

Chalcid Wasps of the Family Pteromalidae (Hymenoptera, Chalcidoidea) of the Kuril Islands

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Received April 20, 2013

Abstract—A list of Pteromalidae wasps of the Kuril Islands includes 84 species belonging to 47 genera of 6 subfamilies. Four genera [*Seladerma* Walker (Miscogasterinae), *Caenacis* Foerster, *Isocyrtus* Walker, and *Synedrus* Graham (Pteromalinae)] and 36 species are recorded for the first time for the Russian fauna; 8 species are new to the Russian Far East. *Seladerma leleji* sp. n. and *Synedrus kaspariani* sp. n. are described. The males of *Semiotellus takadai* Kamijo and *Isocyrtus reticulatus* Xiao et Huang are described for the first time.

DOI: 10.1134/S0013873814010102

The Kuril Archipelago situated in the northwestern part of the Pacific Ocean is one of the most interesting island systems of Russia. The archipelago comprises 56 islands which occupy 10.5 thousand km², extend along over 1300 km from the Kamchatka Peninsula to Japanese Hokkaido Island, and form a natural border between the Sea of Okhotsk and the Pacific Ocean (*The State Report* ..., 2003). Nearly all the islands are mountainous, with their coasts often steep or terraced; large islands have rivers and lakes. Many islands are characterized by the presence of volcanoes and hot springs which contribute to the development of unique natural communities (Bogatov, 2002). A large size of the Kuril Archipelago causes a great diversity of the natural conditions on the islands.

Despite the uniqueness of the natural communities of the Kuril Islands, many groups of parasitic Hymenoptera in this territory have been poorly investigated. The data on the family Pteromalidae, one of the largest and taxonomically obscure groups among the chalcidoid wasps, are extremely scanty. Until now, only 27 pteromalid species belonging to 20 genera of 5 subfamilies have been recorded from this territory (Dzhanokmen, 1993; Tselikh, 2011, 2012a, 2012b), whereas in Japan, neighboring the Kuriles, over 150 species of these wasps are known.

An annotated list below substantially fills a gap in the data on the taxonomic composition of Pteromalidae of one of the most interesting regions of the Russian Far East.

MATERIALS AND METHODS

The study is based on examination of the collections of pteromalids of the Kuril Islands (Sakhalin Prov.), deposited in the Zoological Institute, the Russian Academy of Sciences (St. Petersburg; ZIN), in the Institute of Biology and Soil Sciences, the Far Eastern Branch of the Russian Academy of Sciences (Vladivostok), and in I.I. Schmalhauzen Institute of Zoology, the National Academy of Sciences of Ukraine (Kiev), and also on the author's material collected by sweeping or reared from hosts in Kunashir Island in 2011.

In order to specify the taxonomic position of some taxa, type material of the following species was examined: paratypes of *Asaphes pubescens* Kamijo et Takada, *Stictomischus elongatus* Kamijo, *Caenacis peroni* Kamijo, and *Usubaia liparae* Kamijo (Institute of Zoology, the Committee of Science of the Ministry of Education and Science of the Republic of Kazakhstan, Almaty, Kazakhstan); the holotype of *Stictomischus apoianus* Kamijo and paratypes of *Gastracanthus acutus* (Kamijo), *Semiotellus takadai* Kamijo, *Chlorocyrtus koreanus* Kamijo, and *Plutothrix narendrani* Kamijo (Hokkaido University, Hokkaido, Japan); lectotypes of *Sceptrothelys grandiclava* (Walker) and *Stenomalina iera* (Walker) (The Natural History Museum, London, Great Britain).

The terms used for designation of morphological structures of the pteromalids are those most commonly used in chalcidology (Graham, 1969; Dzhanokmen, 1978).

The geographical distribution and biology of the pteromalids listed are mainly cited after Thompson (1958), Graham (1969), Herting (1973, 1977), Dzhankmen (1978), Kamijo (1960a, 1960b, 1973, 1977, 1978, 1981a, 1981b, 1981c, 1981d, 1982a, 1982b, 1983a, 1983b, 1996, 2000), Ishizaki and Ishikawa (2010), Tselikh (2010, 2011), Burks (2013), and Noyes (2013).

In the following text, one asterisk (*) designates the species and genera recorded for the fauna of the Russian Far East for the first time; two asterisks (**) designate those new to the fauna of Russia. In the annotated list of species, the following abbreviations of collectors' names are used for large collections: A. L., A.S. Lelej; D. K., D.R. Kasparyan; D. R., D.V. Rachin; E. Ts., E.V. Tselikh; S. B., S.A. Belokobylskij.

RESULTS

Examination of the material collected for several years from the Kuril Islands has revealed 84 pteromalid species belonging to the subfamilies Asaphinae (2 species, 1 genus), Diparinae (1 species), Misco-gasterinae (20 species, 9 genera), Ormocerinae (3 species, 2 genera), Panstenoninae (1 species), and Pteromalinae (57 species, 33 genera).

SUBFAMILY ASAPHINAE

1. *Asaphes pubescens* Kamijo et Takada, 1973.

Material. Kunashir Island, Alekhino Vill., 27.VII.1973 (D. K.), 1 ♀; Golovnin Volcano, Siberian dwarf pine [*Pinus pumila* (Pall.)], reared from *Praon bicolor*, 24.VII.2011 (E. Ts., D. R.), 3 ♂; Tret'yakovo Vill., hot spring, 29–30.VII.2011 (E. Ts., D. R.), 1 ♂.

Biology. A hyperparasitoid of the Aphidiidae and Aphelinidae parasitizing on aphids (Aphididae). *Asaphes pubescens* was reared for the first time from *Praon bicolor* Mackauer (Hymenoptera, Aphidiidae).

Distribution. Russia [the Kuril Islands: Kunashir (Tselikh, 2012b)]; Japan (Hokkaido, Honshu, and Shikoku islands).

2. *Asaphes suspensus* (Nees, 1834).

Material. Kunashir Island, Dubovoe Vill., 49°46.479'N, 145°29.721'E, 20–21.VII.2011 (E. Ts., D. R.), 1 ♀, 1 ♂; Golovnin Volcano, Lake Goryachee, 26–27.VII.1981 (S. B.), 1 ♂; same locality, Siberian dwarf pine [*Pinus pumila* (Pall.)], reared from *Praon*

bicolor, 24.VII.2011 (E. Ts., D. R.), 1 ♀, 2 ♂; Shikotan Island, Malokurilskoe Vill., 20.VIII.1973 (D. K.), 2 ♀.

Biology. A hyperparasitoid of the Aphidiidae and Aphelinidae which are parasitoids of aphids (Aphididae). *Asaphes suspensus* was reared for the first time from *Praon bicolor* Mackauer (Hymenoptera, Aphidiidae).

Distribution. Russia [Eastern Siberia (Noyes, 2013), the south of the Far East: Primorskii Territory, islands of Sakhalin, Kunashir (Tselikh, 2011, 2012a), Shikotan]; Western and Eastern Europe, North Africa, Israel, Turkey, Iran, Middle Asia, China (everywhere), North and South Korea, Japan (Hokkaido, Honshu, Shikoku, Kyushu islands), Nepal, India, North and South America.

SUBFAMILY DIPARINAE

3. *Dipara belokobylskii* Dzhankmen, 1993.

Material. Kunashir Island, Sernovodsk Vill., 26–27.VII.1973 (D. K.), 2 ♀.

Biology. Unknown.

Distribution. Russia [the south of the Far East: Khabarovsk and Primorskii territories, Sakhalin Island (Dzhankmen, 1993), the Kuril Islands: Kunashir (Tselikh, 2011, 2012a)].

SUBFAMILY MISCOGASTERINAE

4. *Halticoptera aenea* (Walker, 1833).

Material. Shikotan Island, Gorobets Bay, 18.VIII.1998 (A. L.), 1 ♀, 2 ♂.

Biology. A primary parasitoid of many species of the dipteran families Agromyzidae, Cecidomyiidae, Chloropidae, and Drosophilidae; it was also reared from *Eriogaster lanestris* (L.) and *Malacosoma neustria* (L.) (Lepidoptera, Lasiocampidae).

Distribution. Russia [the Kuril Islands: Shikotan (Tselikh, 2011, 2012a)]; Western and Eastern Europe, the Canary Islands, Turkey, Azerbaijan, Iran, Kazakhstan, North America, the Antilles.

5. *Halticoptera collaris* (Walker, 1836).

Material. Kunashir Island, Golovnin Volcano, 11–13.VI.1973 (I.M. Kerzhner), 1 ♀; Lake Lagunnoe, 12.VII.1973 (D. K.), 3 ♀.

Biology. A primary parasitoid of *Ophiomyia phaseoli* (Tryon) (Diptera, Agromyzidae).

Distribution. Russia [the south of the Far East: Khabarovsk and Primorskii territories, Sakhalin and Kunashir islands (Tselikh, 2011, 2012a)]; Western and Eastern Europe.

6. *Halticoptera violacea* Askew, 1972.

Material. Yankich Island, 5.VIII.1999 (A. L.), 1 ♂; Shikotan Island, Malokurilskoe Vill., 20.VIII.1973 (D. K.), 1 ♂.

Biology. A primary parasitoid of *Agromyza demejerei* Hendel and *Phytomyza cytisi* Brischke (Diptera, Agromyzidae).

Distribution. Russia [the south of the Far East: Primorskii Terr., the Kuril Islands: Shikotan (Tselikh, 2011, 2012a) and Yankich islands]; Western Europe.

7. *Lamprotatus duplicatum* Kamijo, 1960.

Material. Kunashir Island, 1–10 km N of Dubovoe Vill., 18.VII.1973 (D. K.), 2 ♀, 1 ♂; Dubovoe Vill., 22.VII.1973 (D. K.), 1 ♀; Tret'yakovo Vill., 28–29.VII.2011 (E. Ts., D. R.), 1 ♀.

Biology. Unknown.

Distribution. Russia [Sakhalin Prov. (Tselikh, 2012b), the Kuril Islands: Kunashir]; Japan (Hokkaido Island).

8. *Merismus bidentatus* Kamijo, 1996.

Material. Kunashir Island, Sernovodsk Vill., 29.VIII.1973 (D. K.), 1 ♀.

Biology. Unknown.

Distribution. Russia (the Kuril Islands: Kunashir); Japan (Hokkaido and Honshu islands).

9. *Merismus megapterus* Walker, 1833.

Material. Kunashir Island, Sernovodsk Vill., 15.VII.1973 (D. K.), 1 ♂; 1–10 km N of Dubovoe Vill., 18.VII.1973 (D. K.), 1 ♀; Alekhino Vill., 28–30.VII.1973 (D. K.), 1 ♀; Dubovoe Vill., 31.VIII.1973 (D. K.), 1 ♀ 1 ♂; Shikotan Island, Tserkovnaya Bay, 22–30.IX.2012 (Yu.N. Sundukov), 1 ♀.

Biology. A primary parasitoid of the dipterans *Agromyza* sp., *A. graminicola* Hendel, *Cerodontha caricivora* (Groschke), *C. incisa* (Meigen), *C. iraeos*

(Robineau-Desvoidy), *C. pygmaea* (Meigen), *Chromatomyia suikazurae* Sasakawa, *Phytobia* sp. (Agromyzidae), and the lepidopterans *Biselachista serricornis* (Stainton), *B. utionella* Frey, and *Elachista maculicerusella* (Bruand) (Elachistidae).

Distribution. Russia [the south of the Far East: Primorskii Terr. (Tselikh, 2011, 2012a), the Kuril Islands: Kunashir, Shikotan]; Western and Eastern Europe, Kazakhstan, Mongolia, China (everywhere), South Korea, Japan (Hokkaido, Honshu, Shikoku, Kyushu islands), North America.

10. *Merismus rufipes* Walker, 1833.

Material. Makanrushi Island, motley grasses, 18.VIII.1997 (A. L.), 2 ♀; Kunashir Island, Sernovodsk Vill., 26.VIII.1973 (D. K.), 1 ♀; Dubovoe Vill., oak forest, 25.VII.1981 (S. B.), 1 ♀; 7 km S of Lake Lagunnoe, 15.VIII.1989 (A. L.), 1 ♂.

Biology. Unknown.

Distribution. Russia (the Kuril Islands: Makanrushi, Kunashir); Western and Eastern Europe, Kazakhstan, North America.

11. *Merismus splendens* Graham, 1969.

Material. Kunashir Island, Dubovoe Vill., 19.VII.1973 (D. K.), 2 ♀; 20.VII.2011 (E. Ts., D. R.), 1 ♀; Mendeleevo Vill., 3.VIII.2011 (E. Ts., D. R.), 1 ♀.

Biology. A primary parasitoid of the dipterans *Agromyza albipennis* Meigen and *A. oryzae* (Manukata) (Diptera, Agromyzidae).

Distribution. Russia (the Kuril Islands: Kunashir); Western Europe, Japan (Hokkaido and Honshu islands).

12. *Neoskeloceras longistriatum* Kamijo, 1960.

Material. Kunashir Island, Sernovodsk Vill., 22.VII.1981 (S. B.), 2 ♀.

Biology. Unknown.

Distribution. Russia [Sakhalin Prov. (Tselikh, 2012b), the Kuril Islands: Kunashir]; Japan (Kyushu Island).

13. *Seladerma laetum* Walker, 1834.

Material. Shikotan Island, Tserkovnaya Bay, 22–30.IX.2012 (Yu.N. Sundukov), 1 ♀.

Biology. A primary parasitoid of the dipterans *Delia radicum* (L.) (Anthomyiidae), *Nanna armillata* (Zetterstedt), and *N. flavipes* (Fallén) (Diptera, Scathophagidae).

Distribution. Russia (the Kuril Islands: Shikotan); Western and Eastern Europe.

14. *Seladerma leleji* Tselikh, sp. n. (Figs. 1, 2, 5, 6).

Description. Female. Body length 3.5–3.6 mm, length of fore wing 3.0–3.1 mm.

Head (in dorsal view) 2.5–2.6 times as broad as long (Fig. 1) and 1.2 times as broad as mesoscutum. POL 1.2–1.3 times OOL. Eye height 1.4 times eye length and 2.8 times length of malar space. Occiput not bordered. Lower margin of clypeus with 3 asymmetrical teeth. Both mandibles with 3 teeth. Antennal scrobe shallow, without carina between them. Distance between lower margin of clypeus and antennal torulus 0.8 times that between antennal torulus and median ocellus.

Antennal formula 1 1 2 6 3 (Figs. 5, 6). Scape not reaching level of median ocellus, its length 2.8–3.0 times its maximum breadth and 0.6 times eye height. Length of pedicel and flagellum combined 1.2 times breadth of head (dorsal view). First flagellar segment 1.4–1.5 times as long as broad and 1.0–1.1 times as long as pedicel. All funicular segments longer than broad, segments with 2 or 3 rows of sensilla. Clava 3-segmented, 2.8–3.0 times as long as broad; 3rd segment with small area of microsensilla.

Mesosoma 1.6–1.7 times as long as broad. Pronotal collar weak; its anterior margin rounded, without carina. Notauli complete and distinct. Postspiracular sclerite without carina separating triangular zone. Scutellum distinctly convex in lateral view. Propodeum (dorsal view) half as long as scutellum, with distinct straight median carina, without transverse carinae.

Wing (Fig. 2). Fore wing 2.3–2.5 times as long as broad. Costal and basal cells pilose; basal vein not pigmented, pilose along entire length. Speculum closed below. Marginal vein of fore wing 1.4–1.5 times as long as stigmal vein, 0.7 times as long as postmarginal vein. Angle between stigmal and postmarginal veins equal to 45°.

Legs. Hind coxa with several setae dorsally. Length of spur of middle tibia 1.3 times breadth of tibia,

0.6 times length of 1st segment of tarsus. Hind tibia with 2 spurs.

Metasoma 2.6 times as long as broad, 1.1 times as long as mesosoma and head combined. Petiole transverse, 0.4 times as long as broad.

Sculpture of head and mesosoma finely alutaceous. Clypeus smooth and shining. Frenum of scutellum with finely alutaceous sculpture, with several obsolete longitudinal carinae. Lateral propodeal areas smooth and shining.

Coloration. Body bluish green, with metallic reflections. Antennal scape and pedicel dark green, with metallic reflections; flagellum dark brown. Coxae, trochanters, and femora green, with metallic reflections; tibiae and tarsi pale brown. Wings hyaline, without dark spots.

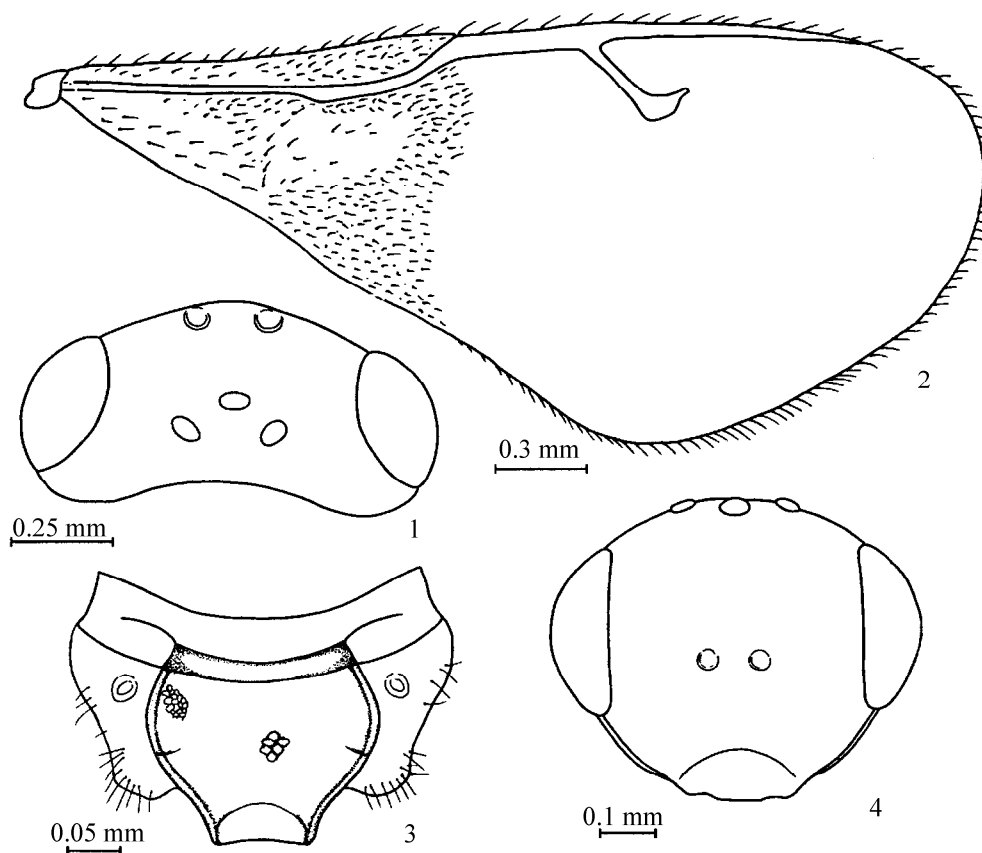
Male similar to female, but differing in following characters: head (dorsal view) 1.3–1.4 times as broad as mesoscutum; length of antennal scape 2.1–2.2 times its maximum breadth (Fig. 6); femora pale brown in basal 1/3.

Diagnosis. *Seladerma leleji* sp. n. is similar to the European *S. caledonicum* Graham (Graham, 1969) in the following characters: antennal scape not reaching median ocellus, metasoma slightly longer than mesosoma and head combined, propodeum half as long as scutellum. The new species clearly differs from *S. caledonicum* in a broader head (its breadth is 2.4–2.5 times its length), in the elongate flagellar segments with 2 or 3 rows of sensilla, and in a narrower metasoma (2.6 times as long as broad). *Seladerma leleji* sp. n. is similar to the European *S. laetum* (Walker) (Graham, 1969) in the presence of 2 or 3 rows of sensilla on the flagellar segments, but differs in the position of the postmarginal vein (forming an angle of 45° with the radial vein) and in the elongate metasoma (1.1 times as long as the mesosoma and the head combined).

Etymology. The species is named in honor of the prominent entomologist A.S. Lelej who collected the specimens of the type series.

Material. Russia. Holotype: ♀, and paratype, ♂, Sakhalin Prov., Simushir Island, Brouton Bay, motley grasses, 8.VIII.1999 (A.S. Lelej) (ZIN). Paratype: ♀, Sakhalin Prov., Iturup Island, Medvezh'ya Bay, 5.VIII.1998 (A.S. Lelej) (ZIN).

Biology. Unknown.



Figs. 1–4. (1, 2) *Seladerma leleji* sp. n. [(1) head, dorsal view; (2) fore wing]; (3, 4) *Synedrus kasparyani* sp. n. [(3) propodeum, dorsal view; (4) head, front view].

Distribution. Russia [the Kuril Islands: Simushir, Iturup].

Note. *Seladerma leleji* sp. n. is similar to the representatives of the genus *Thektogaster* Delucchi, 1955 in the presence of 2 or 3 rows of sensilla on the flagellar segments, but clearly differs in the non-pigmented basal vein and in the presence of an area of microsensilla only on the last segment of the clava.

15. *****Stictomischus apoianus*** Kamijo, 1960.

Material. Kunashir Island, Sernovodsk Vill., 15.VII.1973 (D. K.), 5 ♀, 2 ♂; Alekhino Vill., 30–31.VII.1981 (S. B.), 1 ♀; Dubovoe Vill., 49°46.479'N, 145°29.721'E, 20–21.VII.2011 (E. Ts., D. R.), 1 ♀.

Biology. Unknown.

Distribution. Russia (the Kuril Islands: Kunashir); Japan (Hokkaido Island).

16. *****Stictomischus curvatus*** Kamijo, 1960.

Material. Kunashir Island, Sernovodsk Vill., 22.VII.1981 (S. B.), 1 ♀.

Biology. Unknown.

Distribution. Russia (the Kuril Islands: Kunashir); Japan (Hokkaido Island).

17. *****Stictomischus elongatus*** Kamijo, 1960.

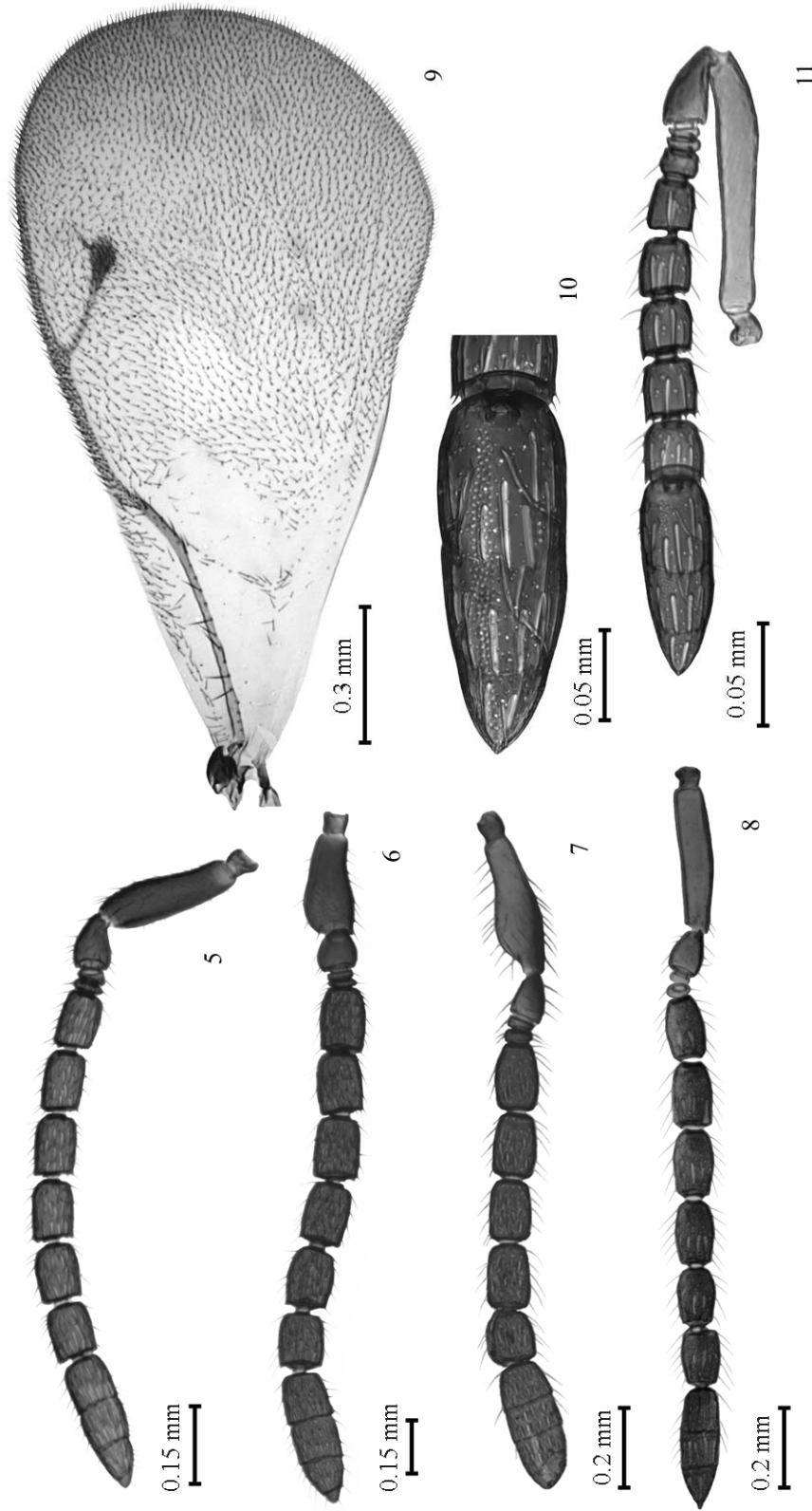
Material. Kunashir Island, Sernovodsk Vill., 15.VII.1973 (D. K.), 1 ♂; Golovnin Volcano, Lake Goryachee, 26–27.VII.1981 (S. B.), 1 ♂; Alekhino Vill., 30–31.VII.1981 (S. B.), 1 ♂.

Biology. Unknown.

Distribution. Russia (the Kuril Islands: Kunashir); Japan (Hokkaido and Honshu islands).

18. ***Stictomischus japonicus*** Kamijo, 1960.

Material. Kunashir Island, Alekhino Vill., 13–14.VI.1973 (I.M. Kerzhner), 1 ♀; Dubovoe Vill., 8–10.VI.1973 (I.M. Kerzhner), 1 ♀; 5 km N of Yuzhno-Kurilsk Vill., 12.VIII.1993 (A.B. Sharkov), 1 ♀; Tret'yakovo Vill., hot spring, 29–30.VII.2011 (E. Ts., D. R.), 1 ♀.



Figs. 5–11. (5, 6) *Seladerma teleji* sp. n.; (7) *Semiotellus takadai* Kamijo; (8) *Isocyrtus reticulatus* Xiao et Huang; (9–11) *Synedrus kasparyani* sp. n. [(5, 11) antenna of female; (6–8) antenna of male; (9) fore wing; (10) clava of antenna with area of microsensilla].

Biology. Unknown.

Distribution. Russia [Sakhalin Prov. (Tselikh, 2012b), the Kuril Islands: Kunashir]; Japan (Hokkaido Island).

19. ***Stictomischus momoi* Kamijo, 1960.

Material. Iturup Island, motley grasses, 2.VII.1998 (A. L.), 1 ♀, 1 ♂; Kunashir Island, Alekhino Vill., 28.VII.1973 (D. K.), 1 ♂; 30–31.VII.1981 (S. B.), 1 ♀, 1 ♂; Tret'yakovo Vill., 4.VIII.1973 (D. K.), 1 ♀.

Biology. Unknown.

Distribution. Russia (the Kuril Islands: Iturup, Kunashir); Japan (Hokkaido and Honshu islands).

20. *Stictomischus scaposus* Thomson, 1876.

Material. Kunashir Island, Alekhino Vill., 29–30.VII.1973 (D. K.), 1 ♀, 2 ♂; Dubovoe Vill., 30.VII.1989 (A. L.), 1 ♀.

Biology. A primary parasitoid of the dipteran family Agromyzidae.

Distribution. Russia [the south of the Far East: Primorskii Terr. (Tselikh, 2011, 2012a), the Kuril Islands: Kunashir]; Western and Eastern Europe.

21. *Thektogaster chrysis* (Foerster, 1861).

Material. Onkotan Island, 27.VII.2000 (A. L.), 1 ♀, 1 ♂; Simushir Island, 8.VIII.1999 (A. L.), 1 ♀.

Biology. Unknown.

Distribution. Russia [the Kuril Islands: Onkotan, Simushir (Tselikh, 2011, 2012a)]; Western and Eastern Europe, Kazakhstan.

22. ***Thinodytes cyzicus* (Walker, 1839).

Material. Kunashir Island, Dubovoe Vill., 49°46.479'N, 145°29.721'E, 20–21.VII.2011 (E. Ts., D. R.), 3 ♀.

Biology. A primary parasitoid of the dipterans *Chromatomyia horticola* (Goureau), *Liriomyza huidobrensis* (Blanchard), and *Phytomyza atricornis* Meigen (Agromyzidae).

Distribution. Russia (the Kuril Islands: Kunashir); Western and Eastern Europe, Turkey, Iraq, Kazakhstan, China (everywhere), Japan (Hokkaido, Honshu, and Kyushu islands), India.

23. **Xestomnaster chrysochlorus* (Walker, 1846).

Material. Makanrushi Island, motley grasses, 18.VIII.1997 (A. L.), 1 ♀, 1 ♂; Matua Island, motley grasses, 3.VIII.1999 (A. L.), 1 ♂; Simushir Island, Brouton Bay, motley grasses, 8.VIII.1999 (A. L.), 1 ♂; Iturup Island, Medvezh'ya Bay, 5.VIII.1998 (A. L.), 2 ♂; Kunashir Island, 17 km S of Yuzhno-Kurilsk Vill., 26.VII.1998 (A. L.), 9 ♀, 1 ♂.

Biology. A primary parasitoid of the dipterans *Phytomyza atricornis* Meigen (Agromyzidae), *Acidia cognata* (Wiedemann), and *Trypeta zoe* Meigen (Tephritidae).

Distribution. Russia [Kaliningrad Prov. (Noyes, 2013), the Kuril Islands: Makanrushi, Matua, Simushir, Iturup, Kunashir]; Western and Eastern Europe.

SUBFAMILY ORMOCERINAE

24. ***Semiotellus longispinus* Xiao et Huang, 1999.

Material. Iturup Island, 29.VII.1997 (A. L.), 1 ♀; Kunashir Island, Dubovoe Vill., oak forest, 25.VII.1981 (S. B.), 1 ♀; Alekhino Vill., forest, 30–31.VII.1981 (S. B.), 3 ♀.

Biology. Unknown.

Distribution. Russia (the Kuril Islands: Iturup, Kunashir); China (Fujian).

Note. The Kuril specimens examined fit the description of *S. longispinus* in the essential diagnostic characters (including the scape projecting beyond the level of the median ocellus, the elongate spur of the middle tibia, and the metasoma which is twice as long as broad), but differ in a shorter flagellum and in a more elongate antennal clava.

25. ***Semiotellus takadai* Kamijo, 1977 (Fig. 7).

Description. Male (described for the first time) similar to female, but differing in following characters. Length of flagellum 1.1–1.2 times breadth of head (dorsal view); scape 2.8–3.0 times as long as broad; 1st flagellar segment 1.4–1.6 times as long as pedicel; all flagellar segments with 2 or 3 rows of sensilla; last claval segment with small area of microsensilla (Fig. 7). Metasoma nearly as long as mesosoma and head combined.

Material. Kunashir Island, Sernovodsk Vill., 15.VII and 29.VIII.1973 (D. K.), 3 ♀; same locality, 20–22.VII.1981 (S. B.), 2 ♀, 1 ♂; 1–10 km N of Dubovoe

Vill., 18.VII.1973 (D. K.), 6 ♀; Dubovoe Vill., 19.VII.1973 (D. K.), 3 ♀; same locality, 25.VII.1981 (S. B.), 3 ♀; Alekhino Vill., 28–29.VII.1973 (D. K.), 4 ♀, 1 ♂; Golovnin Volcano, Lake Goryachee, 26–27.VII.1981 (S. B.), 4 ♀; Yuzhno-Kurilsk Vill., 27.VIII.1988 (A.M. Basarukin), 1 ♀; Stolbchatyi Cape, 1.VIII.2011 (E. Ts., D. R.), 1 ♀.

Biology. Unknown.

Distribution. Russia (the Kuril Islands: Kunashir); Japan (Hokkaido Island).

Note. The males of *Semiotellus takadai* Kamijo are similar to those of *S. sasacolae* Kamijo, but differ in a shorter and more strongly widened antennal scape, in POL 2.3–2.5 times OOL, and in the presence of a small area of microsensilla on the last claval segment.

26. **Systasis encyrtoides* Walker, 1834.

Material. Kunashir Island, Dubovoe Vill., 19.VII.1973 (D. K.), 1 ♀; Mendeleevo Vill., 3.VIII.2011 (E. Ts., D. R.), 1 ♀; Tret'yakovo Vill., forest, 29.VII.2011 (E. Ts., D. R.), 1 ♂.

Biology. A primary parasitoid of many species of the dipteran families Agromyzidae, Cecidomyiidae, and Tephritidae; it was also reared from the lepidopterans *Cochylidia implicitana* (Wocke) and *Tortrix viridana* L. (Tortricidae) and from the coleopterans *Exapion fuscirostre* (F.) (Apionidae) and *Bruchidius ater* (Marsham) (Bruchidae).

Distribution. Russia [the European part (Dzhankmen, 1978), the Kuril Islands: Kunashir]; Western and Eastern Europe, North Africa, the Canary Islands, Israel, Turkey, Middle Asia, China (everywhere), North America.

SUBFAMILY PANSTENONINAE

27. *Panstenon oxylus* (Walker, 1839).

Material. Kunashir Island, Dubovoe Vill., 49°46.479'N, 145°29.721'E, 20–21.VII.2011 (E. Ts., D. R.), 3 ♀; “Kurilskii” Nature Reserve, “Alekhinskii” Cordon, 28.VII.2011 (E. Ts., D. R.), 1 ♀.

Biology. A primary parasitoid of many species of the families Agromyzidae, Cecidomyiidae (Diptera), and Delphacidae (Homoptera); it was also reared from *Malacosoma neustria* (L.) (Lepidoptera, Lasiocampidae). In addition, the species is known as a secondary parasitoid of the wasps *Cotesia glomerata* (L.)

(Braconidae) and *Mesopolobus graminum* (Hardh) (Pteromalidae).

Distribution. Russia [Sakhalin Prov. (Tselikh, 2011, 2012a), the Kuril Islands: Kunashir]; Western and Eastern Europe, Kazakhstan, China (everywhere), North and South Korea, Japan (Hokkaido Island).

SUBFAMILY PTEROMALINAE

28. ***Arthrolytus discoideus* (Nees, 1834).

Material. Kunashir Island, 10 km W of Yuzhno-Kurilsk Vill., 11.VII.1973 (D. K.), 1 ♀.

Biology. Unknown.

Distribution. Russia (the Kuril Islands: Kunashir); Western and Eastern Europe, Turkey.

Note. This specimen was previously misidentified as *Arthrolytus maculipennis* (Walker) (Tselikh, 2011, 2012a).

29. ***Caenacis peroni* Kamijo, 1981.

Material. Kunashir Island, Dubovoe Vill., 31.VIII.1973 (D. K.), 1 ♀.

Biology. A primary parasitoid of *Andricus oblongus* Monzen and *Cynips mukaigawae* (Mukaigawa) (Hymenoptera, Cynipidae).

Distribution. Russia (the Kuril Islands: Kunashir); South Korea, Japan (Hokkaido and Honshu islands).

30. **Callitula bicolor* Spinola, 1811.

Material. Kunashir Island, Dubovoe Vill., 31.VIII.1973 (D. K.), 1 ♀.

Biology. A primary parasitoid of many species of the dipteran families Cecidomyiidae, Chloropidae, and Opomyzidae, and also a secondary parasitoid of *Platygaster vernalis* (Myers) and *P. zosine* Walker (Hymenoptera, Platygastriidae).

Distribution. Russia [the European part, Western Siberia (Dzhanokmen, 1978), the Kuril Islands: Kunashir]; Western and Eastern Europe, the Canary Islands, Azerbaijan, Kazakhstan, China, North America.

31. ***Callitula fulvipes* Kamijo, 1981.

Material. Kunashir Island, road from Tret'yakovo Vill. to Alekhino Vill., motley grasses, 28.VII.2011 (E. Ts., D. R.), 1 ♀; Stolbchatyi Cape, 1.VIII.2011 (E. Ts., D. R.), 1 ♀.

Biology. Unknown.

Distribution. Russia (the Kuril Islands: Kunashir); South Korea, Japan (Hokkaido, Honshu, and Kyushu islands).

32. **Capellia cecidomyiae* (Ratzeburg, 1844).

Material. Kunashir Island, Golovnin Volcano, Lake Goryachee, 26–27.VII.1981 (S. B.), 1 ♀.

Biology. A primary parasitoid of *Cecidomyia pini* (De Geer) (Diptera, Cecidomyiidae) and *Diprion* sp. (Hymenoptera, Diprionidae).

Distribution. Russia [the European part (Bouček, 1965), the Kuril Islands: Kunashir]; Western and Eastern Europe, Japan (Hokkaido Island).

Note. In the specimen from Kunashir Island, the legs are pale brown.

33. *Chlorocytus comatus* Xiao et Huang, 2000.

Material. Iturup Island, motley grasses, 2.VIII.1998 (A. L.), 1 ♀; Kunashir Island, 1–10 km N of Dubovoe Vill., 18.VII.1973 (D. K.), 1 ♀; Dubovoe Vill., 24.VII.1973 (D. K.), 2 ♀; 25.VII.1981 (S. B.), 2 ♀, 2 ♂; Alekhino Vill., 29.VII.1973 (D. K.), 3 ♀; Sernovodsk Vill., 22.VII.1981 (S. B.), 1 ♀.

Biology. Unknown.

Distribution. Russia [the Kuril Islands: Iturup, Kunashir (Tselikh, 2011, 2012a)]; China (Sichuan).

34. ***Chlorocytus harmolitae* Bouček, 1957.

Material. Kunashir Island, Sernovodsk Vill., 15.VII.1973 (D. K.), 3 ♀.

Biology. A primary parasitoid of *Tetramesa eximia* (Giraud) (Hymenoptera, Eurytomidae).

Distribution. Russia (the Kuril Islands: Kunashir); Western and Eastern Europe.

35. ***Chlorocytus koreanus* Kamijo, 1983.

Material. Kunashir Island, Dubovoe Vill., 19.VII.1973 (D. K.), 1 ♀.

Biology. Unknown.

Distribution. Russia (the Kuril Islands: Kunashir); South Korea.

36. ***Chlorocytus phalaridis* Graham, 1965.

Material. Kunashir Island, Mendeleev Vill., 3.VIII.2011 (E. Ts., D. R.), 1 ♀.

Biology. A primary parasitoid of *Tetramesa longicornis* (Walker) (Hymenoptera, Eurytomidae) and a secondary parasitoid of *Bracon* sp. (Hymenoptera, Braconidae).

Distribution. Russia (the Kuril Islands: Kunashir); Western and Eastern Europe, Turkey, Kazakhstan, China.

37. ***Chlorocytus polichna* (Walker, 1848).

Material. Kunashir Island, Dubovoe Vill., oak forest, 25.VII.1981 (S. B.), 1 ♀; Golovnin Volcano, Lake Goryachee, 26–27.VII.1981 (S. B.), 1 ♀.

Biology. A primary parasitoid of *Ceutorhynchus aliiariae* H. Brisout (Coleoptera, Curculionidae).

Distribution. Russia (the Kuril Islands: Kunashir); Western and Eastern Europe, Kazakhstan, China.

38. *Coelopisthia extenta* (Walker, 1835).

Material. Kunashir Island, Golovnin Volcano, 25.VII.1973 (D. K.), 2 ♀; Alekhino Vill., 28.VII.1973 (D. K.), 1 ♀; Sernovodsk Vill., 26.VIII.1973 (D. K.), 3 ♀; Dubovoe Vill., 31.VIII.1973 (D. K.), 3 ♀; same locality, 49°46.479'N, 145°29.721'E, 20–21.VII.2011 (E. Ts., D. R.), 5 ♀, 2 ♂; Yuzhno-Kurilsk Vill., 27.VIII.1988 (A.M. Basarukin), 1 ♀; 5 km N of Yuzhno-Kurilsk Vill., 12.VIII.1993 (A.B. Sharkov), 2 ♀; “Kurilskii” Nature Reserve, Ozernaya River, 43°53.137'N, 145°27.712'E, 23.VII.2011 (E. Ts., D. R.), 1 ♀; road from Tret'yakovo Vill. to Alekhino Vill., 28.VII.2011 (E. Ts., D. R.), 1 ♀; Tret'yakovo Vill., hot spring, 29–30.VII.2011 (E. Ts., D. R.), 1 ♀; Mendeleev Vill., 3.VIII.2011 (E. Ts., D. R.), 2 ♀; Shikotan Island, Malokurilskoe Vill., 15.VIII.1971 (E.P. Nartshuk), 2 ♀; Tserkovnaya Bay, 22–30.IX.2012 (Yu.N. Sundukov), 1 ♀.

Biology. A primary parasitoid of many species of the coleopteran family Curculionidae, of the lepidopterans *Cerapteryx graminis* (L.) (Noctuidae), *Choristoneura murinana* (Hübner) (Tortricidae), *Hyphantria cunea* (Drury), *Tyria jacobaeae* (L.) (Arctiidae), and *Macaria continuaria* (Eversmann) (Geometridae), and also of the soft scale *Physokermes piceae* (Schrank) (Hemiptera, Coccidae).

Distribution. Russia [the European part (Dzhannokmen, 1978), the south of the Far East: Khabarovsk and Primorskii territories (Tselikh, 2011, 2012a), the Kuril Islands: Kunashir, Shikotan]; Western and

Eastern Europe, Azerbaijan, Middle Asia, North America.

39. *Conomorium patulum* (Walker, 1835).

Material. Kunashir Island, Tret'yakovo Vill., 6.IX.1971 (E.P. Nartshuk), 1 ♀; Alekhino Vill., 13–14.VI.1973 (I.M. Kerzhner), 1 ♀.

Biology. A primary parasitoid of pupae of many species of the lepidopteran families Arctiidae, Lasiocampidae, Lymantriidae, Lyonetiidae, Notodontidae, Tineidae, Geometridae, Gracillariidae, and Noctuidae, and also of *Delia radicum* (L.) (Diptera, Anthomyiidae).

Distribution. Russia [the European part (Dzhanokmen, 1978), the south of the Far East: Primorskii Terr., the Kuril Islands (Kunashir) (Tselikh, 2011, 2012a)]; Western and Eastern Europe, North Africa, the Canary Islands, Armenia, Turkey, Middle Asia, South Korea, Japan.

40. *Cryptoprymna atra* (Walker, 1833).

Material. Kunashir Island, Sernovodsk Vill., 15.VII.1973 (D. K.), 2 ♂; 1–10 km N of Dubovoe Vill., 18.VII.1973 (D. K.), 2 ♂; Dubovoe Vill., 19.VII and 31.VIII.1973 (D. K.), 3 ♂; Golovnin Volcano, 26.VII.1973 (D. K.), 1 ♂; Alekhino Vill., 28.VII.1973 (D. K.), 2 ♂; Tret'yakovo Vill., 28.VII.2011 (E. Ts., D. R.), 1 ♂; Stolbchatyi Cape, 1.VIII.2011 (E. Ts., D. R.), 1 ♀; Mendeleevo Vill., 3.VIII.2011 (E. Ts., D. R.), 1 ♀.

Biology. Unknown.

Distribution. Russia (the Kuril Islands: Kunashir); Western and Eastern Europe.

41. *Cyrtogaster vulgaris* Walker, 1833.

Material. Simushir Island, Brouton Bay, 8.VIII.1999 (A. L.), 1 ♀.

Biology. A primary parasitoid of many species of the dipteran families Agromyzidae, Chloropidae, Drosophilidae, Lonchaeidae, Lonchopteridae, Opomyzidae, Syrphidae, and Tephritidae; the species has also been reared from *Bruchidius marginalis* (F.) (Coleoptera, Bruchidae), *Macrosiphum euphorbiae* (Thomas) (Hemiptera, Aphididae), *Diplolepis rosae* (L.) (Hymenoptera, Cynipidae), and *Eriogaster lanestris* (L.) (Lepidoptera, Lasiocampidae). In addition, the species is known as a secondary parasitoid of *Coelinus niger* (Nees) (Hymenoptera, Braconidae).

Distribution. Russia [the Komi Republic, Perm Terr. (Dzhanokmen, 1978), the Kuril Islands: Simushir]; Western and Eastern Europe, North Africa, the Canaries and Azores, Turkey, Azerbaijan, Kazakhstan, North America.

42. *Dinotiscus eupterus* (Walker, 1836).

Material. Kunashir Island, Dubovoe Vill., oak forest, 25.VII.1981 (S. B.), 1 ♂; Yuzhno-Kurilsk Vill., 27.VIII.1988 (A.M. Basarukin), 2 ♀; “Kurilskii” Nature Reserve, Lake Goryachee, Siberian dwarf pine (*Pinus pumila*), *Pityophthorus lichtensteinii*, 24.VII.2011 (E. Ts., D. R.), 3 ♂; Shikotan Island, 15.VI.1946 (D.G. Kononov), 1 ♀.

Biology. A primary parasitoid of many species of the coleopteran families Scolytidae and Curculionidae, and also a secondary parasitoid of *Dendrosoter middendorffii* Ratzeburg (Hymenoptera, Braconidae).

Distribution. Russia [the European part, the Northern Caucasus, Eastern and Western Siberia, the south of the Far East: Primorskii Terr. (Dzhanokmen, 1978; Tselikh, 2010), the Kuril Islands: Kunashir, Shikotan]; Western and Eastern Europe, Belarus, Armenia, Turkey, Middle Asia, China, Japan (Hokkaido Island), New Zealand, North America.

43. *Isocyrtus reticulatus* Xiao et Huang, 2002 (Fig. 8).

Description. **Male** (described for the first time) similar to female, but differing in following characters. Apex of scape reaching level of median ocellus; all flagellar segments longer than broad (Fig. 8). Eye height 2.2–2.3 times length of malar space. Metasomal petiole 1.8 times as long as broad. Metasoma with wide yellow spot at base, length of metasoma 1.9–2.0 times its maximum breadth.

Material. Iturup Island, Kuibyshevskii Bay, 13.VIII.1999 (A. L.), 1 ♀; Kunashir Island, Golovnin Volcano, 26.VII.1973 (D. K.), 1 ♂; Yuzhno-Kurilsk Vill., 27.VIII.1988 (A.M. Basarukin), 1 ♂; 5 km N of Yuzhno-Kurilsk Vill., 12.VIII.1993 (A.B. Sharkov), 1 ♂; road from Tret'yakovo Vill. to Alekhino Vill., motley grasses, 26.VII.2011 (E. Ts., D. R.), 1 ♂; Tret'yakovo Vill., forest, 26–29.VII.2011 (E. Ts., D. R.), 3 ♂.

Biology. Unknown.

Distribution. Russia (the Kuril Islands: Iturup, Kunashir); China (Shanghai).

44. *Gastracanthus acutus* (Kamijo, 1960).

Material. Kunashir Island, Sernovodsk Vill., 15.VII. and 28.VIII.1973 (D. K.), 4 ♀; Alekhino Vill., 11–13.VII.1973 (D. K.), 1 ♂; Golovnin Volcano, 24.VII.1973 (D. K.), 1 ♂; Shikotan Island, Malokurilskoe Vill., 20.VIII.1973 (D. K.), 2 ♀; Shikotan Island, Tserkovnaya Bay, 22–30.IX.2012 (Yu.N. Sundukov), 1 ♀.

Biology. Unknown.

Distribution. Russia [the south of the Far East: Primorskii Terr., the Kuril Islands (Kunashir, Shikotan) (Tselikh, 2011, 2012a)]; Japan (Hokkaido Island).

45. *Holcaeus stylatus* Graham, 1969.

Material. Kunashir Island, Dubovoe Vill., 8–10.VI.1973 (I.M. Kerzhner), 1 ♀; Golovnin Volcano, 11–13.VI.1973 (I.M. Kerzhner), 1 ♀; Sernovodsk Vill., 15.VII.1973 (D. K.), 1 ♀; Alekhino Vill., 28.VII.1973 (D. K.), 1 ♀.

Biology. Unknown.

Distribution. Russia [the south of the Far East: Primorskii Terr. (Tselikh, 2011, 2012a), the Kuril Islands: Kunashir]; Western and Eastern Europe.

46. *Holcaeus varro* (Walker, 1840).

Material. Shikotan Island, Malokurilskoe Vill., 21.VIII.1973 (D. K.), 1 ♀.

Biology. Unknown.

Distribution. Russia (the Kuril Islands: Shikotan); Western and Eastern Europe.

47. *Homoporus febriculosus* (Girault, 1917).

Material. Kunashir Island, Mendeleev Vill., 3.VIII.2011 (E. Ts., D. R.), 1 ♀.

Biology. A primary parasitoid of many species of the dipteran families Cecidomyiidae and Chloropidae, the hymenopteran families Cephidae and Eurytomidae, and also a secondary parasitoid of *Bracon cephi* (Gahan) (Braconidae), *Brasema allynii* (French) (Eupelmidae), *Platygaster hiemalis* Forbes, and *P. zosine* Walker (Platygastridae).

Distribution. Russia [without indication of region (Thompson, 1958; Peck, 1963), the Kuril Islands: Kunashir]; Western and Eastern Europe, Middle Asia, North America.

48. *Janssoniella caudata* Kerrich, 1957.

Material. Kunashir Island, Alekhino Vill., 13–14.VI.1973 (I.M. Kerzhner), 1 ♀.

Biology. A primary parasitoid of *Cis* sp. (Coleoptera, Ciidae).

Distribution. Russia (the Kuril Islands: Kunashir); Western and Eastern Europe, North America.

49. *Lariophagus kuwayamai* Kamijo, 1981.

Material. Kunashir Island, Dubovoe Vill., 20.VII.1973 (D. K.), 1 ♀.

Biology. Unknown.

Distribution. Russia (the Kuril Islands: Kunashir); Japan (Hokkaido Island).

50. *Mesopolobus teliformis* (Walker, 1834).

Material. Kunashir Island, road from Tret'yakovo Vill. to Alekhino Vill., motley grasses, 28.VII.2011 (E. Ts., D. R.), 3 ♀; Tret'yakovo Vill., hot spring, 29–30.VII.2011 (E. Ts., D. R.), 1 ♀; Mendeleev Vill., 3.VIII.2011 (E. Ts., D. R.), 1 ♀.

Biology. Unknown.

Distribution. Russia [(Graham, 1969: “USSR” without exact indication of region), the Kuril Islands: Kunashir]; Western and Eastern Europe, Turkey, Middle Asia.

Note. In the majority of the specimens from Kunashir Island, the metasoma is 2.3–2.4 times as long as broad.

51. *Pachyneuron groenlandicum* (Holmgren, 1872).

Material. Kunashir Island, Golovnin Volcano, 11–13.VI.1973 (I.M. Kerzhner), 1 ♂; “Kurilskii” Nature Reserve, Lake Goryachee, Siberian dwarf pine (*Pinus pumila*), 24.VII.2011 (E. Ts., D. R.), 2 ♂.

Biology. A primary parasitoid of many species of the dipteran families Chloropidae, Psilidae, and Syrphidae and also of the aphids *Callipterinella calliptera* (Hartig) and *Forda marginata* Koch (Hemiptera, Aphididae), the coccid *Physokermes jezoensis* Siraiwa (Hemiptera, Coccidae), the lepidopterans *Dendrolimus* sp. (Lasiocampidae), *Autographa gamma* (L.) (Noctuidae), and *Pieris* sp. (Pieridae). The species is a secondary parasitoid of the hymenopterans

Aleiodes borealis (Thomson) (Braconidae), *Aphidius* sp., and *A. sicarius* Mackauer (Aphidiidae).

Distribution. Russia [Western Siberia (Noyes, 2013), the Kuril Islands: Kunashir]; Western and Eastern Europe, Turkey, Middle Asia, China (everywhere), South Korea, Japan (Hokkaido, Honshu, Kyushu, and Ryukyu islands), India, North America.

52. *Pachyneuron solitarium* (Hartig, 1838).

Material. Kunashir Island, Golovnin Volcano, 11–13.VI.1973 (I.M. Kerzhner), 3 ♀; same locality., Siberian dwarf pine [*Pinus pumila* (Pall.)], *Diaeretus leucopterus* (Haliday), 24.VII.2011 (E. Ts., D. R.), 1 ♀, 2 ♂; Dubovoe Vill., 31.VIII.1973 (D. K.), 1 ♀.

Biology. A primary parasitoid of many species of the families Aphididae, Coccidae, Pseudococcidae, and Psyllidae, the lepidopteran families Lasiocampidae and Lymantriidae; it was also reared from *Coccinella septempunctata* L. (Coleoptera, Coccinellidae) and *Eutolmus* sp. (Diptera, Asilidae). *P. solitarium* is also a secondary parasitoid of many species of the hymenopteran families Aphelinidae, Braconidae, Encyrtidae, Scelionidae, and Trichogrammatidae.

Distribution. Russia [Western Siberia (Filatova, 1974), Sakhalin Prov. (Kamijo, 1983), the Kuril Islands: Kunashir]; Western and Eastern Europe, Middle Asia, China (everywhere), South Korea, Japan (Hokkaido, Honshu, Kyushu islands), India.

53. *Plutothrix acuminata* (Thomson, 1878).

Material. Kunashir Island, Alekhino Vill., 30–31.VII.1981 (S. B.), 1 ♀.

Biology. A primary parasitoid of *Cis boleti* (Scopoli) (Coleoptera, Ciidae) and *Platypeza* sp. (Diptera, Platypezidae).

Distribution. Russia [Sakhalin Prov. (Tselikh, 2012b), the Kuril Islands: Kunashir]; Western and Eastern Europe, North America.

54. ***Plutothrix narendrani* Kamijo, 2004.

Material. Kunashir Island, Alekhino Vill., 11–13.VI.1973 (D. K.), 1 ♀; Tret'yakovo Vill., 29.VII.2011 (E. Ts., D. R.), 1 ♂; Stolbchatyi Cape, 1.VIII.2011 (E. Ts., D. R.), 1 ♂.

Biology. Unknown.

Distribution. Russia (the Kuril Islands: Kunashir); Japan (Hokkaido Island).

55. *Psilocera obscura* Walker, 1833.

Material. Kunashir Island, Golovnin Volcano, 20–22.VII.1973 (D. K.), 1 ♀; Tret'yakovo Vill., outpost, 20.VIII.1980 (S.V. Kononova), 1 ♀; Shikotan Island, Malokurilskoe Vill., 20.VIII.1973 (D. K.), 1 ♂.

Biology. A secondary parasitoid of *Cotesia glomerata* (L.) (Hymenoptera, Braconidae).

Distribution. Russia [Eastern Siberia (Dzhannokmen, 1978), the south of the Far East: Amurskaya Province, Primorskii Terr., the Kuril Islands: Kunashir (Tselikh, 2011, 2012a), Shikotan]; Western and Eastern Europe, Turkey.

56. *Pteromalus berylli* Walker, 1835.

Material. Kunashir Island, “Kurilskii” Nature Reserve, Ozernaya River, 43°53.137'N, 145°27.712'E, 23.VII.2011 (E. Ts., D. R.), 2 ♀; “Alekhinskii” Cordon, 28.VII.2011 (E. Ts., D. R.), 2 ♀.

Biology. A primary parasitoid of *Oxya parietina* (L.) (Diptera, Tephritidae), *Aulacidea hieracii* (Bouché), *A. tragopogonis* (Thomson), *Isocolus scabiosae* (Giraud) (Hymenoptera, Cynipidae), and *Archips rosanus* (L.) (Lepidoptera, Tortricidae).

Distribution. Russia [Sakhalin Prov. (Tselikh, 2012b), the Kuril Islands: Kunashir]; Western and Eastern Europe.

57. ***Pteromalus bifoveolatus* Foerster, 1861.

Material. Kunashir Island, Dubovoe Vill., 31.VIII.1973 (D. K.), 1 ♂.

Biology. A primary parasitoid of many species of the lepidopteran families Lasiocampidae, Lymantriidae, Notodontidae, and Saturniidae.

Distribution. Russia (the Kuril Islands: Kunashir); Western and Eastern Europe, North Africa, Turkey, Kazakhstan, Japan (Honshu Island).

58. *Pteromalus cardui* (Erdös, 1953).

Material. Onkotan Island, 7.VIII.1996 and 27.VII.2000 (A. L.), 3 ♀; Ketoi Island, 6.VIII.1999 (A. L.), 1 ♀, 2 ♂; Simushir Island, 2.VII.2000 (A. L.), 1 ♀; Chirpoi Island, 9.VIII.1999 (A. L.), 12 ♀, 1 ♂; Brat Chirpoev Island, motley grasses, 20.VIII.1997 (A. L., S.Yu. Storozhenko), 2 ♀, 1 ♂; same locality, 4.VIII.2000 (A. L.), 2 ♀; Iturup Island, 13.VIII.1999 (A. L.), 1 ♀; Kunashir Island, Dubovoe Vill.,

30.VII.1989 (A. L.), 1 ♀; 7 km S of Lake Lagunnoe, 15.VIII.1989 (A. L.), 1 ♀; “Kurilskii” Nature Reserve, Ozernaya River, 43°53.137'N, 145°27.712'E, 23.VII.2011 (E. Ts., D. R.), 1 ♀; road from Tret'yakovo Vill. to Alekhino Vill., motley grasses, 28.VII.2011 (E. Ts., D. R.), 1 ♀; Tret'yakovo Vill., forest, 29.VII.2011 (E. Ts., D. R.), 1 ♀; Shikotan Island, 18.VIII.1998 (A. L.), 1 ♀.

Biology. A primary parasitoid of many species of the dipteran family Tephritidae.

Distribution. Russia [the south of the Far East: Primorskii Terr., the Kuril Islands: Ketoi, Simushir, Chirpoi (Tselikh, 2011, 2012a), Onkotan, Brat Chirpoev, Iturup, Kunashir, Shikotan]; Western and Eastern Europe, Kazakhstan.

59. *Pteromalus cioni* (Thomson, 1878).

Material. Kunashir Island, Tret'yakovo Vill., 4–5.VIII.1973 (D. K.), 2 ♀; Golovnin Volcano, 12.VIII.1980 (S.V. Kononova), 1 ♀; 7 km S of Lake Lagunnoe, 15.IX.1999 (A. L.), 1 ♀.

Biology. A primary parasitoid of *Cionus* sp., *C. tuberculosus* (Scopoli), and *Stereonychus fraxini* (De Geer) (Coleoptera, Curculionidae).

Distribution. Russia [(Thompson, 1958, without indication of region), Sakhalin Prov. (Tselikh, 2012b), the Kuril Islands: Kunashir]; Western and Eastern Europe, Kazakhstan.

60. *Pteromalus elevatus* (Walker, 1834).

Material. Kunashir Island, Dubovoe Vill., 31.VIII.1973 (D. K.), 1 ♀; Veslovskii Peninsula, 6.VII.1980 (S.V. Kononova), 1 ♀; Sernovodsk Vill., 22.VII.1981 (E.S. Sugonyaev), 2 ♀; Alekhino Vill., 19.VIII.1999 (A. L.), 1 ♀.

Biology. A primary parasitoid of many species of the dipteran family Tephritidae and also of the hymenopteran families Cynipidae and Eurytomidae. In addition, this species is known as a secondary parasitoid of *Baryscapus gradwelli* Graham (Hymenoptera, Eulophidae).

Distribution. Russia [the European part (Dzhannokmen, 1978), Sakhalin Prov. (Tselikh, 2012b), the Kuril Islands: Kunashir]; Western and Eastern Europe, Turkey, Middle Asia, North America.

61. ***Pteromalus procerus* Graham, 1969.

Material. Kunashir Island, Mendeleevo Vill., 3.VIII.2011 (E. Ts., D. R.), 1 ♂.

Biology. A primary parasitoid of *Rhynchaenus empopulifolis* Chen et Zhang (Coleoptera, Curculionidae).

Distribution. Russia (the Kuril Islands: Kunashir); Western Europe, China (Beijing).

62. *Pteromalus sequester* Walker, 1835.

Material. Kunashir Island, 1–10 km N of Dubovoe Vill., 18.VII.1973 (D. K.), 1 ♀; Tret'yakovo Vill., 4.VIII.1973 (D. K.), 1 ♀; same locality, motley grasses, 28–29.VII.2011 (E. Ts., D. R.), 10 ♀; 10 km S of Yuzhno-Kurilsk Vill., 20.VII.1981 (S. B.), 1 ♀; “Kurilskii” Nature Reserve, Ozernaya River, 43°53.137'N, 145°27.712'E, 23.VII.2011 (E. Ts., D. R.), 1 ♀.

Biology. A primary parasitoid of many species of the coleopteran families Apionidae, Bruchidae, and Curculionidae, the dipteran family Cecidomyiidae, the hymenopteran family Eurytomidae, and the lepidopteran family Pyralidae; a secondary parasitoid of *Dinarmus italicus* (Masi) (Hymenoptera, Pteromalidae).

Distribution. Russia [Siberia (Herting, 1977), Sakhalin Prov. (Tselikh, 2012b), the Kuril Islands: Kunashir]; Western and Eastern Europe, North Africa, the Canary Islands, Turkey, Middle Asia, Iraq, India, Australia, New Zealand, the Hawaiian Islands, North and South America.

63. *Rhopalicus tutela* (Walker, 1836).

Material. Kunashir Island, Alekhino Vill., 28.VII.1973 (D. K.), 1 ♀.

Biology. A primary parasitoid of many species of the coleopteran families Bostrichidae, Curculionidae, and Scolytidae, and also of *Mikiola fagi* (Hartig) (Diptera, Cecidomyiidae).

Distribution. Russia [the European part (Dzhannokmen, 1978), Eastern Siberia (Tselikh, 2010), the south of the Far East: Primorskii Terr. (Tselikh, 2011, 2012a), the Kuril Islands: Kunashir]; Western and Eastern Europe, Armenia, Turkey, Middle Asia, China (everywhere), Japan (Hokkaido, Honshu, Shikoku, and Kyushu islands), New Zealand, North America.

64. *Roptrocercus mirus* (Walker, 1834).

Material. Kunashir Island, Tret'yakovo Vill., 28–29.VII.2011 (E. Ts., D. R.), 1 ♀.

Biology. A primary parasitoid of many species of the coleopteran family Scolytidae and of the lepidopterans *Lymantria dispar* (L.) (Lymantriidae) and *Thaumetopoea processionea* (L.) (Notodontidae); the species is also a secondary parasitoid of Tachinidae (Diptera).

Distribution. Russia [the European part (Dzhankhmen, 1978), Eastern Siberia, the south of the Far East: Primorskii Terr. (Tselikh, 2010, 2011, 2012a), the Kuril Islands: Kunashir]; Western and Eastern Europe, Belarus, China (everywhere), Japan (Hokkaido and Honshu islands).

65. *****Sceptrothelys grandiclava*** (Walker, 1835).

Material. Kunashir Island, road from Tret'yakovo Vill. to Alekhino Vill., motley grasses, 28.VII.2011 (E. Ts., D. R.), 2 ♀.

Biology. A primary parasitoid of *Hypera nigrirostris* (Fabricius), *H. postica* (Gyllenhal), and *H. plantaginis* (De Geer) (Coleoptera, Curculionidae), *Pieris rapae* (L.) (Lepidoptera, Pieridae), and also a secondary parasitoid of *Bathyplectes* sp., *B. curculionis* (Thomson) (Hymenoptera, Ichneumonidae).

Distribution. Russia (the Kuril Islands: Kunashir); Western and Eastern Europe, North America.

66. *****Sphegigaster hamugurivora*** Ishii, 1953.

Material. Kunashir Island, Dubovoe Vill., 8.VIII.1980 (S.V. Kononova), 1 ♂.

Biology. A primary parasitoid of *Chromatomyia horticola* (Goureau) (Diptera, Agromyzidae).

Distribution. Russia (the Kuril Islands: Kunashir); South Korea, Japan (Hokkaido, Honshu, and Shikoku islands).

67. *****Sphegigaster intersita*** Graham, 1969.

Material. Kunashir Island, road from Tret'yakovo Vill. to Alekhino Vill., motley grasses, 28.VII.2011 (E. Ts., D. R.), 1 ♀, 6 ♂; "Kurilskii" Nature Reserve, "Alekhinskii" Cordon, 28.VII.2011 (E. Ts., D. R.), 1 ♂; Tret'yakovo Vill., forest, 29.VII.2011 (E. Ts., D. R.), 3 ♀, 2 ♂; same locality, hot spring, 29–30.VII.2011 (E. Ts., D. R.), 1 ♂.

Biology. A primary parasitoid of *Melanagromyza aeneoventris* (Fallén) and *M. sativae* Spencer (Diptera, Agromyzidae).

Distribution. Russia (the Kuril Islands: Kunashir); Western and Eastern Europe, Kazakhstan, China (Beijing, Shandong).

68. *****Sphegigaster mutica*** Thomson, 1878.

Material. Kunashir Island, Yuzhno-Kurilsk Vill., 27.VIII.1988 (A.M. Basarukin), 1 ♀.

Biology. Unknown.

Distribution. Russia (the Kuril Islands: Kunashir); Western Europe, China (Girin, Beijing).

69. ***Sphegigaster nigricornis*** (Nees, 1834).

Material. Kunashir Island, 10 km W of Yuzhno-Kurilsk, 11.VII.1973 (D. K.), 1 ♀.

Biology. A primary parasitoid of many species of the dipteran family Agromyzidae and of *Ceratapion carduorum* (Kirby) (Coleoptera, Apionidae).

Distribution. Russia [the Kuril Islands: Kunashir (Tselikh, 2011, 2012a)]; Western and Eastern Europe, the Canary Islands, Kazakhstan.

70. *****Spilomalus quadrinota*** (Walker, 1835).

Material. Kunashir Island, Dubovoe Vill., 19.VII.1973 (D. K.), 2 ♀.

Biology. A primary parasitoid of the coleopterans *Anthonomus* sp., *A. rubi* (Herbst) (Curculionidae) and *Auletobius* sp., *A. politus* (Lepeletier et Serville) (Rhynchitidae).

Distribution. Russia (the Kuril Islands: Kunashir); Western and Eastern Europe.

71. *****Stenomalina iera*** (Walker, 1844).

Material. Makanrushi Island, motley grasses, 18.VIII.1997 (A. L.), 15 ♀, 1 ♂; Onkotan Island, Rezvyi Stream, 7.VIII.1996 (A. L.), 2 ♀; same locality, 2 km E of Terrasnyi Cape, 9.VIII.1996 (A. L.), 2 ♀; Kharimkotan Island, Severgin Bay, 8.VIII.1996 (A. L.), 5 ♀; Ekarma Island, slope of volcano, 10.VIII.1996 (A. L.), 1 ♀; Shiashkotan Island, grass meadow, 11.VIII.1996 (A. L.), 4 ♀; Matua Island, alder forest, 15.VIII.1996 (A. L.), 1 ♀; same locality, motley grasses, 15.VIII.1999 (A. L.), 6 ♀; Yankich Island, motley grasses, 5.VIII.1999 (A. L.), 1 ♀; Ketoi Island, motley grasses, 6.VIII.1999 (A. L.), 4 ♀; Simushir Island, motley grasses, 8–9.VIII.1999 (A. L.), 12 ♀, 1 ♂; Chirpoi Island, motley

grasses, 9.VIII.1999 (A. L.), 3 ♀; same locality, 3.VIII.2000 (A. L.), 3 ♀; Urup Island, motley grasses, 7–9.VIII.2000 (A. L.), 5 ♀, 1 ♂; Iturup Island, 1 ♀; Kunashir Island, Sernovodsk Vill., 15.VII and 26.VIII.1973 (D. K.), 2 ♀; Alekhino Vill., 29–30.VII.1973 (D. K.), 1 ♀.

Biology. A primary parasitoid of *Episyrphus balteatus* (De Geer) (Diptera, Syrphidae).

Distribution. Russia (the Kuril Islands: Makan-rushi, Onekotan, Harimkotan, Ekarma, Shiashkotan, Matua, Yankich, Ketoi, Simushir, Chirpoi, Urup, Iturup, and Kunashir); Western Europe.

Note. In all the specimens from the Kuril Islands, the pedicel is 1.2–1.3 times as long as broad, and the coxae and femora are dark green with metallic reflections.

72. *Stenomalina liparae* (Giraud, 1863).

Material. Kunashir Island, Dubovoe Vill., 22.VII.1973 (D. K.), 2 ♀; Golovnin Volcano, 24.VII.1973 (D. K.), 1 ♂; Alekhino Vill., 29–30.VII.1973 (D. K.), 2 ♀; same locality, 14.VIII.1988 (A.G. Zinoviev), 1 ♀; Sernovodsk Vill., 26.VIII.1973 (D. K.), 1 ♀; Stolbchatyi Cape, 44°1.280'N, 145°40.332'E, 31.VI.2011 (E. Ts., D. R.), 2 ♀.

Biology. A primary parasitoid of *Calamoncosis tomentosa* (Macquart), *Lipara lucens* Meigen, and *L. rufitarsis* Loew (Diptera, Chloropidae).

Distribution. Russia [the European part (Dzhannokmen, 1978), the Kuril Islands: Kunashir (Tselikh, 2011, 2012a)]; Western and Eastern Europe, China (Xinjiang, Hebei).

73. ***Stenomalina pilosa* Xiao et Huang, 1999.

Material. Kunashir Island, 7 km S of Lake Lagunoe, 15.VIII.1989 (A. L.), 1 ♀.

Biology. Unknown.

Distribution. Russia (the Kuril Islands: Kunashir); China (Girin).

74. *Synedrus kasparyani* Tselikh, sp. n. (Figs. 3, 4, 9–11).

Description. Female. Body length 2.1–2.3 mm, length of fore wing 1.7–2.1 mm.

Head in dorsal view 2.3–2.4 times as broad as long and 1.2–1.4 times as broad as mesoscutum. POL 1.2–

1.3 times OOL. Eye height 1.3–1.4 times eye length and 1.7–1.9 times length of malar space (Fig. 4). Occiput not bordered. Lower margin of clypeus straight. Both mandibles with 4 teeth. Antennal scrobes shallow, without carina between them. Antennal toruli equally distant from lower margin of clypeus and median ocellus.

Antennal formula 1 1 3 5 3. Scape reaching level of median ocellus, length of scape 5.5–5.7 times its maximum breadth and 0.7 times eye height. Pedicel 0.8 times as long as anelli and 1st flagellar segment combined (Fig. 11). Length of pedicel and flagellum combined 0.9 times breadth of head (dorsal view). All flagellar segments as long as broad, each with 1 row of sensilla. Clava 3-segmented, 2.5–2.8 times as long as broad and slightly longer than 3 preceding flagellar segments combined; all segments of clava with narrow areas of microsensilla (Fig. 10).

Mesosoma 1.6–1.7 times as long as broad. Pronotal collar distinct; its apex sharp, with carina. Notauli weak, reaching only middle of mesoscutum. Scutellum clearly convex in lateral view; frenal line indistinct. Propodeum 0.6 times as long as scutellum, strongly projecting medially beyond bases of hind coxae; its lateral areas with incomplete transverse carinae, longitudinal median carina absent. Nucha 0.3–0.4 times as long as propodeum (Fig. 3).

Wing (Fig. 9). Fore wing 1.9–2.0 times as long as broad. Costal cell pilose; basal cell bare; basal vein pilose along entire length. Speculum open below. Marginal vein 1.2–1.3 times, and postmarginal vein 1.4–1.5 times as long as stigmal vein.

Legs. Spur of middle tibia half as long as 1st segment of tarsus. Hind tibia with 1 spur.

Metasoma 2.2–2.6 times as long as broad, 0.8–1.0 times as long as mesosoma and head combined. Petiole transverse.

Sculpture of head, mesosoma, lateral areas, and nucha reticulate. Clypeus strigose-reticulate. Metasoma finely alutaceous, shining.

Coloration. Body bluish green, with golden metallic reflections. Scape and pedicel pale brownish or yellowish, flagellum brownish. Coxae, trochanters, femora, and tibiae pale brownish; tarsi yellowish. Wings hyaline, without dark spots.

Male unknown.

Diagnosis. The new species is similar to the European *S. transiens* (Walker) in the scape reaching the median ocellus, the flagellar segments subquadrate or longer than broad, and in the marginal vein of the fore wing 1.2–1.3 times as long as the stigmal vein. *Synedrus kasparyani* sp. n. differs from *S. transiens* in the following characters: the length of the scape and flagellum combined is 0.9 times the breadth of the head (dorsal view); the pedicel is 0.7–0.8 times as long as the anelli and the 1st flagellar segment combined; the eye height is 1.7–1.9 times the length of the malar space; the nucha is shorter, 0.3–0.4 times as long as the propodeum.

Etymology. The species is named after the prominent Russian entomologist D.R. Kasparyan who collected specimens of the type series.

Material. Russia. Holotype: ♀, Sakhalin Prov.: Kunashir Island, Golovnin Volcano, 24.VII.1973 (D.R. Kasparyan) (ZIN). Paratypes: 1 ♀, as holotype; 2 ♀, same locality, 22.VII.2011 (E.V. Tselikh, D.V. Rachin) (ZIN); 1 ♀, Shikotan Island, Tserkovnaya Bay, 2–4.X.2012 (Yu.N. Sundukov) (ZIN).

Biology. Unknown.

Distribution. Russia (the Kuril Islands: Kunashir, Shikotan).

75. *****Synedrus transiens*** (Walker, 1835).

Material. Kunashir Island, “Kurilskii” Nature Reserve, Ozernaya River mouth, 23.VII.2011 (E. Ts., D. R.), 1 ♀.

Biology. Unknown.

Distribution. Russia (the Kuril Islands: Kunashir); Western and Eastern Europe.

Note. The specimen examined is similar to *S. transiens* in the essential diagnostic characters (the scape reaches the median ocellus, the length of the clava is equal to the combined length of the three preceding flagellar segments, the marginal vein is 1.3–1.4 times as long as the stigmal vein), but differs in a shorter pedicel and in a longer postmarginal vein.

76. *****Syntomopus incurvus*** Walker, 1833.

Material. Kunashir Island, Dubovoe Vill., oak forest, 25.VII.1981 (S. B.), 1 ♂; 7 km S of Lake Lagunoe, 15.VIII.1989 (A. L.), 1 ♀, 1 ♂.

Biology. A primary parasitoid of *Melanagromyza aenea* (Meigen), *M. dettmeri* Hering, and *M. tripolii* Spencer (Diptera, Agromyzidae).

Distribution. Russia (the Kuril Islands: Kunashir); Western and Eastern Europe, Turkey, Kazakhstan, China (Ningxia Hui Autonomous Region).

Note. The specimens collected in the environs of Lake Lagunoe were previously misidentified as *Syntomopus thoracicus* Walker (Tselikh, 2011, 2012a).

77. ***Syntomopus thoracicus*** Walker, 1833.

Material. Simushir Island, 9.VIII.1999 (A. L.), 1 ♂; Urup Island, 9.VIII.2000 (A. L.), 1 ♀.

Biology. A primary parasitoid of *Melanagromyza aeneoventris* (Fallén), *M. eupatorii* Spencer, *M. sojae* (Zehntner), and *Napomyza lateralis* (Fallén) (Diptera, Agromyzidae).

Distribution. Russia [the Kuril Islands: Simushir (Tselikh, 2011), Urup]; Western and Eastern Europe, Kazakhstan, China (everywhere).

78. ***Toxeuma acilius*** (Walker, 1848).

Material. Kunashir Island, Dubovoe Vill., 22.VII.1973 (D. K.), 1 ♀; Mendeleevo Vill., 3.VIII.2011 (E. Ts., D. R.), 1 ♀.

Biology. Unknown.

Distribution. Russia [the south of the Far East: Primorskii Terr. (Burks, 2013), the Kuril Islands: Kunashir]; Western and Eastern Europe.

79. ***Toxeuma paludum*** Graham, 1959.

Material. Kunashir Island, Dubovoe Vill., 20–21.VII.2011 (E. Ts., D. R.), 2 ♀; Mendeleevo Vill., 3.VIII.2011 (E. Ts., D. R.), 1 ♀.

Biology. A primary parasitoid of *Coleophora* sp. (Lepidoptera, Coleophoridae).

Distribution. Russia [Sakhalin Prov. (Tselikh, 2012b), the Kuril Islands: Kunashir]; Western Europe.

80. *****Toxeuma subtruncatum*** Graham, 1959.

Material. Kunashir Island, Dubovoe Vill., 31.VIII.1973 (D. K.), 1 ♀.

Biology. Unknown.

Distribution. Russia (the Kuril Islands: Kunashir); Western and Eastern Europe.

81. *Trichomalopsis oryzae* Kamijo et Grissell, 1982.

Material. Kunashir Island, "Kurilskii" Nature Reserve, Ozernaya River, motley grasses, 23.VII.2011 (E. Ts., D. R.), 1 ♀; same locality, Alekhinskii Cordon, 28.VII.2011 (E. Ts., D. R.), 2 ♀; road from Tret'yakovo Vill. to Alekhino Vill., 28.VII.2011 (E. Ts., D. R.), 3 ♀; Tret'yakovo Vill., 29.VII.2011 (E. Ts., D. R.), 2 ♀.

Biology. A primary parasitoid of the coleopteran *Oulema oryzae* (Kuwayama) (Chrysomelidae), the dipterans *Agromyza oryzae* (Munakata) (Agromyzidae), *Hydrellia griseola* (Fallén) (Ephydriidae), and *Allognosta sapporensis* Matsumura (Stratiomyidae), and the lepidopterans *Bucculatrix pyrivorella* Kuroko (Bucculatricidae) and *Naranga aenescens* Moore (Noctuidae).

Distribution. Russia [the south of the Far East: Primorskii Terr. (Tselikh, 2011, 2012a), the Kuril Islands: Kunashir]; China (Jiangxi), South Korea, Japan (Hokkaido, Honshu, and Kyushu islands).

82. *Trichomalopsis shirakii* Crawford, 1913.

Material. Kunashir Island, Dubovoe Vill., 49°46.479'N, 145°29.721'E, 20–21.VII.2011 (E. Ts., D. R.), 6 ♀, 4 ♂.

Biology. A primary parasitoid of the coleopteran *Oulema oryzae* (Kuwayama) (Chrysomelidae), the dipterans *Agromyza oryzae* (Munakata) (Agromyzidae) and *Hydrellia griseola* (Fallén) (Ephydriidae), and the lepidopterans *Elachista* sp. (Elachistidae), *Parnara guttatus* (Bremer et Grey) (Hesperiidae), and *Plutella xylostella* (L.) (Yponomeutidae).

Distribution. Russia [Sakhalin Prov. (Tselikh, 2012b), the Kuril Islands: Kunashir]; China including Taiwan Island, South Korea, Japan (Hokkaido, Honshu, and Kyushu islands).

83. *Trigonoderus pulcher* Walker, 1836.

Material. Kunashir Island, Dubovoe Vill., 31.VIII.1973 (D. K.), 1 ♂; Sernovodsk Vill., 21.VII.1981 (S. B.), 1 ♂; Alekhino Vill., 30–31.VII.1981 (S. B.), 2 ♀; Golovnin Volcano, 27.VII.1981 (S. B.), 1 ♂; 7 km S of Lake Lagunoe, 15.VIII.1989 (A. L.), 1 ♂; 35th–42nd km of Yuzhno-Kurilsk–Golovnin highway, 25.VIII.1992 (V. V. Gorbatsovskii), 1 ♀; Tret'yakovo Vill., forest, 29.VII.2011

(E. Ts., D. R.), 1 ♂; Shikotan Island, Malokurilskoe Vill., 21.VIII.1973 (D. K.), 1 ♀.

Biology. Unknown.

Distribution. Russia [the south of the Far East: Khabarovsk and Primorskii territories, the Kuril Islands: Kunashir (Tselikh, 2011, 2012a), Shikotan]; Western and Eastern Europe, Japan (Hokkaido, Honshu, Shikoku, and Kyushu islands).

84. *Usubaia liparae* Kamijo, 1983.

Material. Kunashir Island, Golovnin Volcano, 11–13.VI.1973 (I. M. Kerzhner), 1 ♀.

Biology. A primary parasitoid of *Lipara* sp. (Diptera, Chloropidae).

Distribution. Russia [the south of the Far East: Primorskii Terr. (Tselikh, 2011, 2012a), the Kuril Islands: Kunashir]; Japan (Hokkaido, Honshu, Shikoku, and Kyushu islands).

DISCUSSION

At present, 84 species of the chalcid wasps of the family Pteromalidae are known from the islands of the Kuril Archipelago, among which two species (*Seladerma leleji* sp. n. and *Synedrus kasparyani* sp. n.) are herein described as new to science, and the males of *Semiotellus takadai* Kamijo and *Isocyrthus reticulatus* Xiao et Huang were found and described for the first time. Four genera [*Seladerma* Walker (Miscogasterinae), *Caenacis* Foerster, *Isocyrthus* Walker, and *Synedrus* Graham (Pteromalinae)] and 36 species from the Kuril Islands are recorded for the fauna of Russia for the first time. In the fauna of the Russian Far East, 8 species of the subfamilies Miscogasterinae, Ormocerinae, and Pteromalinae were found for the first time. For 38 pteromalid species, new data on the distribution in the Far East were obtained. The pteromalid fauna of the northern islands of the Kuril Archipelago [separated along the Bussol Strait between Simushir Island and Chernye Brat'ya and Brouton islands (Lelej et al., 2002)] is poor, it includes only one Far Eastern (Stenopean), three Eurasian species, three Eurasian species with disjunctive ranges, and two Holarctic species. At the same time, in the southern islands, 82 species are found, among which 27 have the Far Eastern (Stenopean) ranges, 18 have the Eurasian, 19, the Eurasian disjunctive, 2, the Transpalearctic, 13, the Holarctic, and 3, the multi-regional ranges. Such an essential

difference between the faunas of the northern and southern islands is most likely due to the poor knowledge of the northern Kuriles on the one hand, and to a considerable participation of the Japanese fauna in the formation of the fauna of the southern Kuriles, on the other hand. In particular, among the 82 pteromalid species found in the southern islands, 32 also occur in Japan, and 11 of them were known before only from there [*Asaphes pubescens* Kamijo et Takada, *Lamprotatus duplicatum* (Kamijo), *Neoskeloceras longistria-tum* Kamijo, *Stictomischus apoianus* Kamijo, *S. curvatus* Kamijo, *S. elongatus* Kamijo, *S. japonicus* Kamijo, *S. momoi* Kamijo, *Semiotellus takadai* Kamijo, *Lariophagus kuwayamai* Kamijo, and *Plutothrix narendrani* Kamijo].

In addition to the extensive new data on the taxonomic structure of the pteromalid fauna of the Kuril Islands, new data on the biology of some species were obtained. In particular, *Asaphes pubescens* Kamijo et Takada and *A. suspensus* (Nees) were reared for the first time from *Praon bicolor* Mackauer (Hymenoptera, Aphidiidae), parasitoid of an aphid on *Pinus pumila* (Pall.).

ACKNOWLEDGMENTS

The author is grateful to S.A. Belokobylskij (St. Petersburg, Russia) for consultations during the work on the present publication, to Dr. K. Konishi and Dr. K. Kamijo (Sapporo, Japan), Dr. G. Broad and Dr. Natalie Dale-Skey (London, United Kingdom), and Dr. K.A. Dzhanokmen (Almaty, Kazakhstan) for the opportunity to examine the type material, to M.Yu. Mandelstam and E.M. Davidian for their help in identification of hosts, and to M.Yu. Proshchalykin for his help in organization of the expedition to Kunashir Island in 2011. The author also thanks A.S. Lelej, D.R. Kasparyan, S.A. Belokobylskij, and D.V. Rachin for the material collected.

The study was financially supported by the Russian Foundation for Basic Research (grant no. 13-04-00026).

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