

The genus *Platypalpus* Macquart from Russia and neighbouring lands. I. Five new species from the Kuril Islands (Diptera, Empidoidea: Hybotidae)

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Platypalpus kasparyani sp. n., *P. kurilensis* sp. n., *P. leleji* sp. n., *P. malokurilensis* sp. n., and *P. sasaphilus* sp. n. are described from the Kuril Islands.

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The genus *Platypalpus* is very poorly studied in the eastern part of the Palaearctic Region. This paper is the first report on the genus from the Kuril Islands, Russia. The types of the new species are deposited in the Zoological Institute, Russian Academy of Sciences (St.Petersburg).

Platypalpus kasparyani sp. n.

(Figs 1-6)

Holotype. ♂, Shikotan Is., environs of Malokuril'sk, 20.VIII.1973 (Kasparyan).

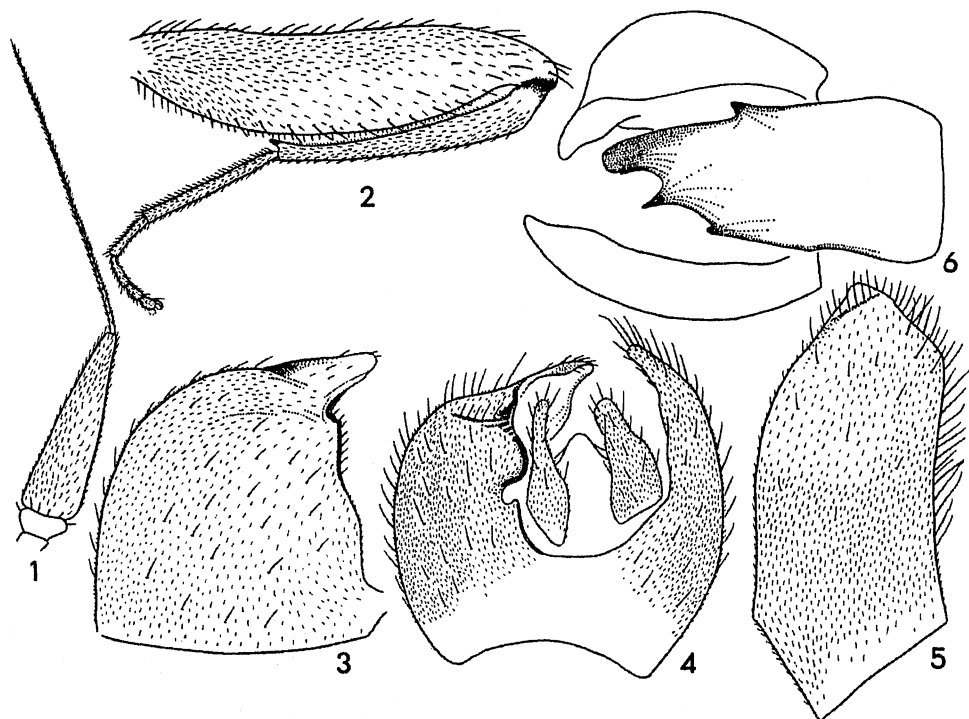
Diagnosis. A rather large, reddish yellow species with a pair of long vertical bristles. Arista thin, white pubescent. Mesonotum with brownish black pattern consisting of two spots behind humeri and a broad median stripe; acrostichal bristles 6-7-serial. Legs yellow; middle femora greatly thickened, bearing a row of short, black posteroventral bristles; middle tibiae with a yellowish, very short, flattened process at apex.

Description. Male. Head black in ground colour. Occiput subshining, faintly greyish pollinose. Frons polished, in front 1.5 times as broad as 2nd antennal segment, widening toward ocellar triangle. Face very narrow, half as wide as frons above antennae; with sparse, greyish pubescence, subshining; clypeus polished. Anterior ocellars very short, black. A pair of long (1.5 times as long as ocellars), black, proclinate vertical bristles. Occiput in upper part with numerous short, blackish, proclinate bristles, nearer to eye margins with a pair of somewhat longer bris-

ties (outer verticals?); in lower part with numerous yellowish, long setulae. Antennae brown. 3rd antennal segment elongate-triangular, 3 times as long as wide, covered with rather long and dense pubescence. Arista brownish yellow, with relatively dense, white pubescence, 1.7 times as long as 3rd antennal segment. Palpi small, rounded at apex, yellow, covered with yellow, short hairs and bearing 2 long, brown bristles near apex. Proboscis rather long, brownish yellow.

Thorax reddish yellow in ground colour. Mesonotum polished, with brownish black spots behind humeri and broad, median, brownish black stripe ending before prescutellar depression; scutellum at base and metanotum brownish. Sides of thorax, scutellum and metanotum covered with very thin, light grey pubescence; sternopleura polished. Humeri distinct, bearing a short, hair-like humeral bristle and several minute hairs. Two notopleurals (posterior one longer), 1 postalar, numerous short setulae near notopleural bristles and along upper margin of notopleural depression. Scutellum with 2 long, crossing apical and 2 short lateral bristles. Acrostichals 6-7-serial, numerous, straight, minute. Dorsocentrals multiserial, numerous, as long as acrostichals (except for 2 pairs of prescutellars), straight, separated from acrostichals by bare area in anterior third of mesonotum only. Thoracic bristles brownish.

Legs yellow; coxae and trochanters of middle and hind legs reddish yellow, 3rd-5th



Figs 1-6. *Platypalpus kasparyani* sp. n., holotype: 1, antenna; 2, middle leg; 3, right periandrial lamella; 4, perianthrium with cerci; 5, left periandrial lamella; 6, hypandrium and periandrial lamellae (setation not shown).

segments of all tarsi darkened. Fore femora slender, whitish pubescent ventrally, with a row of short, thin, light anteroventral and a row of similar posteroventral bristles. Middle femora thickened, twice as stout as fore femora, with a double row of black spinules becoming longer, thinner and lighter toward base of femur; posteroventral bristles blackish, short. Fore tibiae somewhat spindle-like, covered with short bristles. Middle tibiae thickened toward base, 0.6 times as long as middle femora, with a row of black, short spinules ventrally and a yellowish, flattened process at apex. The latter very short, shorter than tibia width near apex. Tarsi of all legs simple. Hind legs long and slender.

Wings hyaline. Veins brownish yellow, becoming lighter toward base of wing. Costal bristle brownish, thin, rather short. R_{4+5} and M_{1+2} divergent near cross-veins and parallel near wing apex. A_1 long, extending almost to lower margin of wing. CuA_2 recurrent, somewhat S-shaped. $r-m$ and $m-cu$ contiguous, the latter 3.4 times as long as the former. br as long as but half as wide as bm . Squamae yellow, with long light cilia. Halteres yellow.

Abdomen brownish, shining, covered with short light bristles becoming longer on 7th and 8th segments. Hypopygium black-brown, small, rounded, polished. Cerci black-brown.

Length: body 3.4 mm; wing 4.2 mm.

Female. Unknown.

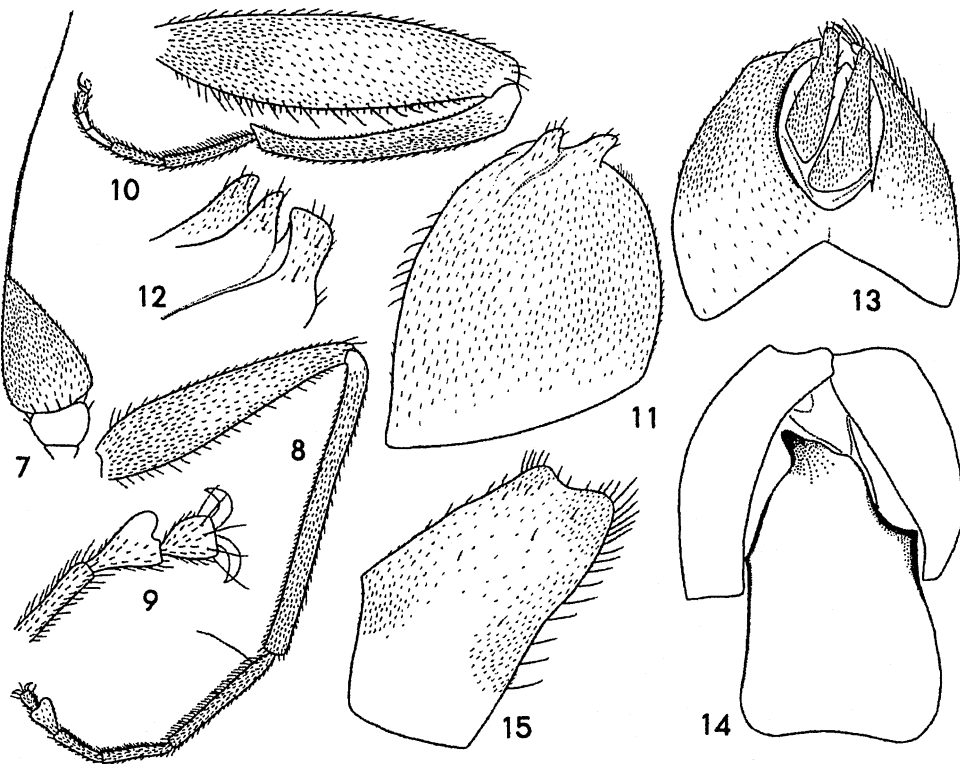
Discussion. The new species belongs to the *luteus* species group, although it has slender fore tarsi. *P. kasparyani* can be easily distinguished from all other *Platypalpus* species by the characters given above in the diagnosis. The new species runs within the key given by Chvala (1989) to *P. engadinicus* Mik and *P. kovalevi* Chvala. The Mediterranean *P. teneriffensis* Beck. has biserial acrostichal bristles (Grootaert & Chvala, 1992).

Distribution. Kuril Islands (Shikotan).

Etymology. The species is named after Dr. D.R. Kasparyan (St. Petersburg) who collected it.

***Platypalpus kurilensis* sp. n.** (Figs 7-15)

Holotype. ♂, Shikotan Is., Malo-Kuril'skoe, 18.VIII.1971 (leg. Nartshuk).



Figs 7-15. *P. kurilensis* sp. n., paratype: 7, antenna; 8, fore leg; 9, apical segments of fore tarsi; 10, middle leg; 11, right periandrial lamella; 12, tip of right periandrial lamella; 13, periandrium with cerci; 14, left periandrial lamella; 15, hypandrium and periandrial lamellae (setation not shown).

Paratypes: 2 ♂, Kunashir Is., Tret'yakovo, 8.VIII. 1971; 3 ♂, 2 ♀, Shikotan Is., Cape Kray Sveta, caught on *Sasa*, 20.VIII.1971 (all leg. Nartshuk); 1 ♀, Shikotan Is., environs of Malokuril'sk, 20.VIII. 1973 (leg. Kasparyan).

Diagnosis. A rather large yellow species with 2 pairs of brown-black vertical bristles. Head largely yellow; occiput with a brownish spot. Mesonotum polished yellow, with a blackish median stripe; acrostichals and dorsocentrals minute, multiserial, separated by bare area. Middle femora greatly thickened, bearing a row of brown posteroventral bristles; middle tibiae with a rather long, pointed apical spur.

Description. Male. Head yellow in ground colour. Occiput with a large, brownish, rounded spot in middle, subshining, thinly light-grey pollinose. Ocellar tubercle brownish. Frons shining, in front as broad as 2nd antennal segment, widening toward ocellar triangle. Face silvery pubescent, somewhat broader than frons above antennae, widening in lower part; clypeus shining.

Anterior ocellars short and strong. Two pairs of vertical bristles: inner convergent, outer divergent. Occiput covered with numerous light setulae becoming longer in lower part. Head with brown-black bristles. Antennae yellow; 3rd segment somewhat darkened in apical half; arista brownish. 3rd antennal segment short, twice as long as wide, round. Arista thin, with short pubescence, 1.9 times as long as 3rd antennal segment. Palpi rather small, elongate-oval, yellow, bearing a few brownish setulae (longest one situated near apex of palpus). Proboscis rather long, yellow.

Thorax yellow in ground colour. Mesonotum with a black-brown percurrent median stripe (as broad as frons near posterior ocelli); scutellum yellow; metanotum with a brownish black spot. Thorax mostly covered with very thin, light grey pollen; mesonotum (including an area occupied by the stripe) and sternopleura polished. Humeri well developed, bearing a long bristle and 4-5 minute light hairs along anterior margin. 2 noto-

pleural bristles of equal length; 1 postalar; numerous short hairs near notopleural bristles. Scutellum with 2 crossing long apical and 2 short lateral bristles. Acrostichals 7-9-serial, very short, numerous. Dorsocentrals multiserial, numerous, nearly as long as acrostichals, narrowly separated from the latter; a pair of prescutellars (nearest to scutellum) as long as notopleurals; bristles of the preceding pair short and hair-like. Long thoracic bristles brownish black.

Legs yellow. Coxae with sparse, rather long, hair-like, brownish bristles. Fore femora slender, with a row of short, brownish anteroventral and a row of similar posteroventral bristles. Middle femora greatly thickened, 1.7 times as stout as fore femora, with a ventral double row of black, short spinules and a row of brown posteroventral bristles; the latter half as long as width of middle femur in the middle. Fore tibiae simple, covered with short bristles and bearing a longer and stronger dorsal bristle near apex. Middle tibiae somewhat arched, thickened toward base, 0.83 times as long as middle femora, with a row of black, short spinules ventrally and a spur at apex. The latter somewhat curved, pointed, with 2 black and short bristles near apex, approximately as long as tibia width near apex. 3rd and 4th segments of fore tarsi flattened; 1st segment with a very long, erected bristle near base ventrally. Hind legs long and slender.

Wings hyaline. Veins brownish yellow becoming lighter toward base of wing. Costal bristle long, blackish. R_{4+5} and M_{1+2} divergent near cross-veins and convergent near wing apex. A_1 long, extending almost to lower margin of wing. CuA_2 recurrent, S-shaped. $r-m$ and $m-cu$ contiguous. br broader than bm . Squamae yellow, with long yellow cilia. Halteres light yellow.

Abdomen black, shining, covered with short, sparse hairs; 7th and 8th segments bearing longer and denser hairs. Hypopygium brownish, shining. Cerci yellowish.

Length: body 2.6-3.0 (holotype 2.8) mm; wing 3.9-4.4 (holotype 3.6) mm.

Female. Similar in all respects to male. Abdomen conical; cerci long and narrow, brownish yellow.

Length: body 2.8-3.1 mm; wing 3.9-4.4 mm.

Discussion. The new species belongs to the *luteus* species group. It can be compared with *P. pallescens* Kovalev and *P. stroblii* Mik only. The former (described from NW

Caucasus) has light yellow occiput, somewhat shorter 3rd antennal segment, uniformly yellow mesonotum and more numerous acrostichal bristles (Kovalev, 1979). The latter (known from Europe) differs from *P. kurilensis* in the completely black both head and 3rd antennal segment and acrostichal bristles not separated from dorsocentral ones (Chvala, 1989).

Distribution. Kuril Islands (Kunashir, Shikotan).

***Platypalpus leleji* sp. n.**

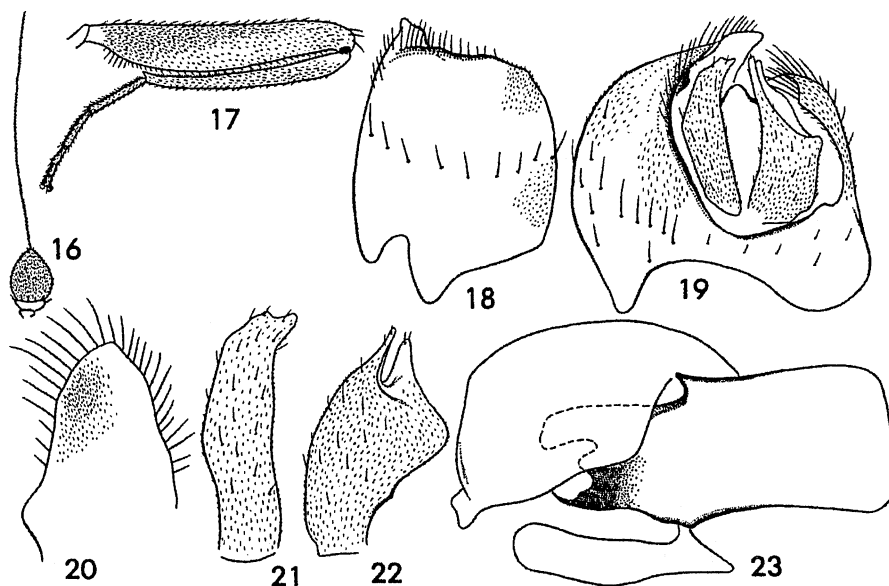
(Figs 16-23)

Holotype. ♂, Iturup Is., 7 km W of Reydovo, 29.VII.1997 (leg. A. Lelej).

Diagnosis. Yellow species with yellow antennae, very small 3rd antennal segment and 2 pairs of yellowish vertical bristles. Mesonotum uniformly yellow, mostly shining; acrostichals 4-serial. Middle femora thickened, without posteroventral bristles. Middle tibiae with a very short, flattened spur.

Description. Male. Head black in ground colour. Occiput and vertex (including ocellar tubercle) light-grey pollinose. Frons light-grey pubescent, narrow, in front as wide as 2nd antennal segment, slightly widening towards ocellar triangle. Face very narrow, half as wide as 2nd antennal segment, slightly widening in lower part, silvery-grey pubescent, clypeus polished. Head with yellowish bristles. Anterior ocellars long; posterior ocellars very short, hair-like. Two pairs of vertical bristles: inner convergent, outer divergent. Occiput covered with numerous light setulae becoming longer in lower part. Antennae yellow; arista black. 3rd antennal segment small, oval, 1.2 times as long as wide. Arista with short pubescence, 4 times as long as 3rd antennal segment. Palpi small, elongate-oval, yellow, with silvery white pubescence and several yellow setulae. Proboscis short, largely yellow, brownish at apex.

Thorax reddish yellow in ground colour; sternopleura with a narrow black-brown patch along posterior suture. Humeri, notopleural depression and metanotum entirely, mesonotum in anterior part, postalar calli along outer side, scutellum along margin and thoracic sides thinly whitish-grey pollinose. Mesonotum mostly shining; sternopleura with a very narrow, long, shining spot in middle. Humeri well developed, with a short, thin bristle and several minute hairs. Mesonotum with a rather short and thin no-



Figs 16-23. *P. leleji* sp. n., holotype: 16, antenna; 17, middle leg; 18, right periandrial lamella; 19, perianthium with cerci; 20, right cercus, lateral view; 21, left cercus, lateral view; 22, hypandrium; 23, perianthium and perianthial lamellae (setation not shown).

topleural bristle surrounded by 5 somewhat shorter setulae, 1 postalar and numerous setulae along lateral margins; the latter as long as acrostichals and dorsocentrals and forming almost a regular row. Scutellum with 2 long apical and 2 very short and thin lateral bristles. Acrostichals irregularly 4-serial (especially in anterior part of mesonotum), almost lacking on prescutellar depression, straight, rather long, widely separated from dorsocentral bristles. The latter irregularly 1-2-serial, as long as acrostichals (except for a pair of prescutellars), straight, numerous. Thoracic bristles yellowish.

Legs yellow; trochanters with a small brown spot; 5th segments of all tarsi brownish yellow (except for their base). Fore coxae silvery-white pubescent in front, with light and long setulae. Fore femora slender, whitish pubescent ventrally, with a row of short, thin, light anteroventral and a row of similar posteroventral bristles. Middle femora thickened, 1.9 times as stout as fore femora, with a double row of black, short spinules ending in several yellowish, longer bristles; spinules in posterior row somewhat longer than these in anterior row; no posteroventral bristles. Fore tibiae somewhat swollen nearer to base, covered with short bristles. Middle tibiae with a row of black, short spinules ventrally, thickened toward

base; 0.7 times as long as middle femora, with a short, yellow, flattened process at apex. Tarsi of all legs simple. Hind legs long and slender.

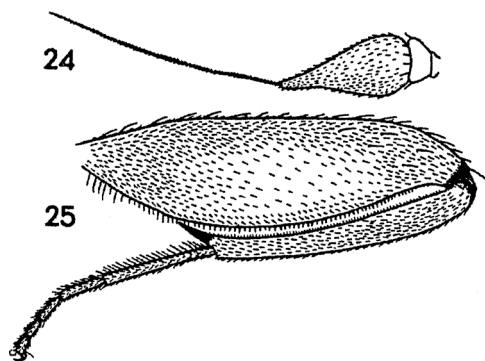
Wings hyaline. Veins brownish yellow. Costal bristle yellowish, thin. R_{4+5} and M_{1+2} straight, parallel. A_1 short. CuA_2 recurrent, straight. $r-m$ and $m-cu$ contiguous, the latter twice as long as the former. br as long as but narrower than bm . Squamae light yellow, with long light cilia. Halteres yellow.

Abdomen brownish yellow (1st and 2nd segments yellow), shining, covered with short light bristles becoming longer on sides and 7th and 8th segments. Hypopygium small, black, shining.

Length: body 2.2 mm; wing 2.9 mm.

Female unknown.

Discussion. The new species belongs to the *longicornis* species group. It is most closely related to *P. albomicans* (Bezzi), which is known from the Italian Alps (Chvala, 1989) only. However, *P. albomicans* has black antennae, 3rd antennal segment longer, mesonotum thinly silvery-grey pollinose and a pointed spur on middle tibiae. Two other "yellow" *Platypalpus* species possessing 2 pairs of vertical bristles (*P. dilatovittatus* (Strobl) and *P. aurantiacus* (Collin)) differ from the new species in the biserial acrostichal bristles and some other characters.



Figs 24, 25. *P. malokurilensis* sp. n., holotype: 24, antenna; 25, middle leg.

Distribution. Kuril Islands (Iturup).

Etymology. The species is named after Dr A.S. Lelej (Vladivostok) who collected it.

***Platypalpus malokurilensis* sp. n.**
(Figs 24, 25)

Holotype. ♀, Shikotan Is., Malokuril'sk, 21.VIII. 1973 (leg. Kerzhner).

Diagnosis. A medium-sized species with partly yellow thorax; a pair of vertical bristles. Mesonotum black, brownish-grey pollinose, rather subshining; acrostichals biserial, dorsocentrals uniserial. Legs yellow; middle femora thickened, with a row of posteroventral bristles; spur on middle tibiae long, pointed and brownish at apex.

Description. Female. Head black in ground colour. Occiput, vertex and frons densely light-grey pollinose. Frons in front 1.5 times as broad as 2nd antennal segment, nearly parallel-sided, very slightly widening toward ocellar triangle. Face silvery-grey pubescent, nearly half as wide as 2nd antennal segment in upper part and somewhat widening below; clypeus polished. Head with yellowish bristles. Anterior ocellars long, posterior ones minute. A pair of long, convergent, widely separated vertical bristles. Occiput with numerous setulae becoming longer in lower part. 1st and 2nd antennal segments yellow; 3rd segment light brown; arista black. 3rd antennal segment triangular, twice as long as wide. Arista with short pubescence, 2.5 times as long as 3rd antennal segment. Palpi elongate-oval, yellow, covered with dense, silvery-white hairs and a few somewhat longer, light setulae. Proboscis brown, 0.66 times as long as height of head.

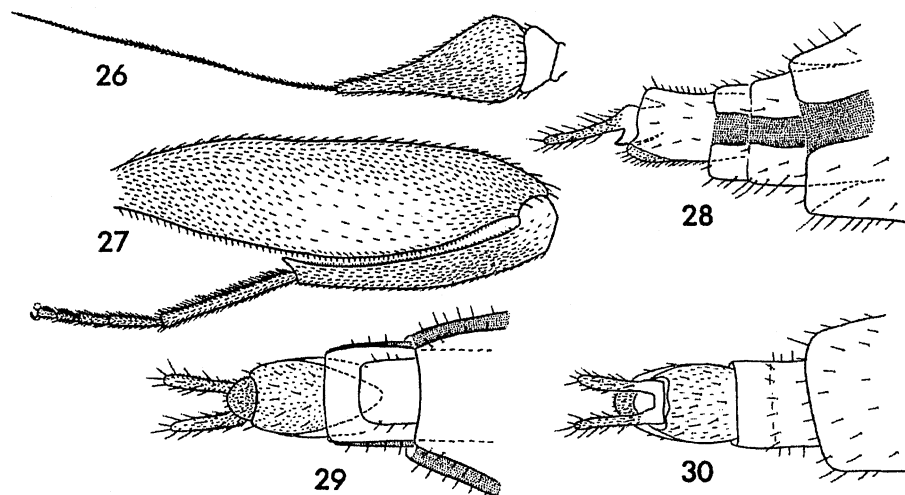
Humeri, notopleural depression, postalar calli and thoracic sides brownish yellow, thinly light-grey pubescent; sternopleura with a large, yellow, polished spot. Mesonotum black, thinly brownish-grey (with golden tint) pollinose. Humeri well developed. Humeral bristle short and thin; posterior notopleural bristle long and strong; anterior one (situated somewhat below) nearly half as long; 1 postalar; several rather long hairs behind humeri and near notopleural bristles. Scutellum with 2 long apical and 2 short lateral bristles. Acrostichals 2-serial, numerous (about 9 in a row), long, straight, widely separated. Dorsocentrals 1-serial, numerous (about 9 in a row), as long as acrostichals (except for a pair of prescutellars), straight, widely separated from acrostichals. Thoracic bristles yellowish.

Legs largely yellow; trochanters of all legs and middle and hind tibiae with a small brownish spot at apex; 5th segment of all tarsi brown. Fore coxae in front silvery-white pubescent and bearing numerous yellowish setulae, shining on sides. Fore and middle femora thickened. Fore femora whitish pubescent ventrally, with a row of short, thin, light posteroventral bristles and a row of similar anteroventral bristles. Middle femora with a double row of black spinules ventrally and a row of yellowish, rather short, posteroventral bristles, 1.5 times as stout as fore femora. All femora with a circle of short, blackish bristles at apex. Fore tibiae covered with short hairs, bearing a few short brownish-yellow bristles dorsally. Middle tibiae thickened, 0.77 times as long as middle femora, with a row of black, short spinules ventrally and a long, pointed spur at apex. The latter somewhat longer than width of tibia near apex, brownish in apical half. Tarsi of all legs simple, covered with short hairs. Hind legs long and slender.

Wings hyaline. Veins yellow. Costal bristle yellowish, long. R_{4+5} and M_{1+2} straight, parallel. A_1 rather short. CuA_2 straight, at right angle to CuA_1 . $m-cu$ and $r-m$ contiguous, the latter 1.5 times as long as the former. br as long as but narrower than bm . Squamae yellow, with long light cilia. Halteres light yellow.

Abdomen light brown, with yellowish tint, shining; 1st and 6th segments with a small, greyish pollinose spot on sides; apical segments (including cerci) densely light-grey pollinose. Cerci mostly brownish, yellowish at apex.

Length: body 2.2 mm; wing 3.2 mm.



Figs 26-30. *P. sasaphilus* sp. n., holotype: 26, antenna; 27, middle leg; 28-30, terminal segments of abdomen, lateral, dorsal, and ventral view.

Male unknown.

Discussion. This species resembles *P. luteolus* (Collin) differing from it in many characters. So, *P. luteolus* has completely pale yellow antennae, uniformly yellow thorax and very stout fore femora.

Distribution. Kuril Islands (Shikotan).

***Platypalpus sasaphilus* sp. n.**

(Figs 26-30)

Holotype. ♀, Kunashir Is., Mendelevo, caught on Sasa, 10.VIII.1971 (leg. Nartshuk).

Diagnosis. A rather large brownish species; antennae brownish yellow; palpi yellow, strip-like; a pair of long, brown vertical bristles. Mesonotum brownish, broadly reddish brown along median line; acrostichal and dorsocentral bristles very short, evenly distributed over mesonotum. Legs yellow; middle femora greatly thickened; middle tibiae with a very short and flattened spur.

Description. Female. Head black in ground colour. Occiput and vertex light-grey pollinose. Frons brownish, subshining, thinly light-grey pubescent, in front as broad as 2nd antennal segment. Face brownish yellow, subshining, narrow, 0.4 times as broad as 2nd antennal segment; clypeus largely yellow, brown along margins, polished. Anterior ocellars brown, long and strong; posterior ones short, hair-like. A pair of long, brown, widely separated vertical bristles. Occiput with numerous setulae becoming longer in lower part. Antennae brownish yellow,

low, 3rd segment darker; arista black. 3rd antennal segment elongate-triangular, twice as long as wide, covered with long pubescence. Arista with short pubescence, 2.5 times as long as 3rd antennal segment. Palpi long and broad, strip-like, rounded at apex, yellow, covered with short, light pubescence and bearing a few yellowish bristles (longest one situated on lower margin of palpus). Proboscis long, brownish yellow.

Thorax brown in ground colour. Mesonotum broadly reddish brown along median line, polished. Postalar calli yellowish. Margins of mesonotum, postalar calli, scutellum and metanotum silvery-grey pubescent; humeri polished. Sternopleura largely shining. Humeri well developed, rather small. Humeral bristle very short and thin, hair-like; posterior notopleural bristle long and strong; anterior one (situated somewhat below) shorter; 1 postalar. Scutellum with 2 long apical and 2 short lateral bristles. Mesonotum uniformly covered with short, nearly equal in length, hair-like bristles; acrostichals not separated from dorsocentrals; a pair of long prescutellars. Long thoracic bristles brownish.

Legs largely yellow; trochanters of all legs with a small brownish spot at apex; knees brownish; last segments of all tarsi somewhat darkened. Fore coxae in front silvery-white pubescent, shining on sides. Middle and hind coxae and trochanters of all legs bearing brown thin bristles. Fore femora slender, whitish pubescent ventrally. Middle

femora very thickened, 2.2 times as stout as fore femora; with a double row of black spine-like bristles ventrally, bristles of posterior row considerably longer than these of anterior row (especially in basal part of femur); no posteroventral bristles. All femora with a circlet of short, brownish bristles at apex. Fore tibiae simple. Middle tibiae thickened toward base, somewhat curved, 0.67 times as long as middle femora, with a row of black, short spinules ventrally and a short, flattened, yellow process at apex. Tarsi of all legs simple, covered with short hairs. Hind legs long and slender.

Wings hyaline. Veins brownish yellow. Costal bristle brownish, long. R_{4+5} and M_{1+2} straight, parallel. A_1 long, extending almost to lower margin of wing. CuA_2 recurrent, somewhat S-shaped. $m-cu$ and $r-m$ almost contiguous, the latter half as long as the former. br as long as but narrower than bm . Squamae yellow, with long light cilia. Halteres light yellow.

Abdomen brownish yellow, lighter in basal half, largely polished; sides and 7th and 8th segments light-grey pollinose; covered with sparse, short, light bristles.

Length: body 3.1 mm; wing 3.5 mm.

Male unknown.

Discussion. The new species is most closely related to *P. nonstriatus* Strobl differing

from it in the longer 3rd antennal segment, yellow palpi, mesonotal pattern and some other characters.

Distribution. Kuril Islands (Kunashir).

Acknowledgements

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