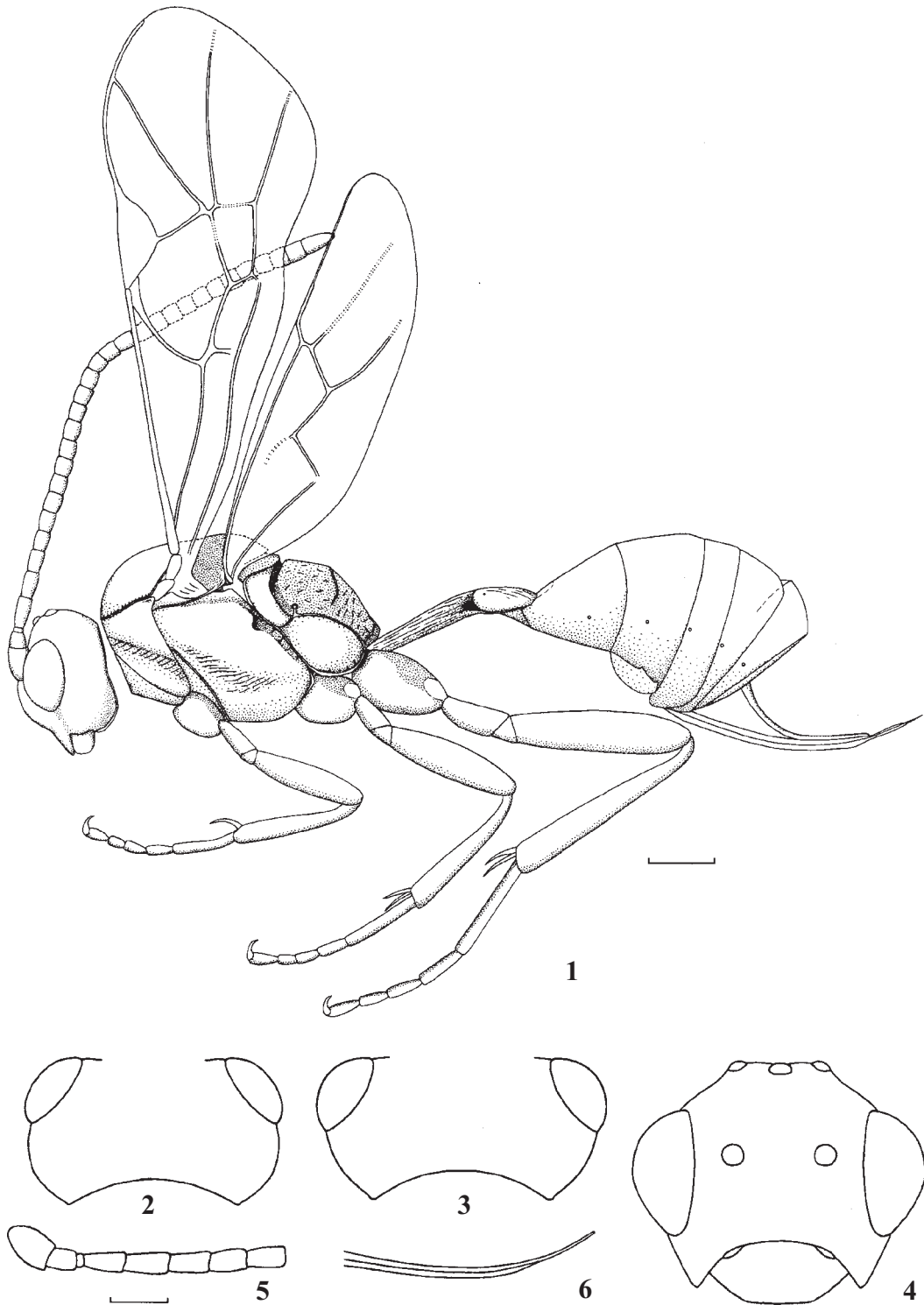
Tergite 1 length 1.0 mm; this tergite longitudinally striate (excluding posterior edge of postpetiolus). Petiolus round in transverse section. Tergite 2 length 0.57 mm, anterior width 0.36 mm. Thyridia elongate. Ovipositor sheath 0.86 mm, slightly shorter than tergite 1. Ovipositor needle-shaped apically, usually with dilatation near apex (Fig. 1).

Body black. Palpi, mandible (except teeth), clypeus, antenna, tegula, legs and metasoma (excluding tergite 1) yellow to rufous. Pterostigma dark brown. Hind coxa and femur brownish.

Male. Unknown.

DIAGNOSIS. *P. (R.) kunashiricus* sp.n. differs from others species of the subgenus by having head straightly narrowed behind eyes (Fig. 3), 30–32-segmented antenna with shortened middle and subapical segments (Fig. 1), densely punctate clypeus, noticeable elevation on the face and frons, weak sternaulus, short basal keel of the propodeum, and predominantly light coloration of the metasoma.

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Figs 1-6. *Probles* (*Rugodiaparsis*) spp., females: 1, 3, 4 — *P. (R.) kunashiricus* sp.n. (holotype); 2, 5 — *P. (R.) kotenkoi* sp.n. (holotype); 6 — *P. (R.) ruficornis*; 1 — habitus; 2-4 — head, dorsal (2, 3) and frontal (4) view; 5 — basal segments of antenna, lateral view; 6 — ovipositor, lateral view. Upper scale bar 0.4 mm (1), lower scale bar 0.2 mm (2-6).

Рис. 1-6. *Probles* (*Rugodiaparsis*) spp., самки: 1, 3, 4 — *P. (R.) kunashiricus* sp.n. (голотип); 2, 5 — *P. (R.) kotenkoi* sp.n. (голотип); 6 — *P. (R.) ruficornis*; 1 — габитус; 2-4 — голова, сверху (2, 3) и спереди (4); 5 — базальные членики антенны, сбоку; 6 — яйцеклад, сбоку. Верхняя линейка 0,4 мм (1), нижняя линейка 0,2 мм (2-6).

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