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Abstract—Species of the genus Synaldis, characterized by the presence of a mesoscutal pit and by the propodeum smooth over the most part, are reviewed. Ten new species are described and figured: Synaldis bokkaica sp. n. (Russia: Primorskiy Terr.), S. cespitator sp. n. (Russia: Kamchatka, Primorskiy Terr.), S. esipenki sp. n. (Russia: Primorskiy Terr.), S. leshi sp. n. (Russia: Kamchatka, Primorskiy Terr.), S. licho sp. n. (Russia: Primorskiy Terr.; Japan: Hokkaido, Honshu), S. maruyamae sp. n. (Japan: Hokkaido), S. nitidulatus sp. n. (Russia: Primorskiy Terr.), S. ootshi sp. n. (Russia: Jewish Autonomous Province, Primorskiy Terr.), S. soralae sp. n. (Russia: Primorskiy Terr.), S. ussuriana sp. n. (Russia: Primorskiy Terr.). Three species are recorded from Russia for the first time: S. cultrigaster Fischer (Novgorod Province, Primorskiy Terr.), S. distenta Papp (Primorskiy Terr.), and S. vestigata Papp (Kamchatka, Kuril Islands, Primorskiy Terr.). A key to all Palearctic species of this subgroup is given.

The present communication deals with eastern Palearctic species of the genus Synaldis Förster. Species of the genus without the mesoscutal pit were revised earlier (Belokobylskij, 2002); the species analyzed below possess a more or less distinct mesoscutal pit. It is of interest that species of the latter group rarely exhibit enlarged paraclypeal areas (nearly fused with the margin of the eyes), and such species almost never occur in the fauna of the eastern Palearctic Region.

It should be noted that the mesoscutal pit is occasionally indistinct and even absent; such an intraspecific variability was found in S. sincera Papp (Belokobylskij, 2002). In S. cultrigaster Belokobylskij, this pit is usually absent, but occasionally occurs, although being hardly noticeable, even in paratypes. In S. cultrigaster Fischer, which is always included in this group of species, the mesoscutal pit is also usually inconspicuous. All these facts indicate that this character should be used carefully for diagnostic purposes.

The group of species discussed can be subdivided into 2 subgroups. In species of the first subgroup, the propodeum is smooth over the most part and frequently bears in the middle a more or less distinct and usually entire longitudinal carina surrounded with a sculpture. The present paper deals with species of this subgroup. Species of the second subgroup are characterized by the entirely or almost entirely sculptured propodeum, these species will be discussed in the next communication.

In the fauna of the Palearctic Region (mainly, the western part), 11 species of this subgroup were recorded, with about half of these known from the southern areas (Fischer, 1993a, 1993b). Among these, only 3 species were recorded in Korea and Mongolia (Papp, 1994, 1996, 1999). Only 3 species of the subgroup under study were found in North America (Fischer, 1967) and separated in the Synaldis blantoni group, section A. Among these species, only one (S. acutidens Fischer) was described from a female, and two others (S. blantoni Fischer and S. ritundidens Fischer), from males; this circumstance complicates a comparison of these species with the eastern Palearctic material. In the present study, ten more new species from the Russian Far East and Japan are described.

The most part of the material used in the present study are deposited in the Zoological Institute, Russian Academy of Sciences, St. Petersburg (ZIN). Other types of the new species are deposited in Institute of Zoology, National Academy of Sciences of the Ukraine, Kiev (IZATNU); and National Institute of Agro-Environmental Sciences, Tsukuba, Japan (NI-AES). The nomenclature of the wing venation follows that by Belokobylskij and Tobias (1998).
**Synaldis bokhaica** Belokobylskij, sp. n.
(Figs. 1-11)

**Female.** Body length 1.8 mm, length of fore wing 1.7 mm. Width of head 1.7 times its median length, 1.4 times maximum length, 1.4 times width of mesoscutum. Head slightly narrower at level of temples than at level of eyes, more or less uniformly and gradually roundly narrowed behind eyes. Transverse eye diameter 1.5 times length of temples (1.6 times when measured along straight line). Ocelli slightly enlarged, situated in an equilateral triangle; POL subequal to Od, 0.4 times OOL. Width of face 1.1 times its height in middle (including antennal tubercles) and 1.1 times maximum diameter of eye. Maximum diameter of eye 1.2 times minimum one. Groove between antennal tubercle and eye indistinct. Paraclypeal areas enlarged, oval, distinctly not reaching eye margin. Width of clypeus 3.3 times its height. Mandible weakly widened to apex, its median length 1.7 times maximum width. Upper tooth narrow, subequal to middle one, roundly obtused, directed slightly upwards. Middle tooth narrow, tapered, rather short. Deep acute-angular emargination present between upper and middle teeth. Lower tooth medium-sized, widest, widely rounded, slightly shorter than upper tooth.

Antennae 21-segmented, slender, filiform, about 1.2 times as long as body. Scape 0.6 times as long as 1st flagellar segment. First flagellar segment slender, its length 4.2 times apical width and 1.2 times length of 2nd segment. Length of 2nd flagellar segment 3.3

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times maximum width. Length of middle flagellar segments 2.3 times their width. Penultimate segment 2.3 times as long as wide, 0.6 times as long as 1st segment, 0.9 times as long as ultimate segment; the latter weakly tapered at apex.

Length of mesosoma 1.25 times its height. Dorsal surface of mesosoma distinctly convex. Notauli on vertical surface of mesoscutum distinct, converging toward apex, nearly smooth; horizontal surface without notauli. Mesoscutal pit rather short, narrow, very shallow. Prescutellar depression weakly crenulate, with distinct median carina, 0.45 times as long as wide and half as long as the convex scutellum. Metanotum without tubercle. Sternauli rather short, slanting, weakly crenulate, situated nearly in middle of mesopleura. Furrow along mesopleural suture nearly smooth. Propodeum strongly, more or less uniformly slanting behind base, without subbasal tooth. Propodeal spiracles very small.

Fore wing 2.5 times as long as wide. First and second radial abscissae without break, but arcuate there; 1st and 2nd abscissae combined 0.4 times as long as the straight 3rd abscissa. First medial abscissa straight in basal half, weakly arcuate in apical half. Discoidal cell 1.3 times as long as wide. Parallel vein arising at middle of distal vein of brachial cell. Distance between nervulus and basal vein subequal to nervulus length. Brachial cell weakly widened to apex. Hind wing 6 times as long as wide. First mediocubital abscissa 1.4 times as long as 2nd one. Recurrent vein absent.

Legs rather slender. Hind femur 4 times as long as wide. Hind tibia weakly widened to apex, its length nearly 9 times maximum apical width. Hind tarsus nearly as long as hind tibia. Hind basitarsus 0.6 times as long as 2nd–5th tarsal segment combined. Second segment of hind tarsus half as long as 1st one, 1.2 times as long as 5th (without pretarsus).

Metasoma strongly compressed; tergite I distinctly and non-uniformly widened to apex, its length nearly twice its apical width, slightly exceeding length of propodeum; its apical width 1.8 times its minimum width. Tergite II with short, deep, rather wide slanting lateral depressions at base. Ovipositor sheaths of medium length, 1.15 times as long as tergite I, 0.6 times as long as hind tibia and 0.2 times as long as fore wing.

Sculpture and pubescence. Head, mesoscutum, scutellum, and mesopleura smooth. Propodeum mostly smooth, with distinct and entire median longitudinal carina, without transverse sabbasal carina, weakly and narrowly striate in middle along carina; propodeal areas absent. Tergite I with dorsal carinae at base, densely and distinctly striate in apical half, weakly and irregularly rugulose in middle. Antennae with rather long dense semi-erect hairs. Face densely covered with long and short semi-erect hairs. Mesoscutum mostly glabrous, with very sparse long and erect hairs on vertical surface and 2 hairs in posterior 1/4 of horizontal surface.


Male unknown.


Diagnosis. The new species is most closely related to S. cabinica asiatica Papp from Korea and the Russian Far East (Papp, 1994; Belokobylovskij, 2002) and differs from it in the following characters: ovipositor short, face nearly as wide as long, prescutellar depression striate, hind tibia with shorter and sparser pubescence, and mesoscutal pit present.

Distribution. Russia (Primorskii Terr.).

Synaldis cespitator Belokobylovskij, sp. n. (Figs. 12–22)

Description. Female. Body length 1.5–2.3 mm, length of fore wing 1.8–2.3 mm. Width of head nearly twice its median length, 1.45–1.5 times maximum length, and 1.5–1.6 times width of mesoscutum. Head at level of temples narrower than at level of eyes, more or less uniformly and distinctly rounded narrowly behind eyes. Transverse eye diameter 1.2–1.4 times length of temples (1.5–1.8 times, when measured along straight line). Ocelli small, situated in equilateral triangle; POL 1.0–1.2 times Od, 0.3–0.4 times OOL. Width of face 1.4–1.6 times its height in middle (including antennal tubercles). 1.3–1.4 times maximum diameter of eye. Maximum diameter of eye 1.25–1.3 times minimum one. Groove between antennal tubercle and eye indistinct. Paraclypeal areas slightly enlarged, oval, not reaching eye margin. Width of clypeus 2.0–2.2 times its height. Mandible distinctly widened to apex, its median length 1.3–1.5
times maximum width. Upper tooth rather wide, nearly as long as middle one, roundly obtused, directed upwards. Middle tooth narrow, tapered, rather long. Distinct acute-angular emargination present between upper and middle teeth. Lower tooth short, widest, widely rounded, slightly shorter than upper tooth, not deflected.

Antennae 20–23-segmented, filiform, slightly thickened. Scape 0.7–0.8 times as long as 1st flagellar segment. First flagellar segment rather slender, its length 3.5–4.0 times apical width, 1.2–1.3 times length of 2nd segment. Length of 2nd flagellar segment 2.7–3.0 times maximum width. Middle flagellar segments 2.3–2.6 times as long as wide. Penultimate segment 2.2–2.3 times as long as wide, 0.55–0.60 times as long as 1st segment, and 0.9 times as long as ultimate segment; the latter obtused at apex.

Length of mesosoma 1.2–1.3 times its height. Dorsal surface of mesosoma distinctly convex. Width of mesoscutum subequal to its median length. Notauli on vertical surface of mesoscutum distinct, weakly converging toward apex, sparsely crenulate; on horizontal surface of mesoscutum, notauli absent. Mesoscutal pit deep, more or less long, oblong. Prescutellar depression smooth, with distinct median carina, 0.4–0.6 times as long as wide 0.5–0.7 times as long as the con-
vex scutellum. Metanotum without tubercle. Sterna long, slanting, distinctly crenulate, situated nearly in middle of mesopleura. Furrow along mesopleural surgery nearly smooth. Propodeum strongly and almost uniformly slanting backwards behind basal 1/5, with noticeable basal lobe. Propodeal spiracles small.

Fore wing 2.4–2.5 times as long as wide. Break between 1st and 2nd radial abscissae inconspicuous, basal abscissa of 1st radiomedial vein occasionally present, very rarely well developed; 1st and 2nd abscissa combined 0.50–0.55 times as long as the straight 3rd abscissa. First medial abscissa weakly or distinctly S-shaped. Discoidal cell 1.4–1.5 times as long as wide. Parallel vein arising slightly before middle of distal vein of brachial cell. Distance from nervulus to basal vein subequal to nervulus length. Brachial cell distinctly widened to apex. Hind wing 5.2–5.5 times as long as wide. First mediocubital abscissa 1.5–1.9 times as long as 2nd one. Recurrent vein absent.

Legs slender. Hind femur 4.5–5.0 times as long as wide. Hind tibia weakly widened to apex, its length 8.5–9.5 times maximum apical width. Hind nearly as long as hind tibia. Hind basitarsus 0.6 times as long as 2nd–5th tarsal segment combined. Second segment of hind tarsus 0.50–0.55 times as long as 1st one, 1.3–1.5 times as long as 5th (without pretarsus).

Metasoma weakly compressed. Tergite I distinctly and uniformly widened to apex; length of tergite 1–2.0 times apical width, 1.2–1.4 times length of propodeum; apical width of tergite 1.5–1.8 times its minimum width. Tergite II with short shallow rather wide lateral depressions at base. Ovipositor sheaths long, 2.5–2.8 times as long as tergite I, 1.1–1.2 times as long as hind tibia, and 0.30–0.37 times as long as fore wing.

Sculpture and pubescence. Head, mesoscutum, scutellum, and mesopleura smooth. Propodeum mostly smooth, with distinct and entire median longitudinal carina and short 1 or 2 transverse sabbasal carinae, distinctly narrowly striate in middle along carina; propodeal areas absent. Tergite I with dorsal carinae weakly diverging backwards along entire length, distinctly striate in apical 1/4–1/3, weakly or very weakly rugulose or smooth in basal 3/4–2/3. Antennae with more or less long dense semi-erect hairs. Face rather densely covered with long upcurved erect hairs. Mesoscutum mostly glabrous, with long and erect hairs dense on vertical surface and very sparse along traces of notaui on horizontal surface.


**Male** unknown.

**Material.** Holotype: ♂, Primorskii Terr., Shkoptsovskii Distr., Anisimovka, meadow, 11.VII.1984 (S. Belokobyshkij) (ZIN). Paratypes: 1 ♀, Primorskii Terr., Lazo Nature Reserve, 10 km SW Sokolchii, forest, glades, 22.VII.1993 (S. Belokobyshkij) (ZIN); 8 ♂, Kamchatka, Kozyrevsk, birch forest, floodland, 12, 14, 15, and 22.VII.1985 (S. Belokobyshkij) (ZIN, IZATNU, HNHM); 6 ♂, Kamchatka, 20 km N Kozyrevsk, glades, 21.VII.1985 (S. Belokobyshkij) (ZIN, IZATNU); 1 ♀, Kamchatka, 10 km S Kozyrevsk, forest, volcanic sand, 23 VII.1985 (S. Belokobyshkij) (ZIN); 1 ♀, Kamchatka, Milkovo, birch forest, 7.VII.1985 (S. Belokobyshkij) (ZIN).

**Diagnosis.** The new species is closely related to *S. vestigata* Papp and differs from it in the following characters: ovipositor sheaths long, mesoscutum weakly pubescent, metasomal tergite I sculptured only in apical 1/4, and mandibles more strongly widened at apex.

**Distribution.** Russia (Kamchatka, Primorskii Terr.).

**Synaldis cultrigaster** Fischer, 1970


**Distribution.** Austria, Russia (European part, Primorskii Terr.).

**Notes.** This species is very similar to *S. extremiorientalis* Belokobyshkij (2002) described from the Russian Far East and differs from it the following characters: mesoscutal pit present (a variable character), mesoscutum shorter and wider, head wider than long,
temples shorter. Possibly, an examination of an additional material will show variability of these characters and, thus, a question on synonymy of these names may arise.

**Synaldis distenta** Papp, 1994


**Distribution.** Russia (Primorski Terr.), Korea.

**Notes.** This species belongs to a group of the species possessing thickened and shortened antennal segments and widened hind femur. It is very similar to *S. reducta* (Tobias), and its the only most reliable diagnostic character is the shortened 4th antennal segment (distinctly shorter than 5th one).

**Synaldis esipenkoi** Belokobylskij, sp. n. (Figs. 23–33)

**Description. Female.** Body length 1.6 mm, length of fore wing 1.8 mm. Width of head 1.8 times its median length, 1.5 maximum length, 1.5 times width of mesoscutum. Width of head at level of temples equal to that at level of eyes. Head weakly convex behind eyes, then uniformly rounded narrowed. Transverse eye diameter equal to length of temples (when measured along straight line). Ocelli small, situated in nearly equilateral triangle; POL 1.2 times Od, 0.4 times OOL. Width of face 1.6 times its height in middle (including antennal tubercles), 1.6 times maximum diameter of eye. Maximum diameter of eye 1.3 times minimum one. Groove between antennal tubercle and eye absent. Paraclypeal areas slightly enlarged, oval, distinctly not reaching eye margin. Mandible distinctly widened to apex, its median length 1.1 times maximum width. Upper tooth rather wide, slightly longer than middle one, narrowly obtused, directed distinctly upwards. Middle tooth wide, tapered, rather short. Distinct, nearly rectangular emargination present between upper and middle teeth. Lower tooth short, very wide, rounded, much shorter than upper tooth.

Antennae 19-segmented, filiform, slightly thickened. Scape 0.9 times as long as 1st flagellar segment. First flagellar segment rather thick, its length 2.7 times apical width and 1.1 times length of 2nd segment. Length of 2nd flagellar segment 2.3 times maximum width. Middle flagellar segments 2.2 times as long as wide. Penultimate segment twice as long as wide, 0.7 times as long as 1st segment, 0.85 times as long as ultimate segment; the latter obtuse at apex.

Length of mesosoma 1.15 times its height. Dorsal surface of mesosoma convex. Width of mesoscutum 1.2 times its median length. Notauli on vertical surface of mesoscutum weakly converging toward apex, crenulate; horizontal surface of mesoscutum without notauli. Mesoscutal pit small, narrow, short, oblong. Prescutellar depression distinctly crenulate, with very weak median carina, half as long as wide, nearly half as long as the strongly convex scutellum. Metanotum without tubercle. Sternaul long, slanting, coarsely crenulate, situated in anterior 2/3 of mesopleura. Furrow along mesopleural suture smooth in upper half, very weakly crenulate in lower half. Propodeum strongly and uniformly slanting backwards behind basal 1/6, with distinct lobe in basal 1/6. Propodeal spiracles enlarged, distance from them to base of propodeum nearly twice diameter of spiracle.

Fore wing 2.6 times as long as wide. First and second radial abscissae without break, distinctly arcuate there; 1st and 2nd abscissae combined half as long as the straight 3rd abscissa. First medial abscissa nearly straight. Discoidal cell 1.4 times as long as wide. Parallel vein arising nearly from middle of distal vein of brachial cell. Distance between nervus and basal vein about 0.3 times nervus length. Brachial cell weakly widened to apex. Hind wing 6.2 times as long as wide. First mediocubital abscissa 1.8 times as long as 2nd one. Recurrent vein absent.

Legs rather robust. Hind femur 3.8 times as long as wide. Hind tibia widened to apex, its length 6.6 times maximum apical width. Hind tarsus nearly as long as hind tibia. Hind basitarsus half as long as 2nd–5th tarsal segment combined. Second segment of hind tarsus half as long as 1st one, 1.15 times as long as 5th (without pretarsus).

Metasoma distinctly compressed. Tergite I distinctly and almost uniformly widened to apex, length of tergite 1.5 times apical width and 1.1 times length
of propodeum; apical width of tergite nearly twice its minimum width. Tergite II with short distinct lateral depressions at base. Ovipositor sheaths short, 1.3 times as long as tergite I, 0.6 times as long as hind tibia, and 0.2 times as long as fore wing.

Sculpture and pubescence. Head, mesoscutum, scutellum, and mesopleura smooth. Propodeum with distinct entire longitudinal carina and rather long transverse carina in basal 1/6, more or less widely and distinctly striate along carina; propodeal areas absent. Tergite I distinctly striate or rugose over its most part, nearly smooth at base, with dorsal carinae, which at first weakly diverging and then slightly converging. Antennae with rather long, dense, semi-erect hairs. Face more or less densely covered with long, up-curved, erect hairs. Mesoscutum mostly glabrous, with short, rather sparse semi-erect hairs on vertical surface and along traces of notauali on horizontal surface.


**Male** unknown.

**Material.** Holotype: ♀, Russia, Primorskii Terr., Chernigovka District, Gorny Khutor, on *Ambrosia*, 20.VI.1982 (Esipenko) (ZIN).

**Diagnosis.** The new species is closely related to *S. vestigator* Papp and differs from it the following
characters: temples long, mandibles wide and bearing wide and widely rounded lower tooth, mesoscutum weakly pubescent with shorter hairs, propodeal spiracles enlarged, hind femur thickened, and metasomal tergite 1 wider.

**Distribution.** Russia (Primorskiy Terr.).

**Synaldis leshii** Belokobylskij, sp. n. (Figs. 34–44)

**Description.** Female. Body length 1.7–2.0 mm, length of fore wing 2.0–2.2 mm. Width of head 1.8–2.0 times its median length, 1.5–1.6 times maximum length, and 1.3–1.4 times width of mesoscutum. Head at level of temples narrower than at level of eyes, more or less uniformly and roundly narrowed behind eyes. Transverse eye diameter 1.4–1.6 times length of temples (1.5–1.8 times, when measured along straight line). Ocelli slightly enlarged, situated in nearly equilateral triangle; POL 1.2 times Od, 0.4 times OOL. Width of face 1.2 times its height in middle (including antennal tubercles), 1.2 times maximum diameter of eye. Maximum diameter of eye 1.2–1.3 times minimum one. Groove between antennal tubercle and eye absent. Paraclavell areas slightly enlarged, oval, distinctly not reaching eye margin. Width of clypeus 2.5 times its height. Mandible nearly parallel-sided, its median length 1.3–1.5 times maximum width. Upper tooth rather narrow, distinctly shorter than middle one, rounded, very weakly erect upwards. Middle tooth narrow, tapered, rather long. Distinct acute-angular
emargination present between upper and middle teeth. Lower tooth small, widest, widely rounded, nearly as long as upper tooth.

Antennae 16-segmented, rather slender, filiform, nearly as long as body length. Scape 0.6–0.7 times as long as 1st flagellar segment. First flagellar segment slender, its length 4.3–4.5 times apical width and 1.2–1.3 times length of 2nd segment. Length of 2nd flagellar segment 3.3–3.5 times maximum width. Middle flagellar segments 3.0–3.2 times as long as wide.Penultimate segment 2.7 times as wide as long, 0.7 times as long as 1st segment, and equal in length to ultimate segment; the latter rounded at apex.

Length of mesosoma 1.25–1.3 times its height. Dorsal surface of mesosoma distinctly convex. Width of mesoscutum 1.2–1.3 times its median length. Notauli on vertical surface of mesoscutum distinct, weakly converging toward apex, nearly smooth or sparsely crenulate; horizontal surface of mesoscutum without notauli. Mesoscutal pit rather long and deep. Prescutellar depression densely and rather distinctly crenulate, without obvious median carina, 0.4–0.5 times as long as wide, 0.6 times as long as the convex scutellum. Metanotum without tubercle. Sternalia rather long, slanting, distinctly crenulate, situated nearly in middle of mesopleura. Furrow along mesopleural suture nearly smooth. Propodeum strongly and almost uniformly slanting behind base, without subbasal tooth. Propodeal spiracles small.

Fore wing 2.4–2.5 times as long as wide. First and second radial abscissae without break, weakly arcuate there; 1st and 2nd abscissae combined 0.4–0.45 as long as the curved 3rd absissa. First medial absissa straight or weakly convex. Discoidal cell 1.2–1.3 times as long as wide. Parallel vein arising slightly before middle of distal vein of brachial cell. Distance between nervulus and basal vein 0.75–1.0 times nervulus length. Brachial cell strongly widened to apex. Hind wing 5.3–5.6 times as long as wide. First mediocubital absissa 1.5–1.6 times as long as 2nd one. Recurrent vein absent.

Legs slender. Length of hind femur 4.6–4.7 times its width. Hind tibia weakly widened to apex, its length 9.0–9.5 times maximum apical width. Hind tarsus 0.85–0.9 times as long as hind tibia. Hind basitarsus 0.6 times as long as 2nd–5th tarsal segment combined. Second segment of hind tarsus half as long as 1st one, 1.2–1.3 times as long as 5th one (without pretarsus).

Metasoma weakly compressed. Tergite I distinctly and uniformly widened to apex; length of tergite 1.4–1.6 times apical width and 1.2–1.3 times length of propodeum; apical width of tergite nearly twice its minimum width. Tergite II with short, rather wide, with shallow lateral depressions at base. Ovipositor sheaths of medium length, 1.35–1.5 times as long as tergite I, 0.6 times as long as hind tibia, and 0.2 times as long as fore wing.

Sculpture and pubescence. Head, mesoscutum, scutellum, and mesopleura smooth. Propodeum mostly smooth, with distinct and entire median longitudinal carina, without transverse sábbal carina, distinctly and narrowly or rather widely striate in middle along carina; propodeal areas absent. Tergite I with dorsal carinae diverging backwards nearly along entire length or only in basal 2/3, coarsely irregularly areolate rugose in apical half. Antennae with rather long, dense, semi-erect hairs. Face densely covered with long, curved or straight semi-erect hairs. Mesoscutum mostly glabrous, with long erect hairs on vertical surface and sparse or very sparse hairs along traces of notauli on horizontal surface.

Coloration. Body dark reddish brown, metasoma or only tergite I slightly paler. Mandibles yellow. Palps pale yellow. Antennae dark brown to black, 2 basal segments brownish yellow or yellow. Tegulae brown or reddish brown. Legs yellow, hind tibia slightly darkened at apex. Fore wing hyaline. Pterostigma brown.

Male unknown.


Diagnosis. The new species is closely related to S. vestigata Papp (1994) and differs in the following features: propodeum without subbasal transverse carina, metasomal tergite I shorter and distinctly widened, antennae slender, and mesoscutum scarcely pubescent. It differs from S. bokhaicus sp. n. (also possessing the sparsely pubescent mesoscutum) in the following characters: mandibular teeth of another shape, head wider, metasomal tergite I wide, dorsal side of hind tibia densely pubescent, and body nearly black. Among western Palaearctic species, S. leshii is similar to S. tothi Fischer (1993a) from Georgia, and shows the following differences: propodeum without transverse sábbal carina, face high, mandible nearly
parallel-sided and bearing small upper and lower teeth, antennal segments long and slender, mesoscutal pit wide, hind femur narrower, and nervulus distinctly postfurcal.

**Distribution.** Russia (Kamchatka, Primorskiy Terr.).

**Synaldis licho** Belokobylskij, sp. n. (Figs. 45–55)

**Description.** Female. Body length 1.4–2 mm, length of fore wing 1.6–1.9 mm. Width of head 1.8 times its median length, 1.5–1.6 times maximum length, 1.4–1.5 times width of mesocutum. Head at level of temples narrower than at level of eyes, uniformly and distinctly roundly narrowed behind eyes. Transverse eye diameter 1.7–1.8 times length of temples (and nearly twice, when measured along straight line). Ocelli slightly enlarged, situated in nearly equilateral triangle; POL subequal to OD, 0.3–0.4 times OOL. Width of face 1.2–1.3 times its height in middle (including antennal tubercles) and 1.2 times maximum diameter of eye. Maximum diameter of eye 1.2 times minimum one. Groove between antennal tubercle and eye absent. Paraclypeal areas slightly enlarged, oval, distinctly not reaching eye margin. Width of clypeus 2.2 times its height. Mandible weakly widened to apex, its median length 1.4–1.5 times maximum width. Upper tooth rather wide, subequal to middle one, rounded, more or less distinctly directed upwards. Middle tooth narrow, tapered, rather short. Distinct,
nearly rectangular emargination present between upper and middle teeth. Lower tooth rather small, shortest, widely rounded, as wide as upper tooth.

Antennae 16–21-segmented, rather slender, filiform, nearly as long as body. scape 0.7 times as long as 1st flagellar segment. First flagellar segment slightly thickened, its length 3.5–4.0 times apical width, 1.15–1.2 times length of 2nd segment. Length of 2nd flagellar segment 3.0–3.5 times maximum width. Middle flagellar segments 2.6–2.8 times as long as wide. Penultimate segment 2.8–3.5 times as long as wide, 0.7–0.75 as long as 1st segment, as long as apical one; the latter rounded at apex.

Length of mesosoma 1.25–1.3 times its height. Dorso lateral surface of mesosoma distinctly convex. Width of mesoscutum 1.1–1.2 times its median length. Notauli on vertical surface of mesoscutum distinct, weakly converging toward apex, nearly smooth; horizontal surface of mesoscutum without notauli. Mesoscutal pit small, short, inconspicuous or distinct. Prescutellar depression smooth, with distinct median carina, 0.45–0.55 times as long as wide and 0.6–0.7 times as long as the distinctly convex scutellum. Metanotum without tubercle. Sternauli rather short, slanting, distinctly crenulate, situated nearly in middle of mesopleura. Furrow along mesopleural suture entirely smooth. Propodeum strongly and almost uniformly slanting behind base, without subbasal tooth. Propodeal spiracles small.

Fore wing 2.3–2.4 times as long as wide. First and second radial abscissae without break, weakly arcuate there; 1st and 2nd abscissae combined 0.4–0.45 as long as the straight 3rd abscissa. First medial abscissa nearly straight. Discoidal cell 1.4–1.5 times as long as wide. Parallel vein arising slightly before middle of distal vein of brachial cell. Distance between nervulus and basal nervus 0.5–1.0 nervus length. Brachial cell distinctly widened to apex. Hind wing 5–6 times as long as wide. First mediodiscal abscissa 1.5–1.7 times as long as 2nd one. Recurrent vein absent.

Legs slender. Hind femur 4.3–4.5 times as long as wide. Hind tibia weakly widened to apex, its length 9.0–9.5 times maximum apical width. Hind tarsus nearly as long as hind tibia. Hind basitarsus 0.55–0.60 times as long as 2nd–5th tarsal segment combined. Second segment of hind tarsus half as long as 1st segment, 1.2–1.3 times as long as 5th one (without pretarsus).

Metasoma distinctly compressed. Tergite I distinctly and uniformly widened to apex; length of tergite 1.6–2.0 times apical width, 1.2 times length of propodeum; apical width of tergite 1.5–2.0 times its minimum width. Tergite II with short, rather wide, distinct lateral depressions at base. Ovipositor sheaths of medium length, 1.4–1.6 times as long as tergite I, 0.6–0.8 times as long as hind tibia, and 0.2 times as long as fore wing.

Sculpture and pubescence. Head, mesoscutum, scutellum, and mesopleura smooth. Propodeum mostly smooth, with distinct and entire median longitudinal carina, without transverse sabbasal carina, distinctly and striate wrinkled in middle along carina; propodeal areas absent. Tergite I coarsely and incorrectly alveolate rugose in apical half; its basal half with dorsal carinae at first weakly converging and then slightly diverging. Antennae with rather short, dense, semi-erect hairs. Face densely covered with long upcurved semi-erect hairs. Mesoscutum with long erect hairs in middle on vertical and horizontal surfaces, glabrous at sides.


Male unknown.


Diagnosis. The new species is very similar to S. lesii sp. n. from the Russian Far East, and differs from it in the following characters: mesoscutum pubescent in middle, prescutellar depression smooth, 1st flagellar segment thicker, and number of antennal segments greater. From S. armenica Fischer (Armenia), the new species differs in the narrow mandibles, smooth prescutellar depression, and also in the propodeum bearing the entire longitudinal carina and no subbasal transverse carina.

Distribution. Russia (Primorskii Terr.), Japan (Hokkaido and Honshu Islands).
Figs. 56–66. Synaldis maruyamae sp. n.: (56) head, front view; (57) head, dorsal view; (58, 59) mandible [(58) view on upper tooth; (59) view on lower tooth]; (60) six basal antennal segments; (61) propodeum; (62) metasomal tergite 1; (63) hind femur; (64) hind tibia; (65) fore wing; (66) hind wing.

Synaldis maruyamae Belokobylskij, sp. n.
(Figs. 56–66)

Description. Female. Body length 1.7 mm, length of fore wing 1.9 mm. Width of head nearly twice its median length, 1.4 times maximum length, and 1.5–1.6 times width of mesoscutum. Head slightly narrower at level of temples than at level of eyes, uniformly and distinctly roundly narrowed behind eyes. Transverse eye diameter 1.3 times length of temples (1.6 times, when measured along straight line). Ocelli small, situated in nearly equilateral triangle; POL 0.7 times Od, 0.2 times OOL. Width of face 1.2 times its height in middle (including antennal tubercles), 1.1 times maximum diameter of eye. Maximum diameter of eye 1.25 times minimum one. Groove between antennal tubercle and eye absent. Paraclypeal areas slightly enlarged, oval, not reaching eye margin. Width of clypeus 2.2 times its height. Mandible slightly widened to apex, its median length 1.8 times maximum width. Upper tooth rather wide, slightly shorter than middle one, roundly obtused, weakly directed upwards. Middle tooth rather long, narrow, tapered. Distinct narrow acute-angular emargination present between upper and middle teeth. Lower tooth short, rather narrow, roundly obtused at apex, much shorter than upper tooth.

Antennae filiform, slightly thickened, with more than 18 segments. Scape 0.8 times as long as 1st flagellar segment. First flagellar segment rather slender, its length 3.5 times apical width, 1.15 times length of 2nd
segment. Length of 2nd flagellar segment 2.7 times maximum width. Middle flagellar segments 2.5 times as long as wide.

Length of mesosoma 1.4 times its height. Dorsal surface of mesosoma convex. Width of mesoscutum subequal to its median length. Notauli on vertical surface of mesoscutum weakly converging toward apex, sparsely crenulate; horizontal surface of mesoscutum without notauli. Mesoscutal pit small, short, elongate. Prepectellar depression smooth, with fine median carina, half as long as wide and 0.45 times as long as the convex scutellum. Metanotum without tubercle. Sternauli long, slanting, distinctly crenulate, situated in anterior 2/3 of mesopleura. Furrow along mesopleural suture nearly smooth. Propodeum strongly and almost uniformly slanting backwards behind basal 1/3, with distinct lobe in basal 1/3. Propodeal spiracles small.

Fore wing 2.6 times as long as wide. First and second radial abscissae without break, arcuate there; 1st and 2nd abscissae combined 0.4 times as long as the straight 3rd abscissa. First mediad abscissa distinctly S-curved. Length of discoidal cell 1.4 times its width. Parallel vein arising nearly from middle of distal vein of brachial cell. Distance between nervulus and basal vein nearly half nervulus length. Brachial cell not widened to apex. Hind wing 6 times as long as wide. First mediocubital abscissa 1.2 times as long as 2nd one. Recurrent vein absent.

Legs more robust. Hind femur 3.4 times as long as wide. Hind tibia weakly widened to apex, its length 8.5 times maximum apical width. Hind tarsus nearly as long as hind tibia. Hind basitarsus 0.55 times as long as 2nd–5th tarsal segment combined. Second segment of hind tarsus half as long as 1st segment, 1.3 times as long as 5th one (without pretarsus).

Mesotarsus distinctly compressed. Tergite I distinctly and uniformly widened in basal half, nearly parallel-sided in apical half; length of tergite 1.7 times apical width and 1.2 times length of propodeum; apical width of tergite 2.5 times its minimum width. Tergite II with very short and shallow lateral depressions at base. Ovipositor sheaths long, 3.2 times as long as tergite I, 1.4 times as long as hind tibia, 0.4 times as long as fore wing.

Sculpture and pubescence. Head, mesoscutum, scutellum, and mesopleura smooth. Propodeum with high sharp process in mediobasal 1/3, bearing distinct longitudinal carina before it and rather coarse striae fan-like diverging in posterior part; smooth parts on propodeum narrow at sides and wide on anterior surface; propodeal areas absent. Tergite I with dorsal carinae distinctly converging backwards in basal half, distinctly rugose striae in apical 3/4. Antennae densely covered with long semi-erect hairs. Face rather densely covered with long upcurved erect hairs. Mesoscutum glabrous at sides, with long sparse erect hairs on vertical surface, along traces of notauli, and in mediobasal half on horizontal surface.


**Male unknown.**

**Material.** Holotype: ♀, "Japan: Sapporo, Mt. Mauryama, 5.IX.1999, S. Belokobylskij" (ZIN).

**Diagnosis.** The new species is most closely related to *S. cespitator* sp. n., and differs from it in the following characters: face narrower, mandible weakly widened to apex and its lower tooth weaker, mesosoma longer, hind femur thickened, metasomal tergite I of another shape, and metasoma pale.

**Distribution.** Japan (Hokkaido Island).

**Synaldis nitidulator** Belokobylskij, sp. n.
(Figs. 67–77)

**Description. Female.** Body length 1.6 mm, length of fore wing 1.5 mm. Width of head 1.6 times its median length, 1.35 times maximum length, and 1.4 times width of mesoscutum. Head slightly wider at level of temples than at level of eyes, convex behind eyes, then distinctly roundly narrowed. Transverse eye diameter 1.3 times length of temples (1.5 times, when measured along straight line). Ocelli situated in equilateral triangle; POL 1.2 times Od, 0.4 times OOL. Width of face 1.3 times its height in middle (including antennal tubercles), 1.3 times maximum diameter of eye. Maximum diameter of eye 1.2 times minimum one. Groove between antennal tubercle and eye absent. Paraclypeal areas medium-sized, oval, distinctly not reaching eye margin. Width of clypeus 2.5 times its height. Mandible widened to apex, its median length 1.7 times maximum width. Upper tooth wide, subequal to middle one, roundly obtusely, distinctly directed upwards.
Middle tooth narrow, tapered, rather short. Deep, nearly rectangular emargination present between upper and middle teeth. Lower tooth large, widest, widely rounded, slightly shorter than upper tooth.

Antennae 15-segmented, filiform, thickened, 0.8 times as long as body. Scape 0.75 times as long as 1st flagellar segment. First flagellar segment slightly thickened, its length 3 times apical width and 1.15 times length of 2nd segment. Length of 2nd flagellar segment 2.3 times maximum width. Middle flagellar segments thickened, nearly twice as long as wide. Penultimate segment twice as long as wide, 0.75 times as long as 1st segment, 1.1 times as long as ultimate segment; the latter obtuse at apex.

Length of mesosoma 1.3 times its height. Dorsal surface of mesosoma weakly convex. Notauli on vertical surface of mesoscutum distinct, converging toward apex, nearly smooth; horizontal surface of mesoscutum without notauli. Mesoscutal pit very small, weakly oval. Prescutellar depression smooth, with distinct median carina, 0.45 times as long as wide and 0.45 times as long as the convex scutellum. Metanotum without tubercle. Sternauli rather short, slanting, very weakly crenulate, situated nearly in middle of mesopleura. Furrow along mesopleural suture entirely smooth. Propodeum strongly slanting backwards behind basal 1/4, with distinct tooth in mediobasal 1/4. Propodeal spiracles small.

Fore wing 2.6 times as long as wide. Break between 1st and 2nd radial abscissae absent, arcuate there; 1st and 2nd abscissae combined 0.45 times as long as the straight 3rd abscissa. First medial abscissa straight.
Discoidal cell 1.45 times as long as wide. Parallel vein arising from middle of distal vein of brachial cell. Nervulus weakly postfurcal. Brachial cell distinctly widened to apex. Hind wing 6 times as long as wide. First mediocubital abscissa 1.6 times as long as 2nd one. Recurrent vein absent.

Legs rather slender. Hind femur 3.8 times as long as wide. Hind tibia weakly widened to apex, its length nearly 9 times maximum apical width. Hind tarsus 0.9 times as long as hind tibia. Hind basitarsus 0.55 times as long as 2nd–5th tarsal segment combined. Second segment of hind tarsus 0.55 times as long as 1st segment and 1.2 times as long as 5th one (without pretarsus).

Metasoma strongly compressed. Tergite I distinctly and uniformly widened to apex; length of tergite 1.5 times apical width, 1.2 times length of propodeum; apical width of tergite nearly twice its minimum width. Tergite II with short, wide, deep, slanting lateral depressions at base. Ovipositor sheaths of medium length, 1.7 times as long as tergite I, 0.8 times as long as hind tibia, and 0.25 times as long as fore wing.

Sculpture and pubescence. Head, mesoscutum, scutellum, and mesopleura smooth. Propodeum mostly smooth, with distinct entire median longitudinal carina and short transverse carina in basal 1/4, very weakly wrinkled in middle along carina; propodeal areas absent. Tergite I mostly smooth, very finely sculptured at base. Antennae with rather long, dense, semi-erect hairs. Face densely covered with long semi-erect hairs. Mesoscutum with rather dense long erect hairs on vertical-surface and sparse hairs on horizontal surface along probable line of notauli.


Male unknown.


Distribution. Russia (Primorski Terr.).

**Synaldis orotski** Belokobyl'skij, sp. n. (Figs. 78–88)

Description. Female. Body length 1.5–1.6 mm, length of fore wing 1.6–1.8 mm. Width of head 1.6–1.8 times its median length, 1.4 times maximum length, and 1.6–1.65 times width of mesoscutum. Head at level of temples nearly as wide as at level of eyes, weakly convex behind eyes, then uniformly roundly narrowed. Transverse eye diameter 1.1–1.15 times length of temples (subequal to it, when measured along straight line). Ocelli medium-sized, situated in equilateral triangle; POL subequal to OD, 0.3 times OOL. Width of face 1.3–1.4 times its height in middle (including antennal tubercles), 1.3 times maximum diameter of eye. Maximum diameter of eye 1.2–1.3 times minimum one. Groove between antennal tubercle and eye weak, occasionally indistinct. Paraclypeal areas enlarged, oval, slightly not reaching eye margin. Width of clypeus nearly twice its height. Mandible weakly widened to apex, its median length 1.6–1.7 times maximum width. Upper tooth rather wide, shorter than middle one, roundly obtused, directed upwards. Middle tooth rather long, narrow, tapered. Deep and acute-angular emargination present between upper and middle teeth. Lower tooth shortest, not wider than upper one, rounded, distinctly directed downwards.

Antennae 18–19-segmented, filiform, slightly thickened. Scape 0.7 times as long as 1st flagellar segment. First flagellar segment rather slender, its length 3.5–3.7 times apical width and 1.20–1.25 times length of 2nd segment. Length of 2nd flagellar segment 2.8–3.0 times maximum width. Middle flagellar segments 2.3–2.5 times as long as wide. Penultimate segment 2.0–2.3 times as long as wide, 0.65–0.7 times as long as 1st segment, and 0.9 times as long as the apically obtused ultimate segment.

Length of mesosoma 1.2–1.3 times its height. Dorsal surface of mesosoma convex. Width of mesoscutum 1.0–1.1 times its median length. Notauli on vertical surface of mesoscutum distinct, weakly converging toward apex, sparsely crenulate; horizontal surface of mesoscutum without notauli. Mesoscutal pit small, short, oblong. Precostellar depression more or less crenulate, with obsolete median carina, 0.6 times as long as wide and 0.7–0.8 times as long as the convex scutellum. Metanotum without tubercle. Sternauli long, slanting, sparsely crenulate, situated nearly in middle of mesopleura, not fused in anterior part with

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subalar depression. Furrow along mesopleural suture nearly smooth. Propodeum strongly and almost uniformly slanting backwards behind basal 1/3, with noticeable basal lobe. Propodeal spiracles small.

Fore wing 2.6–2.8 times as long as wide. First and second radial abscissae without break, but arcuate there; 1st and 2nd abscissae combined 0.4 times as long as the straight 3rd abscissa. First medial abscissa nearly straight. Discoidal cell 1.4–1.5 times as long as wide. Parallel vein arising at, or slightly behind middle of distal vein of brachial cell. Distance from nervulus to basal vein nearly as long as nervulus. Brachial cell widened to apex. Hind wing 5.8–6.2 times as long as wide. First mediocubital abscissa 1.4 times as long as 2nd one. Recurrent vein absent.

Legs slender. Hind femur 4.0–4.2 times as long as wide. Hind tibia weakly widened to apex, its length 8–9 times maximum apical width. Hind tarsus nearly as long as hind tibia. Hind basitarsus 0.6 times as long as 2nd–5th tarsal segment combined. Second segment of hind tarsus 0.55 times as long as 1st segment, 1.4 times as long as 5th one (without pretarsus).

Metasoma distinctly compressed. Tergite I distinctly and uniformly widened to apex; length of tergite 1.8–2.0 times apical width, 1.2–1.3 times length of propodeum; apical width of tergite 1.8–2.0 times its minimum width. Second tergite with short, rather wide, shallow lateral depressions at base. Ovipositor sheaths long, 3.0–3.5 times as long as tergite I, 1.3–1.4 times as long as hind tibia, 0.40–0.45 times as long as fore wing.
Sculpture and pubescence. Head, mesoscutum, scutellum, and mesopleura smooth. Propodeum mostly smooth, with weak and nearly entire median longitudinal carina and short high transverse sabbasal carina, distinctly and rather widely striate in middle along carina; propodeal areas absent. Dorsal carinae on tergite I extending nearly along entire tergal length, weakly diverging backwards, and weakly converging at apex; tergite coarsely striate, with fine rugosity between striae. Antennae densely covered with rather long semi-erect hairs. Face rather densely covered with long upcurved erect hairs. Mesoscutum mostly glabrous, with long erect hairs dense on vertical surface and very sparse along traces of notauli on horizontal surface.


Male unknown.


Diagnosis. The new species is most closely related to S. cespitator sp. n. and differs from it in the following characters; paracytpeal areas enlarged, lower tooth of mandible small and distinctly directed downwards, mesoscutal pit short and shallow, prescutellar depression long and crenulate, ovipositor sheaths longer, and body paler.

Distribution. Russia (Jewish Autonomous Province, Primorskii Terr.).

Synaldis reducta (Tobias, 1962)


Material. Russia. Primorskii Terr.: 2 ♀, Spassk-Dal’nii, forest, glades, forest edges, shrubs, 4.IX.2001 and 19.VIII.1991 (S. Belokobylskij); 2 ♀, 25 km SE Spassk-Dal’nii, Sini Range, forest, forest edges, 6.IX.2001 (S. Belokobylskij); 1 ♀, 20 km SE Spassk-Dal’nii, forest, forest edges, 17.VII.1995 (S. Belokobylskij); 1 ♀, 30 km NW Spassk-Dal’nii, deciduous forest, 25.VIII.1981 (S. Belokobylskij); 1 ♀, Vladivostok, Sanatornaya, Botanical garden, mixed forest, 10.IX.1982 (S. Belokobylskij); 1 ♀, Khanka Distr., Novokachalinsk, mixed forest on coast of Lake Khanka, 23.VII.1995 (S. Belokobylskij); 1 ♀, 30 km SE Ussuriisk, Kamenshuka, forest, 8 and 9.IX.1987 (S. Belokobylskij); 1 ♀, 30 km SE Ussuriisk, forest, forest edges, 12–17.VII.2001 (S. Belokobylskij); 1 ♀, Shkotovskii Distr., Anisimovka, forest, forest edges, 29.VIII.2001 (S. Belokobylskij); 1 ♀, 1 ♀, Shkotovskii Distr., Anisimovka, path to Krinichnaya Mt., forest, 28.VIII.2001 (S. Belokobylskij). Jewish Autonomous Province: Amurzet, meadow, 16.VI.1985 (S. Belokobylskij). Irkutsk Prov.: 1 ♀, Bratsk, mixed forest, 21.VII.1987 (K. Gorodkov).

Distribution. Russia (European part, Ural, Eastern Siberia, Jewish Autonomous Province, Primorskii Terr.), Korea Peninsular, Austria.

Notes. The species is characterized by a significant variability in the size of tubercles at sides of occiput. Papp (1996) used this character as the basis for diagnostics of the species. These tubercles are inconspicuous, occasionally almost invisible in the holotype and some individuals from various parts of the distribution range of the species (European part of Russia, Ural, Primorskii Terr.), but rather distinct in specimens from Primorskii Territory (as well as from Korea Peninsula: Papp, 1996). This character varies even between specimens of the same sample. The thickness of the hind femur in the species also varies: its length usually 3.0–3.3 times maximum width, but 3.5–3.6 times, in some specimens. It should also be noted that the number of the antennal segments in S. reducta varied between 14 and to 18 in the material examined. This character also plays a certain role in diagnostics of some species of the genus Synaldis.

Synaldis seralae Belokobylskij, sp. n. (Figs. 89–99)

Description. Female. Body length 2 mm, length of fore wing 2.1 mm. Width of head 1.8 times its median length, 1.6 times maximum length, and 1.45 times width of mesoscutum. Head distinctly narrower at level of temples than at level of eyes, distinctly and uniformly roundly narrowed behind eyes. Transverse eye diameter 2.3 times length of temples (2.8 times, when measured along straight line). Ocelli medium-sized, situated in equilateral triangle; POL 0.7 times Od, 0.3 times OOL. Width of face 1.3 times its height.

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in middle (including antennal tubercles), 1.25 times maximum diameter of eye. Maximum diameter of eye 1.15 times minimum one. Groove between antennal tubercle and eye absent. Paraclypeal areas small, oval, separated far from eye margin. Width of clypeus 2.5 times its height. Mandible distinctly widened to apex, its median length 1.4 times maximum width. Upper tooth rather wide, narrowed to apex, rounded, directed upwards, shorter than middle one. Middle tooth narrow, tapered, rather short. Nearly rectangular emargination present between upper and middle teeth. Lower tooth rather short, widest, uniformly rounded, not directed downwards.

Antennae filiform, narrow, 19-segmented. Scape 0.7 times as long as 1st flagellar segment. First flagellar segment slender, its length nearly 5 times apical width and 1.2 times length of 2nd segment. Length of 2nd flagellar segment 3.3 times maximum width. Middle flagellar segments nearly 3 times as long as wide. Penultimate segment 2.2 times as long as wide, 0.55 times as long as 1st flagellar segment, as long as the apically obtuse ultimate segment.

Length of mesosoma 1.1 times its height. Dorsal surface of mesosoma convex. Width of mesoscutum 1.15 times its median length. Notauli on vertical surface of mesoscutum distinct, weakly converging to-
ward apex, sparsely crenulate; horizontal surface of mesoscutum without notauli. Mesoscutal pit small, short, narrow, oblong. Prescutellar depression smooth, with distinct median carina, 0.4 times as long as wide and half as long as the convex scutellum. Metanotum without tubercle. Sternalia short, nearly vertical, crenulate, situated nearly in middle of mesopleura, not fused with subalar depression in anterior part. Furrow along mesopleural suture nearly smooth. Propodeum strongly and almost uniformly slanting behind base, without basal lobe. Propodeal spiracles small.

Fore wing 2.5 times its width. First and second radial abscissae without break, weakly arcuate there; 1st and 2nd abscissae combined half as long as the straight 3rd abscissa. First medial abscissa weakly arcuate. Length of discoidal cell 1.3 times its width. Parallel vein arising distinctly before middle of distal vein of brachial cell. Distance between nervulus and basal vein 0.8 times nervulus length. Brachial cell strongly widened to apex. Length of hind wing 5.8 times its width. First mediocubital abscissa 1.7 times as long as 2nd one. Recurrent vein absent.

Legs slender. Hind femur 4.7 times as long as wide. Hind tibia weakly widened to apex, its length 8.5 times maximum apical width. Hind tarsus 0.9 times as long as hind tibia. Hind basitarsus 0.55 times as long as 2nd–5th tarsal segment combined. Second segment of hind tarsus half as long as 1st segment, 1.15 times as long as 5th one (without pretarsus).

Metasoma weakly compressed. Tergite I distinctly and almost uniformly widened to apex; length of tergite 1.5 times apical width, 1.3 times length of propodeum; apical width of tergite twice its minimum width, Tergite II with short, deep, rather wide lateral depressions at base. Ovipositor sheaths rather long, twice as long as tergite I, slightly shorter than hind tibia, 0.3 times as long as fore wing.

Sculpture and pubescence. Head, mesoscutum, scutellum, and mesopleura smooth. Propodeum mostly smooth, with distinct and entire median longitudinal carina, without transverse sabbbasal carina, with narrow striate stripe in middle along carina; propodeal areas absent. Tergite I coarsely and irregularly rugulose in apical half, nearly smooth at base, with dorsal carinae weakly diverging backwards in basal 2/3. Antennae densely covered with rather short semi-erect hairs. Face densely covered with rather short upcurved erect hairs. Mesoscutum with wide median stripe of dense, rather long semi-erect hairs; glabrous at sides.


Male unknown.


Diagnosis. The new species is closely related to S. cespitator sp. n. and differs from it in the absence of transverse carina at the base of the propodeum, short temples, densely pubescent median part of the mesoscutum, short mesosoma, and pale coloration of the body. S. seralae differs from the Far Eastern S. ca-binica asiatica Papp in the presence of a distinct mesoscutal pit, greater apical width of the metasomal tergite I, dense pubescence of the median part of the mesoscutum, and the short temples and mesosoma. It differs from S. leshii sp. n. in having the long ovipositor, short mesosoma and temples, densely pubescent median part of the mesoscutum, and widened mandibles. Its differences from the Caucasian S. armenica Fischer consist are the absence of transverse carina at the base of the propodeum, transverse shape of the head, long ovipositor, short mesosoma and temples, and densely pubescent median part of the mesoscutum.

Distribution. Russia (Primorskiy Terr.).

Synaldis ussuriana Belokobyyskij, sp. n. (Figs. 100–110)

Description. Female. Body length 1.4 mm, length of fore wing 1.5 mm. Width of head 1.6 times its median length, 1.4 times maximum length, and 1.45 times width of mesoscutum. Head as wide at level of temples as at level of eyes, weakly widened behind eyes, then distinctly and uniformly roundly narrowed. Transverse eye diameter 1.7 times length of temples (1.6 times, when measured along straight line). Ocelli rather small, situated in triangle with base 1.15 times as long as lateral sides; POL 0.8 times OOL, 0.3 times OOL. Width of face 1.3 times its height in middle (including antennal tubercles), 1.25 times maximum diameter of eye. Eyes sparsely and shortly pubescent; maximum diameter of eye 1.1 times minimum one. Groove between antennal tubercle and eye ill-defined. Paracylypeal areas small, oval, distinctly not reaching eye margin. Width of clypeus 2.5 times its height.
Mandible distinctly widened to apex, its median length 1.2 times maximum width. Upper tooth wide, narrowed to apex, rounded, distinctly directed upwards, slightly longer than middle tooth. Middle tooth narrow, tapered, rather short. Nearly rectangular emargination present between upper and middle teeth. Lower tooth short, widest, uniformly rounded, not directed downwards.

Antennae nearly filiform, thickened (thickest in middle), 15-segmented. Scape 0.9 times as long as first flagellar segment. First flagellar segment weakly thickened, its length nearly 3 times apical width, 1.1 times length of 2nd segment. Length of 2nd flagellar segment 2.2 times maximum width. Middle flagellar segments twice as long as wide. Penultimate segment 1.7 times as long as wide, 0.7 times as long as 1st flagellar segment, and 0.8 times as long as ultimate segment; the latter obtuse at apex.

Length of mesosoma 1.3 times its height. Dorsal surface of mesosoma convex. Width of mesoscutum 1.3 times its median length. Notauli on vertical surface of mesoscutum distinct, weakly converging toward apex, crenulate; horizontal surface of mesoscutum without notauli. Mesoscutal pit small, short, wide, oval. Prescutellar depression smooth, with distinct median carina, 0.35 times as long as wide and 0.4 times as long as the convex scutellum. Metanotum without tubercle. Sternauli short, slanting, crenulate, situated in anterior half of mesopleura, not fused with subalar depression in anterior part. Furrow along mesopleural suture nearly smooth. Propodeum strongly and almost uniformly slanting backwards behind basal 1/5, with distinct basal lobe. Propodeal spiracles small.

Fore wing 2.7 times its width. First and second radial abscissae without break, weakly arcuate there; 1st
and 2nd abscissae combined half as long as the straight 3rd abscissa. First medial abscissa very weakly arcuate. Length of discoidal cell 1.5 times its width. Parallel vein arising distinctly before middle of distal vein of brachial cell. Distance between nervulus and basal vein 1.5 nervulus length. Brachial cell distinctly widened to apex. Length of hind wing 6.5 times its width. First mediocubital abscissa 1.6 times as long as 2nd one. Second vein absent.

Legs more or less robust. Hind femur 3.6 times as long as wide. Hind tibia distinctly widened to apex, its length 7 times maximum apical width. Hind tarsus 0.9 times as long as hind tibia. Hind basitarsus 0.6 times as long as 2nd–5th tarsal segment combined. Second segment of hind tarsus half as long as 1st segment, 1.3 times as long as 5th one (without pretarsus).

Metasoma distinctly compressed. Tergite 1 distinctly and almost uniformly widened to apex; length of tergite 1.8 times apical width, 1.2 times length of propodeum; apical width of tergite 1.8 times its minimum width. Tergite II with rather long deep wide lateral depressions at base. Ovipositor sheaths short, 1.3 times as long as tergite I, 0.6 times as long as hind tibia, and 0.2 times as long as fore wing.

Sculpture and pubescence. Head, mesoscutum, scutellum, and mesopleura smooth. Propodeum mostly smooth, with distinct and entire median longitudinal carina and distinct transverse sobsabral carina, with narrow striation along carina; propodeal areas absent. Tergite I finely striate in apical third, smooth at base, with high, nearly parallel dorsal carinae. Antennae densely covered with rather long semi-erect hairs. Face with rather sparse, more or less short, upcurved, erect hairs. Mesoscutum with rather long semi-erect hairs in anterior part, densely covered with such hairs along traces of notauli, widely glabrous at sides and narrowly glabrous in middle of median lobe.


**Male** unknown.

**Material.** Holotype: ♂, Russia, Primorski Terr., 20 km SE Ussuriisk, at light, 18–21.VII.1996 (S. Belokobylskij) (ZIN).

**Diagnosis.** The new species is very similar to *S. vestigata* Papp and differs from it in a smaller number of the shorter flagellar segments, thickened hind femur, and sparser pubescence of the hind tibiae. It also differs from the Mongolian *S. kaszabiana* Papp in the following characters: 1st flagellar segment long, propodeum with transverse sobsabral carina, mandibles narrower, prescutellar depression long and smooth, hairs on hind tibia longer, and 3rd radial abscissa shorter.

**Synaldis vestigata** Papp, 1994

**Papp, 1994 : 152, 1996 : 151.**


Notes. It is of interest that some specimens of S. vestigata Papp possess narrower antennal segments. In this form, the length of 2nd segment is 2.8-3.3 times its width (2.4-2.6 times, in the basic form), and the length of the middle segments is 2.3-2.5 times their width (1.8-2.0 times, in the basic form). However, this character gives no basis to consider the form a separate taxon. The sculpture of the propodeum (occasionally rather coarse) in many specimens of this species can occupy a rather wide area along the median longitudinal carina.

Distribution. Russia (Kamchatka, Kuril Islands, Primorski Terr.), Korea Peninsula, Japan (Hokkaido, Honshu, and Kyushu Islands).

A Key to Palaearctic Species of the Genus Synaldis, Possessing a Mesoscutal Pit and Entirely or Mostly Smooth Propodeum

1. Propodeum entirely smooth, without median longitudinal carina.—Length of mesosoma 1.5 times its height. Propodeal spiracles enlarged. Body length 1.5 mm. Israel ...................... S. argamani Fischer.
—Propodeum with at least median longitudinal carina, frequently sculptured around it, occasionally with transverse short carina in basal part .................. 2.

2. Notauli on vertical surface of mesoscutum absent. Rugae of prescutellar depression radially diverging ............................................. 3.
—Notauli on vertical surface of mesoscutum distinctly depressed, frequently more or less sculptured .... 5.

3. Length of mesosoma 1.5 times its height; mesosoma dorsally rather flat. Body length 1.5 mm. Israel ....
.................................................................................. S. israelica Fischer.
—Length of mesosoma 1.3 times its height; mesosoma dorsally strongly convex ...................... 4.

4. Head 1.5 times as wide as long. Metasomal tergite I strongly narrowed before spiracles, nearly parallel-sided behind them. Length of 1st flagellar segment twice its width, middle segments about 1.5 times as long as wide. Body length 1.8 mm. Jordan ......................... S. jordanica Fischer.
—Head 1.8 times as wide as long. Metasomal tergite I uniformly and nearly linearly widened to apex. Length of 1st flagellar segment 3 times its width, middle segments about twice as long as wide. Body length 1.6 mm. Israel ................................. S. glabripleura Fischer.

5. Flagellar segments short and distinctly thickened. Length of 1st flagellar segment 1.5-2.3 (rarely 2.5) times maximum width. Scape longer than 1st flagellar segment, rarely as long as it.—Mandibles strongly widened to apex, usually with 3 tapered teeth (except in S. fraudulenta, S. kaszabiana and S. lacesciva). Hind femur thickened, usually 3.0-3.5 (rarely 3.7) times as long as wide (except in S. fraudulenta) ........................................ 6.

—Flagellar segments long, slender or occasionally weakly thickened. Length of 1st flagellar segment 3.0-4.5 times maximum width. Scape shorter than 1st flagellar segment .................................. 11.

6. Second flagellar segment 0.75-0.80 times as long as 3rd segment.—Antennae 16-segmented. Body length 1.8 mm. Russia (Primorski Terr.), Korea Peninsula ............................... S. distenta Papp.
—Second flagellar segment as long as, or slightly longer than 3rd segment ............................. 7.

7. Third (lower) tooth of mandible widely rounded at apex.—Propodeal spiracles not enlarged. Antennae distinctly shorter than body, 13-17-segmented ........................................ 8.
—Third (lower) tooth of mandible tapered at apex. Propodeal spiracles distinctly enlarged ............ 10.

8. Width of face nearly twice its height in middle. Temples distinctly longer than transverse eye diameter. Hind femur not thickened, 4.4 times as long as wide.—Antennae 17-segmented. Tunis ................................................................. S. fraudulenta Papp.
—Width of face 1.5-1.6 times its height in middle. Length of temples equal to, or slightly exceeding transverse eye diameter. Hind femur thickened, 3.0-3.5 times as long as wide .................. 9.


10. Occiput usually with more or less distinct tubercles at sides. Third radial absissa 1.5 times as long as 1st and 2nd absissae combined. Length of meso-
soma 1.35–1.4 times its height. Prescutellar depression smooth, only with weak median carina. Ovipositor sheaths about 0.3 times as long as metasoma. Body length 1.7–1.8 mm. Russia (European part, Ural, southern part of eastern Siberia, southern Far East), Korea, Austria .............................. S. reducta (Tobias).

—Occiput without tubercles at sides. Third radial abscissa twice as long as 1st and 2nd abscissae combined. Length of mesosoma 1.5 times its height. Prescutellar depression with 5 carinae. Ovipositor sheaths half as long as metasoma. Body length 1.6 mm.—Italy, China (Fujian) .............................. S. nitidula (Masi).

11 (5). Ovipositor long, its sheaths 1.1–1.4 times as long as hind tibia, rarely slightly shorter (S. seralae sp. n.), 0.3–0.45 times as long as fore wing.—Propodeum frequently with short transverse subbasal carina .............................. 12.

—Ovipositor short, its sheaths distinctly shorter than hind tibia, 0.2–0.25 times as long as fore wing .............................. 15.

12. Face narrower, its width 1.2 times its height in middle (including antennal tubercles) (Figs. 56). Length of mesosoma 1.4 times its height. Hind femur thickened, 3.4 times as long as wide (Figs. 63). Metasomal tergite I widened in basal half, nearly parallel-sided in apical half (Figs. 62). Body length 1.7 mm. Japan (Hokkaido) .............................. S. maruyamae sp. n.

—Face wider, its width 1.3–1.6 times its height in middle (including antennal tubercles) (Figs. 12, 78, 89). Length of mesosoma 1.1–1.3 times its height. Hind femur narrow, 4–5 times as long as wide (Figs. 20, 86, 96). Metasomal tergite I uniformly widened along entire length (Figs. 18, 84, 94) .............................. 13.

13. Propodeum without transverse subbasal carina in middle (Figs. 95). Temples short, transverse eye diameter 2.3 times length of temple (Figs. 90). Mesosoma very short, 1.1 times as long as high. Body pale reddish brown. Body length 2 mm. Russia (Primorski Terr.) .............................. S. seralae sp. n.

—Propodeum with transverse subbasal carina in middle (Figs. 17, 83). Temples longer, transverse eye diameter 1.1–1.4 times length of temple (Figs. 13, 79). Mesosoma longer, 1.2–1.3 times as long as high. Body reddish brown or dark reddish brown .............................. 14.

14. Paraclypeal areas weakly enlarged, distant far from eye margin (Figs. 12). Lower tooth of mandible larger and directed slightly downwards (Figs. 14, 15). Mesoscutal pit rather long and deep. Prescutellar depression rather narrow and smooth. Body length 1.5–2.3 mm. Russia (Kamchatka, Primorski Terr.) .............................. S. cespitator sp. n.

—Paraclypeal areas distinctly enlarged, slightly not reaching eye margin (Fig. 78). Lower tooth of mandible smaller and distinctly directed downwards (Figs. 80, 81). Mesoscutal pit small and short. Prescutellar depression wide and more or less crenulate. Body length 1.5–1.6 mm. Russia (Jewish Autonomous Province, Primorski Terr.) .............................. S. orotshi sp. n.


—Length of metasomal tergite I no more than 2.0–2.2 times apical width. Metasoma of female usually weakly compressed, only slightly longer than head and mesosoma combined .............................. 17.

16. Paraclypeal areas less strongly enlarged, distant distinctly from eye margin. Mesoscutum wider, its width 1.10–1.15 times its median length. Mesopleural suture frequently distinctly crenulate in lower half. Body length 1.9–2.6 mm. Austria, Russia (European part, Primorski Terr.) .............................. S. cultrigaster Fischer

—Paraclypeal areas distinctly enlarged, nearly adjoining eye margin. Mesoscutum narrower, its width 0.90–0.95 times its median length. Mesopleural suture frequently nearly smooth or very weakly crenulate in lower half.—Mesoscutal pit frequently absent. Body length 1.7–2.4 mm. Russia (Primorski Terr., Kuril Islands) .............................. S. cultrata Belokobylskij

17. Propodeum without transverse subbasal carina in middle (Figs. 6, 39, 50). Mesoscutum usually weakly and sparsely pubescent on most part (except in S. icho sp. n.) .............................. 18.

—Propodeum with transverse subbasal carina in middle (Figs. 28, 72, 105). Mesoscutum usually distinctly and densely pubescent over most part (except in S. esipenkoi sp. n.) .............................. 20.
18. Median part of mesoscutum widely pubescent. Prescutellar depression smooth. Body length 1.4–2.0 mm. Russia (Primorski T err.), Japan (Hokkaido, Honshu) .................. S. licho sp. n.
—Median part of mesoscutum glabrous, with hairs only along traces of notaui. Prescutellar depression crenulate .............................................. 19.

19. Upper tooth of mandible narrow, lower tooth smaller (Figs. 3, 4). Length of metasomal tergite I nearly twice its apical width (Figs. 7). Hairs on dorsal side of hind tibia sparse (Figs. 8). Body pale reddish brown. Body length 1.8 mm. Russia (Primorski T err.) .................. S. bokhai ca sp. n.
—Upper tooth of mandible wide, lower tooth larger (Figs. 36, 37). Length of metasomal tergite I 1.4–1.6 times apical width (Figs. 40). Hairs on dorsal side of hind tibia dense (Figs. 41). Body dark reddish brown. Body length 1.7–2.0 mm. Russia (Kamchatka, Primorski T err.) ........ S. leshii sp. n.

20 (17). Transverse sabbasal carina of propodeum long, slightly not reaching spiracles. Body length 1.5 mm. Georgia ...................... S. tothi Fischer
—Transverse sabbasal carina of propodeum short, far not reaching spiracles ......................................................... 21.

21. Metasomal tergite I wide, its length 1.5 times apical width (Figs. 29, 73).—Upper tooth of mandible distinctly directed upwards (Figs. 24, 68) .............. 22.
—Metasomal tergite I narrow, its length 1.8–2.2 times apical width (Figs. 106) ......................................................... 23.

22. Metasomal tergite I mostly smooth (Fig. 73). Transverse eye diameter 1.3 times length of temple (Figs. 70). Mandible less strongly widened, its median length 1.7 times maximum width. Lower tooth of mandible large, slightly shorter than upper one (Figs. 68, 69). Prescutellar depression smooth, with distinct median carina. Sternaui situated in middle of mesopleura. Body length 1.6 mm. Russia (Primorski T err.) ............... S. nitidulator sp. n.
—Metasomal tergite I mostly striate (Fig. 29). Transverse eye diameter equal to length of temple (Fig. 23). Mandible more strongly widened, its median length 1.1 times maximum width. Lower tooth of mandible small, distinctly shorter than upper one (Figs. 24, 25). Prescutellar depression crenulate, with very fine median carina. Sternaui situated in anterior 2/3 of mesopleura. Body length 1.6 mm. Russia (Primorski T err.) .............. S. esipenki sp. n.

23. Hind femur thickened, 3.6 times as long as wide (Fig. 107). Second flagellar segment thick, 2.2 times as long as wide (Fig. 104). Antennae 15-segmented. Body length 1.4 mm. Russia (Primorski T err.) .................. S. ussuriana sp. n.
—Hind femur not thickened, 4–5 times as long as wide. Second flagellar segment slender, 2.4–4.0 times as long as wide. Antennae 17–19-segmented ................................................................................. 24.

24. Temples long, transverse eye diameter subequal to length of temples. Upper tooth of mandible longer, more strongly directed upwards. Length of mandible equal to its maximum width. Length of mesosoma 1.25 times its height. Mesoscutal pit inconspicuous. Body length 1.2–1.6 mm. Armenia ................................................................. S. armenica Fischer.
—Temples short, transverse eye diameter 1.7–2.0 times length of temples. Upper tooth of mandible shorter, weakly directed upwards. Length of mandible 1.7 times maximum width. Length of mesosoma 1.35–1.5 times its height. Mesoscutal pit distinct. Body length 1.7–2.1 mm. Russia (Kamchatka, Kuril Islands, Primorski T err.), Korea Peninsula, Japan ...................................................... S. vestigata Papp.

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REFERENCES


