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Two new species of *Orgilus* HALIDAY from the Russian Far East

(Hymenoptera, Braconidae)

Contributions to the knowledge of East Palaearctic insects (9)

With 18 figures

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Summary

Orgilus fulvus sp. n. and *Orgilus chankaicus* sp. n. are described from the Russian Far East.

Zusammenfassung

Orgilus fulvus sp. n. und *Orgilus chankaicus* sp. n. werden aus dem Fernen Osten Rußlands beschrieben.

Key words: *Orgilus*, Hymenoptera, Braconidae, new species, Russian Far East, East Palaearctic.

Introduction

Thirteen species of *Orgilus* HALIDAY are known from the Russian Far East (BELOKOBYLSKIJ & TAEGER, 1996). During the preparation of the Braconid part of the "Opredelitel' nasekomych dal'nego vostoka Rossii", we discovered two additional species in the genus. We describe them below.

The following abbreviations are used for morphological terms: POL - postocellar line, OOL - ocular-ocellar line, OD - maximal diameter of lateral ocelli; for institutions: DEI - Deutsches Entomologisches Institut (Eberswalde, Germany), ZIP - Zoological Institute, Russian Academy of Sciences (St. Petersburg, Russia).

Orgilus fulvus sp. n.

(Figs 1-9)

Holotype: ♀, Primorskiy Kray, Spassk-Dal'niy, forest, border of forest, 30.06.1995 (S. Belokobylskij) (ZIP). Paratypes. Primorskiy Kray: 2 ♀, Spassk-Dal'niy, forest, border of forest, 1.07.1995 (S. Belokobylskij) (ZIP, DEI); 1 ♀, 10 km SW Sokol'chi, Lazovskiy Nature Reserve, forest, meadow, 22-24.07.1993 (Belokobylskij) (ZIP).

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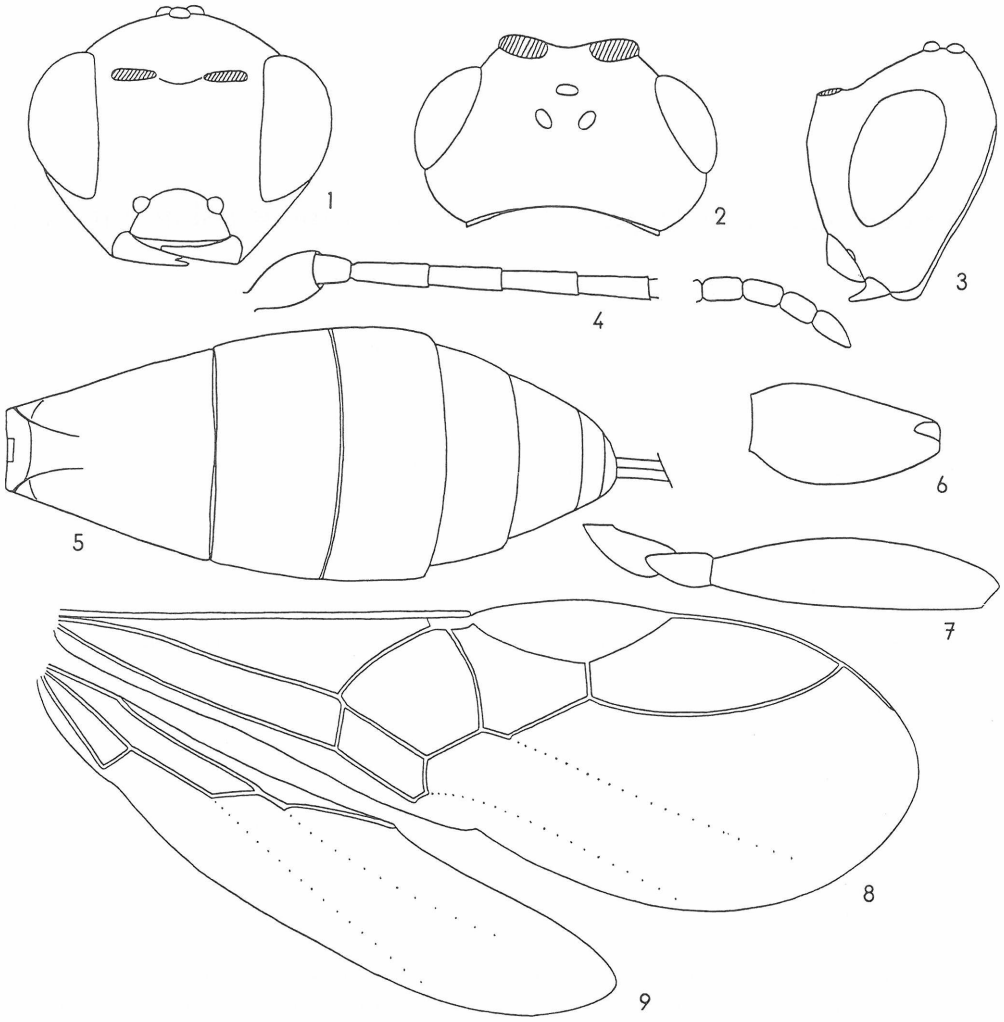

Figs 1-9. *Orgilus fulvus* sp. n. **1** - head, frontal view; **2** - head, dorsal view; **3** - head, lateral view; **4** - basal and apical segments of antenna; **5** - metasoma, dorsal view; **6** - hind coxa; **7** - hind trochanter and femur; **8** - fore wing; **9** - hind wing.

Description

Female. Body length 2.2-2.4 mm; fore wing length 2-2.4 mm.

Head width 1.8-2.0 times its length, 1.2 times width of mesoscutum. Temple distinctly roundly narrowed behind eye. Length of eye (in dorsal view) 2.0-2.2 times length of temple. Vertex distinctly convex. Occipital carina weak, in lateral view reaching top of eye. Occiput weakly concave. Frons without carina and furrow. Ocelli medium-sized, in equilateral triangle; OD:POL:OOL = 1:1.0-1.3:2.5-3. Eye glabrous, 1.3-1.4 times as high as broad. Cheek height

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0.25-0.3 times height of eye, 0.8-1.0 times basal width of mandible. No subocular suture. Face weakly convex, its width 1.4-1.5 times its medial height, 1.1 times height of eye. Tentorial pits distinct, situated at lower level of eyes, distance between pits 2.3-2.5 times distance from pit to eye. Clypeal suture distinct and complete. Clypeus convex, its width 1.7-2.0 times its medial height, ventral margin of clypeus almost straight. Cheeks distinctly and almost roundly narrowed below eyes. Maxillary palpi nearly 0.8 times as long as head height. Apical segment of labial palpi 2.5-3.0 times as long as wide.

Antenna 26-segmented, nearly equal to length of body. Length of scapus 1.7 times its width, nearly equal to length of first flagellar segment. First flagellar segment 3.0-3.5 times as long as its apical width, 1.0-1.1 times as long as second segment. Length of penultimate segment 1.7-1.8 times its width, 0.9 times apical segment.

Mesosoma. Length 1.6-1.7 times its maximum height, height 1.3 times its width. Notauli deep, complete, crenulate. Prescutellar depression short, crenulate, 0.25-0.3 times length of scutellum. Sternauli long, very shallow, almost straight, smooth. Prepectal carina complete. Propodeum roundly narrowed from base to apex (in lateral view).

Wings. Length of fore wing 2.8-3.0 times its width. Length of pterostigma 3.0-3.2 times its maximum width, 1.1-1.15 times metacarpus (within radial cell). Metacarpus (within radial cell) 2.1- 2.4 times the distance from apex of radial cell to apex of wing. Radial vein arising beyond middle of pterostigma. First radial abscissa 0.45-0.5 times maximum width of pterostigma, nearly 0.1 times second abscissa, 0.4 times first radiomedial vein. Second abscissa distinctly curved. Recurrent vein 2.2-2.8 times second abscissa of medial vein. Third medial abscissa lost. Discoidal cell narrowly sessile, its length 1.2-1.3 times its width. Distance from nervulus to basal vein 0.1-0.3 times nervulus length. Length of hind wing 5 times its width. Second abscissa of mediocubital vein 0.8-1.0 times first abscissa, 2.5-3.0 times nervellus and 2.5 times basal vein.

Legs. Hind femur 3.7-4.3 times as long as wide, 1.5-1.7 times hind coxal length, 0.7 times hind tibial length. Inner spur of hind tibia nearly 0.4 times basitarsus length. Hind tarsus nearly as long as hind tibia, its second segment 0.35 times first segment, 1.1 times fifth segment (without pretarsus). Claws simple.

Metasoma 1.1-1.2 times as long as mesosoma. Laterotergites distinct on second and basal half of third tergites. First tergite distinctly widened from base to apex, without spiracular tubercles, with distinct dorsal carinae in basal third. Apical width of first tergite 2.4-2.7 times its minimum width, its length equal to or slightly greater than its apical width. Length of second tergite 0.6-0.7 times basal width of second tergite, 1.0-1.2 times length of third tergite. Second suture deep, straight and crenulate. Ovipositor sheath 0.7-0.9 times hind femur, 0.23-0.24 times fore wing, 0.4-0.45 times metasoma.

Sculpture. Head entirely finely and densely coriaceous. Pronotum finely reticulate with granulation, smooth dorsolaterally. Mesoscutum and scutellum finely coriaceous with punctulation. Mesopleura smooth. Metapleura very finely reticulate, almost smooth. Propodeum entirely smooth. Hind coxa coriaceous dorsally and finely reticulate laterally, hind femur rather densely coriaceous. First-fourth metasomal tergites almost entirely and fifth tergite basally rugulose-reticulate or reticulate, first tergite additionally with sparse striae.

Colour. Body brownish yellow, first tergite may be dark basally. Antenna dark reddish brown or black, 2-3 basal segments light brown. Palpi pale yellow. Stemmaticum dark brown. Tegulae light brown. Legs light brown, all tarsi and hind tibia in apical three fourths darker. Wings hyaline. Pterostigma yellow.

Male unknown.

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Discussion

This new species is closely related to *O. radialis* JAKIMAVICIUS, 1972 from Europe and Mongolia (TOBIAS, 1986; TAEGER, 1989) and differs by having the radial cell less shortened, propodeum and mesopleura smooth, first metasomal tergite narrow, head round in frontal view, body entirely brownish yellow. In *O. radialis* the ovipositor sheath are clearly longer (1.6-1.8 times hind femur) and tibial spurs about 0.5 times basitarsus length. Furthermore, the additional mesosternal furrow of *O. radialis* is not present in *O. fulvus*. *O. fulvus* sp. n. is also similar to the North American species *O. coleophorae* MUESEBECK (MUESEBECK, 1970). It differs by being smaller, having the ovipositor shorter, propodeum and mesopleura smooth and sternauli smooth. The position of the new species in the key (BELOKOBLYSKIJ & TAEGER, 1996) is as follows:

2 Third abscissa of medial vein absent. Ovipositor sheath shorter than metasoma 2a

\- Third abscissa of medial vein nearly 0.2-0.5 times second abscissa. Ovipositor sheath not shorter or slightly shorter than body 5

2a Radial cell distinctly shortened. Metacarpus (within radial cell) 2.1-2.4 times the distance from apex of radial cell to apex of wing. Third radial abscissa distinctly curved. Ovipositor sheath 0.7-0.9 times hind femur. Inner hind tibial spur about 0.4 times as long as the basitarsus. Body entirely yellowish brown. 2.2-2.6 mm. Russia (Primorskiy Kray) . . . . . *O. fulvus* sp. n.

\- Radial cell rather long and slightly shortened. Metacarpus (within radial cell) 5-8 times the distance from apex of radial cell to apex of wing. Third radial abscissa almost straight. Ovipositor sheath 1.2-1.8 times hind femur. Inner hind tibial spur about 0.5 times as long as the basitarsus. Body partly usually reddish brown in part 3

Orgilus chankaicus sp. n.

(Figs 10-18)

Holotype: ♀, Primorskiy Kray, 20 km NW Spassk-Dal'niy, meadow and shrubs on the coast of the Khanka Lake, 18.08.1995 (S. Belokobylskij) (ZIP). Paratypes. 2 ♀, same label as holotype (ZIP, DEI).

Description

Female. Body length 3.2-3.5 mm; fore wing length 3.0-3.1 mm.

Head width 1.9-2.0 times its length, 1.2 times width of mesoscutum. Temple strongly roundly narrowed behind eye. Length of eye (in dorsal view) 2.0-2.4 times length of temple. Vertex distinctly convex. Occipital carina in lateral view reaching up to top of eye. Occiput very weakly concave. Frons with wide tubercle near anterior ocellus. Ocelli rather large, in equilateral triangle; OD:POL:OOL = 1:1.0:2.0-2.4. Eye very sparsely and shortly setose, 1.3 times as high as broad. Cheek height 0.2-0.25 times height of eye, 0.75-0.85 times basal width of mandible. No subocular suture. Face weakly convex, its width 1.2 times its medial height, almost equal to height of eye. Tentorial pits distinct, situated at lower level of eyes, distance between pits 1.7 times distance from pit to eye. Clypeal suture almost lost dorsally. Clypeus width nearly twice its medial height, ventral margin of clypeus almost straight. Cheeks distinctly and almost linearly narrowed below eyes. Maxillary palpi nearly as long as head height. Apical segment of labial palpi nearly 3 times as long as wide.

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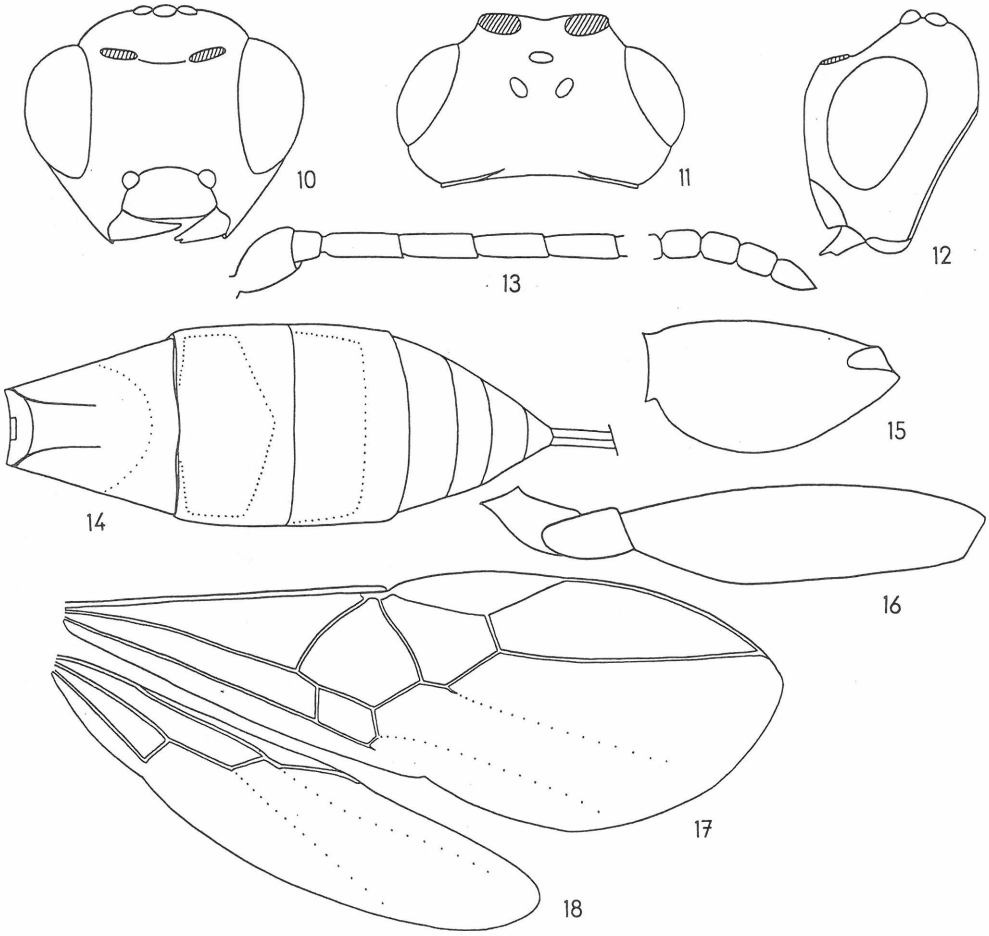

Figs 10-18. *Orgilus chankaicus* sp. n. **10** - head, frontal view; **11** - head, dorsal view; **12** - head, lateral view; **13** - basal and apical segments of antenna; **14** - metasoma, dorsal view; **15** - hind coxa; **16** - hind trochanter and femur; **17** - fore wing; **18** - hind wing.

Antenna 26-segmented, 0.9 times as long as body. Length of scapus 1.5-1.7 times its width, equal to first flagellar segment. First flagellar segment 2.7-3.0 times as long as its apical width, as long as second segment. Length of penultimate segment 1.3 times its width, 0.7 times apical segment.

Mesosoma. Length 1.6-1.7 times its maximum height, height 1.4-1.5 times its width. Notauli deep, complete, crenulate. Prescutellar depression short, with medial carina, crenulate, 0.25-0.3 times length of scutellum. Sternauli long, curved, crenulate. Prepectal carina complete. Propodeum roundly narrowed from base to apex (in lateral view).

Wings. Length of fore wing 2.7-2.8 times its width. Length of pterostigma 4.0-4.2 times its maximum width, 0.7-0.75 times metacarpus (within radial cell). Metacarpus (within radial cell) 9-10 times the distance from apex of radial cell to apex of wing. Radial vein arising behind middle of pterostigma. First radial abscissa almost as long as maximum width of pterostigma,

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0.15 times second abscissa, 0.7 times first radiomedial vein. Second abcissa straight. Recurrent vein 1.8 -2.3 times second abscissa of medial vein. Third medial abscissa short, 0.43-0.5 times second abscissa. Discoidal cell sessile, its length 1.1-1.2 times its width. Distance from nervulus to basal vein 0.5-0.75 times nervulus length. Length of hind wing 4.0-4.3 times its width. Second abscissa of mediocubital vein 0.6 times first abscissa, nearly twice nervellus and 2.3 times basal vein.

Legs. Hind femur 3.6-4.0 times as long as wide, 1.5-1.6 times hind coxal length, 0.75-0.8 times hind tibial length. Inner spur of hind tibia nearly 0.5 times basitarsus length. Hind tarsus slightly longer than hind tibia, its second segment 0.4 times first segment, 1.4 times fifth segment (without pretarsus). Claws with small basal lobe.

Metasoma 1.2 times as long as mesosoma. Laterotergites distinct on second and third tergites. First tergite distinctly widened from base to apex, without spiracular tubercles, with rather distinct dorsal carinae in basal half. Apical width of first tergite 2.0-2.2 times its minimum width; its length 0.9-1.0 times its apical width. Length of second tergite 0.6 times basal width of second tergite, nearly as long as third tergite. Second suture distinct, straight, crenulate. Ovipositor sheath 2.5-3.0 times hind femur, 0.9 times fore wing, 0.8 times body length.

Sculpture. Head finely and sparsely punctulate, face densely punctulate. Pronotum densely granulate in lower half, smooth in upper half. Mesoscutum distinctly punctulate. Scutellum almost smooth. Meso- and metapleurae punctulate. Propodeum without carinae, entirely and densely rugulose-reticulate. Hind coxa densely punctulate dorsally, almost smooth ventrally, hind femur finely punctulate, with very fine microsculpture. First-third metasomal tergites entirely and fourth-sixth tergites in basal two thirds or three fourths densely rugulose-striate.

Colour. Body light reddish brown, first metasomal tergite laterally and in apical quarter yellow. Black: ocellar triangle, longitudinal stripes at lateral lobes of mesoscutum, metanotum, propodeum, first in great part, second (except lateroposterior corners) and third (except posterior third) tergites. Antenna black, two basal segments yellowish brown in ventral half. Palpi and tegulae yellow. Legs light reddish brown, all spurs pale yellow; hind tibia yellow basally, darker on their subbasal and apical aspects; medial and hind tarsi darker. Wing faintly infuscate. Pterostigma dark brown.

Male unknown.

Discussion

This new species is morphologically very similar to *O. eous* BELOKOBYLSKIJ & TAEGER to which it is presumably closely related. The differences are given in the following couplets that are to be added in the key (BELOKOBYLSKIJ & TAEGER, 1996):

5 Metasoma behind first tergite smooth. Radial cell of fore wing strongly shortened, metacarpus (within radial cell) 1.2-1.7 times distance from apex of radial cell to apex of wing. Ovipositor sheath 2.0-2.5 times body. First metasomal tergite 1.5-1.8 times as long as its apical width. Length of second tergite 1.0-1.1 times its basal width. 3.5-6 mm.
Mongolia, Russia (Chita Province) . . . . . *O. elongatus* PAPP, 1971

\- Metasoma almost completely rugose-striate. Radial cell of fore wing long, metacarpus (within radial cell) 8-10 times distance from apex of radial cell to apex of wing. Ovipositor sheath nearly as long as body. First metasomal tergite 0.9-1.1 times as long as its apical width. Length of second tergite 0.6-0.7 times its basal width 5a

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5a Ovipositor sheath longer, 3.7-4.3 times hind femur, 1-1.2 times fore wing. Medial lobe of mesoscutum, mesosternum and metasoma dorsally almost entirely black. Distance from nervulus to basal vein 0.3-0.4 times nervulus length. 3.5-4.2 mm. Russia (Primorskiy Kray, Sakhalin Is.) . . . . . *O. eous* BELOKOBYLSKIJ & TAEGER, 1996

\- Ovipositor sheath shorter, 2.5-3 times length of hind femur, and 0.9 times fore wing length. Medial lobe of mesoscutum, mesosternum, posterior parts of 1-3 metasomal tergites and all following tergites light brown. Distance from nervulus to basal vein 0.5-0.75 times nervulus length. 3.2-3.5 mm. Russia (Primorskiy Kray). . . . . *O. chankaicus* sp. n.

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