

## Revision of Palaearctic species of the genus *Porricondyla* Rondani, 1840 s.str. (Diptera, Cecidomyiidae)

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Palaearctic species of gall midges of the genus *Porricondyla* are revised. Descriptions of *Spungisomyia* gen. n. (type species — *Porricondyla media*), *Porricondyla amurensis* sp. n. from Amur Prov., *P. caucasicola* sp. n. from N. Caucasus, *P. lobifera*, and *P. ussuriorum* spp. n. from Russian Far East are given. A key to Palaearctic species is presented.

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**Key words.** Diptera, Cecidomyiidae, *Porricondyla*, *Spungisomyia*, new genus, new species, revision, Palaearctic.

### Introduction

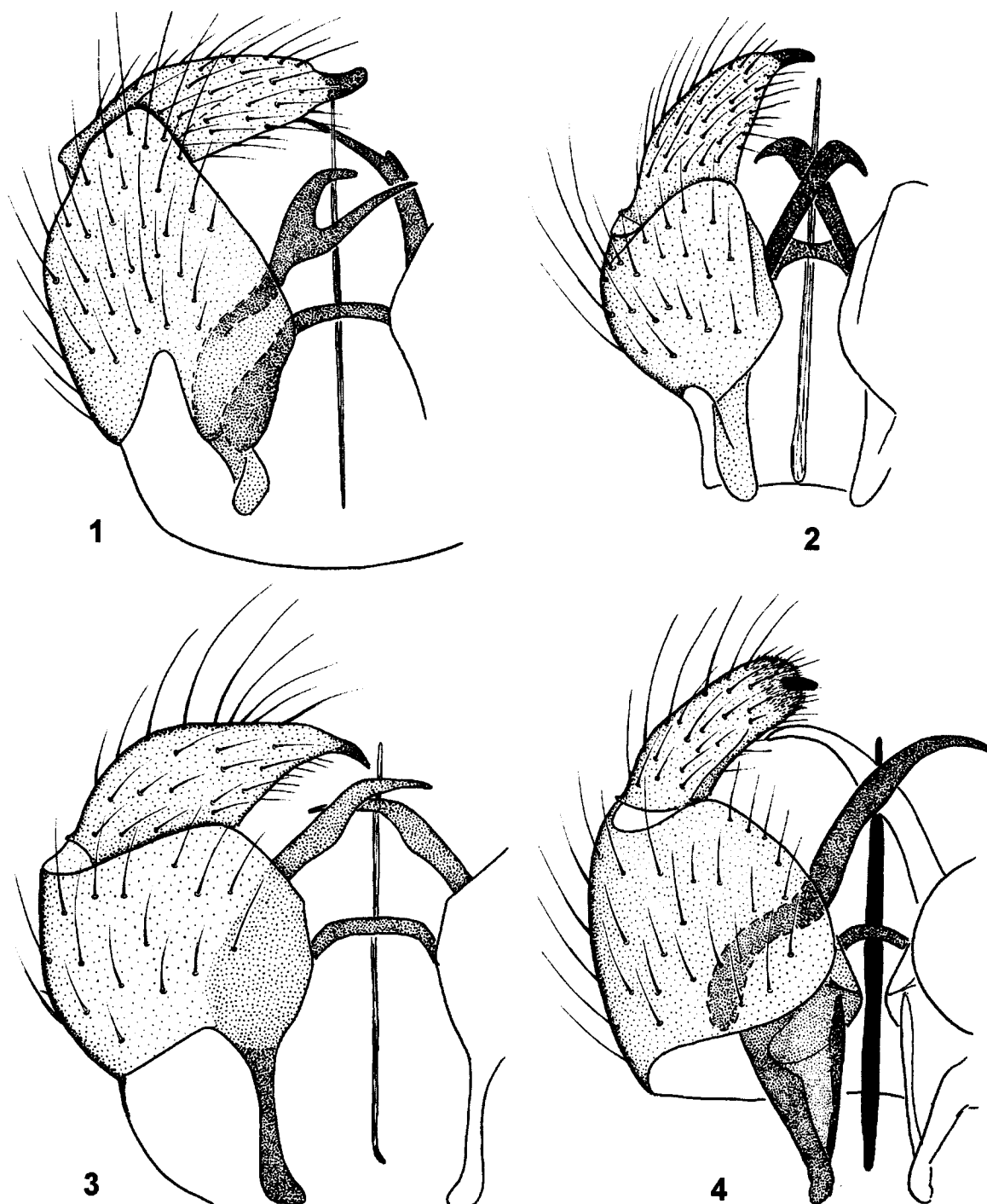
Fifty five valid Palaearctic species were included in the genus *Porricondyla* by Skuhrava (1986), including 11 species of the genus *Epidosis* Loew, 1850. A considerable number of these species were tentatively included in the genus *Porricondyla* because of their uncertain taxonomic position. S. Panellius (1965) revised the European gall midges of subfamily Porricondylinae. This author described and redescribed 13 species of the genus *Porricondyla*. Twenty two previously described species of *Porricondyla* could not be identified by S. Panellius owing to their incomplete descriptions. S. Panellius in this publication wrote, that there might be reason to divide the genus *Porricondyla* into subgenera or even into genera. B. Mamaev (1966) revised this group of gall midges and described two new genera in the affinity of *Porricondyla*. The drawing of male genitalia of *Porricondyla* (*Epidosis*) *albimana* (Winnertz, 1853) leads to conclusion, that taxon *Epidosis* Loew, 1850 (sensu Kieffer, 1896) seems to be a separate genus

with simple tarsal claws and peculiar morphology of postabdomen. Nearctic Porricondylinae were revised by J. R. Parnell (1971), Japanese gall midges, including Porricondylinae, by J. Yukawa (1971). Recently B. Mamaev (1990a) described 13 new genera of gall midges of the subfamily Porricondylinae, including 10 genera of the tribe Porricondylini also in the affinity of *Porricondyla*. Now it is necessary to transfer a number of species of the genus *Porricondyla* s. lat. in other genera and to define more exactly the limits of the genus *Porricondyla* s. str. according to characters of type species *Cecidomyia albitarsis* Meigen, 1830 = *Porricondyla nigripennis* (Meigen, 1830).

### Genus *Porricondyla* Rondani, 1840 s. str.

Rondani, 1840, *Memorie Ditt. Ital.*: 14.

Type species *Cecidomyia albitarsis* Meigen, 1830, *Syst. Besch.*, 6: 268 [= *Porricondyla nigripennis* (Meigen, 1830)].



Figs 1—4. *Porricondyla*, male genitalia, dorsal view, tergites and sternite removed.  
1, *P. bifurcata* Mam.; 2, *P. colpodioides* Mam.; 3, *P. distinguenda* Mam.; 4, *P. hamifera* Mam.

Male. Antennae with 2+14 segments, usually longer than wing; flagellar segments of antennae with basal enlargement, 1.5—2.0 times as long as broad; stem bare, 1.3—2.5 times as long as basal enlargement; sensoria ring-shaped, on the first 8 or 11—14 flagellar segments; basal setae in 1—2 seta broad whorl; distal setae in single whorl; horseshoe shaped sockets of long hairs irregularly distributed on ba-

sal enlargement; palpi with 1+4 segments, sometimes considerable longer than height of the head; head with 3—10 ommatidia-broad eye-bridge. Thorax with anterior and posterior dorsolateral and pteropleural setae, mesopleural setae present or absent; wings longer than body;  $R_s$  in the same direction as  $R_5$  at slight angle with it,  $RM-M$  slightly curved,  $M_{1+2}$  sometimes visible in distal part;  $M_{3+4}$  basally fused with

*Cu*; legs very long, sometimes more the twice as long as body; tarsus 2 usually as long as tibia; tarsus 4 much longer than tarsus 5; tarsus 1 with blunt projection; claw bifid or sometimes trifid, empodium as long as claw or slightly longer. Tergites of abdomen with fields and medial transverse row of setae. Genitalia about as broad as 8th abdominal segment, usually directed upwards; coxites rounded, with long strongly sclerotized roots and transverse bridge; style as a rule with apical claw or spine; 10th tergite and 10th sternite bilobed, tegmen with a pair of long strongly sclerotized usually overlapping hooks; aedeagus membranous; genital rod straight, simple; ventral plate with a pair of hooks- or plate-shaped projections, rarely with pubescent lobes.

Female. Antennae with 2+10 or 2+11 segments, much shorter than body; flagellar segments cylindrical, with short stem; sensoria consist of 2 complete medially and laterally connected rings, lamellae of ovipositor 2-segmented; female of *R. nigripennis* and other large species with 2 sclerotized spermathecae.

Conclusion. *Porricondyla* s. str. is characterized by the combination of the following characters: male antennae with 2+14 segments, sensoriae on the first 8—14 flagellar segments ring-shaped, simple, without longitudinal branch. *Cu* forming a fork with  $M_{3+4}$  tarsal claw bifid or trifid, empodium as long as claw, tegmen with two sclerotized usually overlapping parameres, ventral plate with a pair of projections or setose lobes, transverse bridge distinct.

### Illustrated checklist of Palearctic species

A number of species including in the checklist were redescribed because original descriptions of these species were incomplete.

#### *Porricondyla armata* Spungis

Spungis, 1981, Latvijas entomologs, 24: 53.

*Material.* ♂, **Russia**, Voronezh Prov., Ramon, 15.IX.1978, V. Spungis leg. (paratype); 4 ♂, *Moscow Prov.*, Danki, 11.IX.1962, H. Mamaeva leg. (deposited in B. Mamaev collection).

Male. Large species with broad wings, length of body — 2.5 mm. Sensoria on all flagellar segments, without longitudinal branch. Morphology of genitalia is aberrant, because ventral plate without projections, parameres short, transverse bridge indistinct, style with one large and few small apical dents (Spungis, 1981).

Female unknown.

#### *Porricondyla bifurcata* Mamaev

(Figs 1, 19)

Mamaev, 1963, Uzbek. biol. Zh., 2: 74.

*Material.* 5 ♂, **Uzbekistan**, the pass Takhtakaracha near Samarkand, 19.V.1962, B. Mamaev leg. (holotype, paratypes) (deposited in B. Mamaev collection).

Male. Middle size species with narrow wings, length of body — 2.0 mm. Sensoria on 1—13 flagellar segments. Morphology of genitalia aberrant, because right paramere bifurcated, left — simple; Projection of ventral plate with lateral dent.

Female unknown.

#### *Porricondyla colpodioides* Mamaev

(Figs 2, 16, 28)

Mamaev, 1963, Uzbek. biol. Zh., 2: 75.

*Material.* 2 ♂, **Uzbekistan**, the pass Takhtakaracha, 27.V.1962, B. Mamaev leg. (holotype, paratype) (deposited in B. Mamaev collection).

Male. Middle size species, length of body 2.0—2.2 mm. Eye bridge consist of 3—4 rows of facets and removed on the frontal part of the head; the stem of middle flagellar segments of type specimen extremely long, almost 2.5 times as long as basal enlargement; stem of 3rd flagellar segment 2.0 times as long as basal enlargement; anterior angle of praescutum with light membranous patch; wings narrow. Coxite of genitalia with apical lobe, style with long apical spine, parameres strongly sclerotized, overlapping; transverse bridge distinct, straight (not arched); projection of ventral plate finger-shaped.

Female unknown.

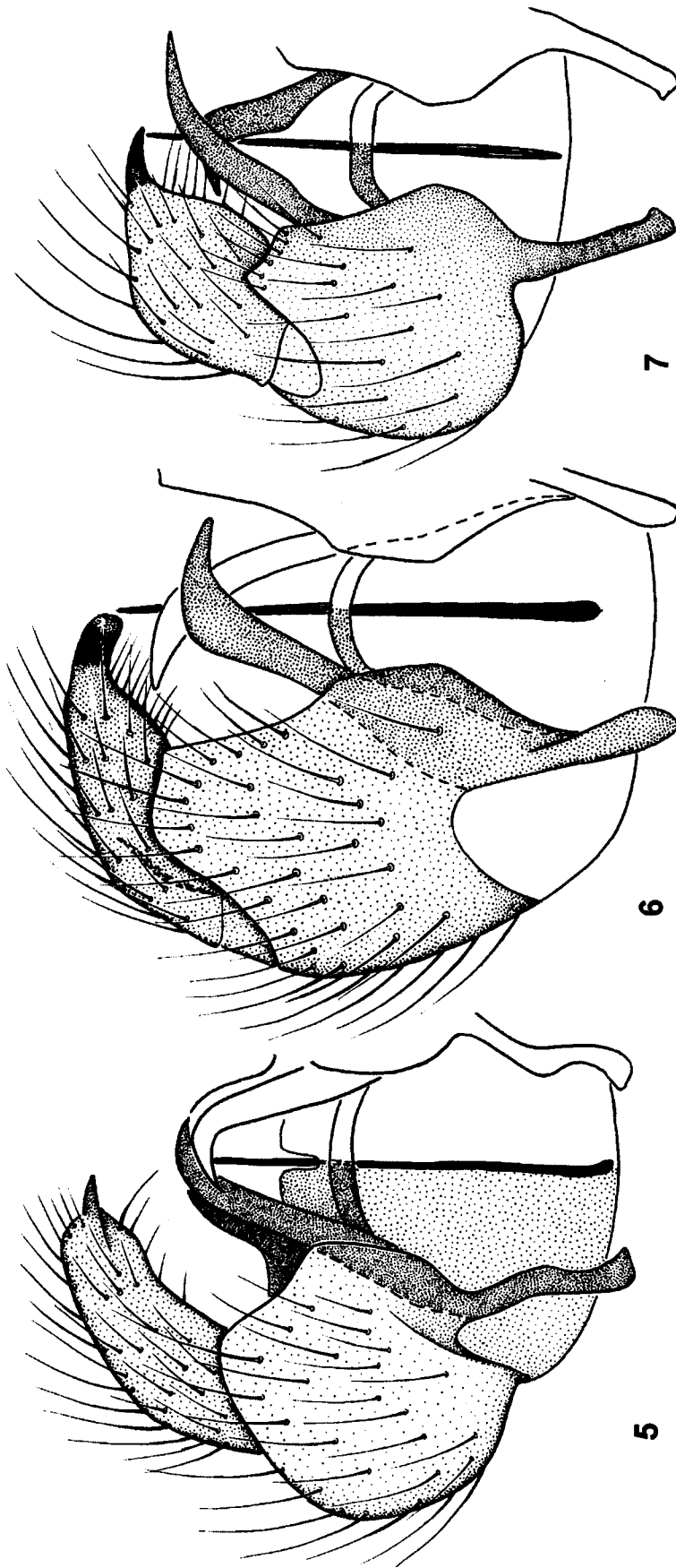
#### *Porricondyla distinguenda* Mamaev

(Figs 3, 18, 27)

Mamaev, 1963, Uzbek. biol. Zh., 2: 75.

*Material.* 3 ♂, **Uzbekistan**, Kitab, 5.VI.1962, B. Mamaev leg. (holotype, paratypes); ♂, **Sweden**, Uppsala, 22.VII.1993, B. Mamaev leg. (deposited in B. Mamaev collection).

Male. Middle size species, length of body 1.8—2.0 mm. Eye bridge consist of 3 rows of facets and removed on the frontal part of the head; stem of 3rd and other middle flagellar segments 2.0 times as long as basal enlargement; sensoria on 1—13 flagellar segments. Anterior angle of praescutum with light membranous patches; wings very narrow. Coxite of genitalia without distinct apical lobe; style with long



Figs 5—7. *Porricondyla*, male genitalia, dorsal view, tergites and sternite removed.  
5, *P. hyalinata* Mam.; 6, *P. petrophila* Mam.; 7, *P. petiolata* Mam.

apical spine; parameres strongly sclerotized, overlapping; transverse bridge thin; projections of ventral plate strongly curved, needle-shaped.

Female unknown.

***Porricondyla hamifera* Mamaev**

(Figs 4, 17, 30)

Mamaev, 1986, Proceedings of Turkmen. Acad. Sci., ser. biol. sci., N5: 76.

**Material.** ♂, Uzbekistan, the pass Takhtakaracha near Samarkand, 19.V.1962, B. Mamaev leg. (holotype) (deposited in B. Mamaev collection).

**Male.** Middle size species, length of body 2.0 mm. Eye bridge consists of 3—4 rows of facets and removed on the frontal part of the head; stem of middle flagellar segments 1.6 times as long as basal enlargement; sensoria on 1—12 flagellar segments. Anterior angle of praescutum with light membranous patch; wing moderate narrow. Coxite of genitalia round, without lobe; style with dark lamellar claw; parameres long, strongly sclerotized, overlapping; transverse bridge thin, roots of coxites very thick, projection of ventral plate weakly sclerotized, finger-shaped.

Female unknown.

***Porricondyla hyalinata* Mamaev**

(Figs 5, 21, 31)

Mamaev, 1990b, In: "Novosty sistematiki i faunistiki, Kiev: 144.

**Material.** ♂, Russia, S. Yamal, Khadyta, 30.VII.1981, W. Olschwang leg. (holotype) (deposited in B. Mamaev collection).

**Male.** Middle size species, length of body 1.8 mm. Eye bridge consists of 2 rows of facets and removed on frontal part of the head; the stem of middle flagellar segments 1.5 times as long as basal enlargement; sensoria on 1—11 flagellar segments. Wings moderate narrow as in *P. colpodoides*. Coxite of genitalia without distinct apical lobe; style with round apex and strong apical spine; parameres strongly sclerotized, with curved apex; transverse bridge long and thin; projection of ventral plate evenly curved.

Female unknown.

***Porricondyla lamellata* Yukawa**

Yukawa, 1971, Mem. Fac. Agric. Kagashima Univ., 8(1): 71.

Full description of this species had been published by J. Yukawa (1971). Morphology of male genitalia

of *P. lamellata* is aberrant, because ventral plate without projections, with setose lobes; style truncate, without apical spine or claw; transverse bridge weakly sclerotized.

***Porricondyla lata* Mamaev, nom. rev.**

Mamaev, 1965, In: Mamaev and Krivosheina, 1965, "Larvae of gall midges", Moscow: 267.

**Material.** 2 ♂, 3 ♀, Russia, Moscow Prov., Pavlovskaya Sloboda, 12.VIII.1963, breeding from larvae developing in litter of coniferous forest (holotype, paratypes); ♂, Lithuania, Vevis, 5.VIII.1962, H. Mamaeva leg. (deposited in B. Mamaev collection).

The synonymy of this species and Nearctic *P. dilatata* Felt, 1908 (Skuhrava, 1986) is not correct, because J. R. Parnell (1971) wrote only, that "this species is extremely similar to *Porricondyla lata* Mamaev et Krivosheina. However, this synonymy is only tentative as the postabdomen of the type of *P. dilatata* is not well preserved and cannot be properly compared." M. Skuhrava (1986) had no reason to put *P. lata* as full synonym of *P. dilatata* without such comparison. Full description of this species had been published by S. Panelius (1965).

***Porricondyla leacheana* (Walker)**

Walker, 1856, Insecta Britannica. Diptera. 3, London: 109. (*Cecidomyia*).

Full description of this species had been published by S. Panelius (1965).

***Porricondyla neglecta* Mamaev**

Mamaev, 1965, In: Mamaev and Krivosheina, Larvae of gall midges, Moscow: 267.

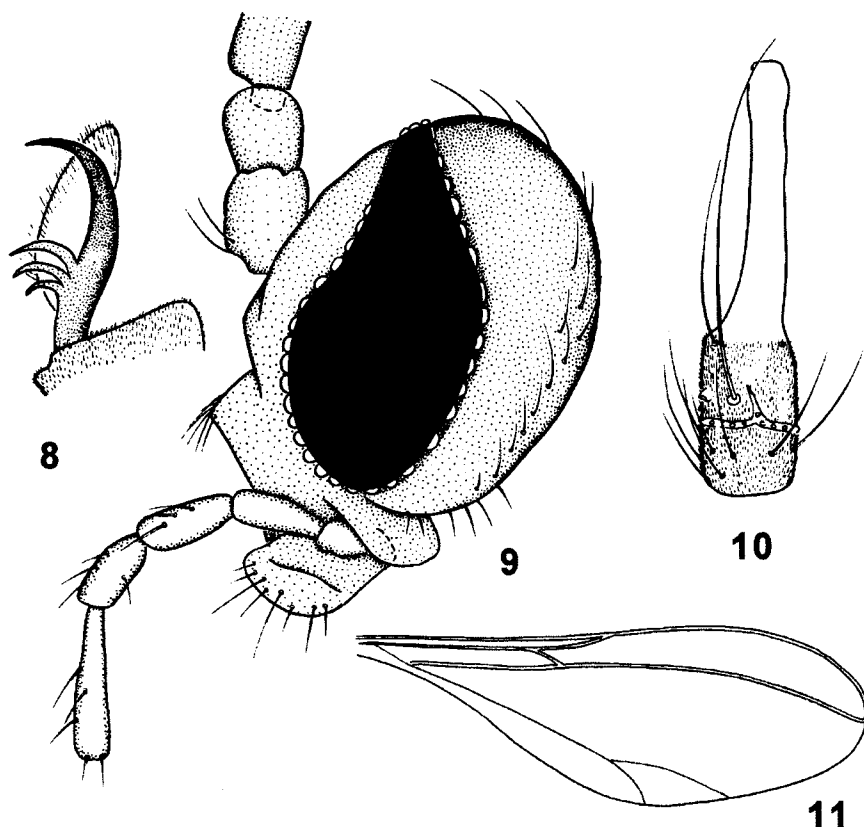
**Material.** ♂, Russia, Moscow Prov., Zavety Ilyicha, 13.VI.1962 (holotype); 3 ♂, 2 ♀, Moscow Prov., Pavlovskaya Sloboda, 16.VII.1965, breeding from larvae developing in litter of spruce forest, H. Mamaeva leg. (deposited in B. Mamaev collection).

Full description of this species had been published by S. Panelius (1965).

***Porricondyla nigripennis* (Meigen)**

Meigen, 1830, Syst. Besch. der bekannten europ. zweiflug. Insekten. 6. Hamm.: 269. (*Cecidomyia*).

**Material.** 4 ♂, Sweden, Skane, Skaralid, 22.V.1993; ♂, Dalarna, Nas, 29.V.1993; 4 ♂, Uppsala, 22.VII.1993 B. Mamaev leg.; ♀, Finland, Tvarminne, 24.VIII.

Figs 8—11. *Spungisomyia* gen. n.

8, tarsal claw; 9, head, lateral view; 10, 2nd flagellar segment; 11, wing.

1960, S. Panelius leg.; ♀, **Ukraine**, *Transcarpathians*, Kvasy, 30.VI.1963, B. Mamaev leg.; ♂, **Russia**, *S.Yamal*, Khadyta, 26.VII.1981, W. Olschwang leg.; ♂, ♀, *Rostov Prov.*, Leninsky forestry, 17.V.1953; ♂, *Daghestan*, Arani, 25.V.1955, B. Mamaev leg.; ♂, *Tuva*, Ishtii-Chem, 19.VIII.1973, N. Krylova leg.; ♂, *Amur Prov.*, Zeja, 18.VI.1982, M. Krivosheina leg.; ♂, *Far East*, Ussuri Reserve, 4.V.1969, G. Krivotshapov leg.; ♂, **Italy**, Monte Amiata, 19.VI.1994, B. Mamaev leg. (deposited in B. Mamaev collection).

*P. nigripennis* is the type species of genus *Porricondyla*. The detail description of this species published by S. Panelius (1965) is very important. *P. nigripennis* distributes over all Holarctic region.

### *Porricondyla petiolata* Mamaev

(Figs 7, 20, 33)

Mamaev, 1986: Proc. Turkmen. Acad. Sci., ser. biol. sci., N5: 67.

**Material.** ♂, **Turkmenia**, Badkhyz reserve, 5.V.1963, B. Mamaev leg. (holotype) (deposited in B. Mamaev collection).

**Male.** Middle size species with broad wings, length of body 2.2 mm. Eye bridge consists of 6 rows of facets; stem of the middle flagellar segments 1.7 times

as long as basal enlargement; sensoria on the first 10 flagellar segments, the tips of both antennae broken. Anterior angle of praescutum with light membranous patch. Coxite of genitalia with short apical lobe, style dilated, with long acute spine; parameres long, overlapping, transverse bridge strongly sclerotized, projection of ventral plate bifurcated.

Female unknown.

### *Porricondyla petrophila* Mamaev

(Figs 6, 22, 29)

Mamaev, 1986, Proc. Turkmen. Acad. Sci., N5: 67.

**Material.** 5 ♂, **Turkmenia**, *Kopetdag*, Ipai-Kala, 25.V—6.VI.1971, B. Mamaev leg. (holotype, paratypes); 2 ♂, **Russia**, *Amur Prov.*, Zeja, 22.VI. 1982, M. Krivosheina leg. (deposited in B. Mamaev collection).

**Male.** Middle size species with broad wings and well developed anal lobe, length of body 2.2 mm. Eye bridge consists of 8 rows of facets; stem of middle flagellar segments 2.0 times as long as basal enlargement; sensoria on the first 13 flagellar segments. Anterior angle of praescutum with light membranous patch. Coxite with broad apical lobe, style with

massive apical dent; parameres overlapping; transverse bridge thin; projection of ventral plate with acute lateral dent.

Female unknown.

### *Porricondyla pubescens* (Walker)

Walker, 1856, *Insecta britannica*. Diptera. 3. London: 104. (*Cecidomyia*).

**Material.** ♂, Sweden, Dalarna, Tjanberget, 29.VI.1993; 5 ♂, Nas, Grasberget, 1.VII.1993; ♂, Uppland, Osthammor, Fageron, 13.VII.1993, B. Mamaev leg.; ♂, Finland, Tvarminne, 17.VII.1960, S. Panelius leg.; ♂, Ukraine, Transcarpathians, Kvasy, 15.VI.1963, B. Mamaev leg.; ♂, Russia, S. Yamal, Khadyta, 1.VIII.1981, W. Olschwang leg.; ♂, Yaroslavl Prov., —.V.1961; ♂, N. Caucasus, Krasnaya Polyana, 13.VI.1967; ♂, Kamchatka, Kosyrevsk, 28.VI.1984, B. Mamaev leg. (deposited in B. Mamaev collection).

Detail description of this species had been published by S. Panelius (1965). This species is aberrant, because anterior part of praescutum without light membranous patch, parameres do not cross each other and with denticulation, style with strong pectinate claw. Female unknown.

### *Porricondyla rufescens* Panelius

Panelius, 1965, *Acta zool. fenn.*, 113: 45.

**Material.** ♂, Sweden, Uppsala, 22.VII.1993; 1 ♂, 2 ♀, Finland, Tvarminne, 30.VII.1960, S. Panelius leg.; 2 ♂, Lithuania, Palanga, 28.VII.1962; ♂, Russia, Moscow Prov., Churilki, 8.VI.1979, H. Mamaeva leg.; 2 ♂, Kursk Prov., Kursk reserve, 6.VII.1970, H. Mamaeva leg.; 2 ♂, Kamchatka, Kosyrevsk, 28.VI.1984, B. Mamaev leg.; ♂, Turkmenia, Kopetdag, Ipai-Kala, 25.V.1971, B. Mamaev leg.; 2 ♂, Italy, Siena, 15.VI.1994, B. Mamaev leg. (deposited in B. Mamaev collection).

Detail description of this species had been published by S. Panelius (1965), including the female. J. R. Parnell (1971) expressed the opinion that *P. rufescens* is very similar to Nearctic *P. spinigera* Felt.

### *Porricondyla rufocinerea* Panelius

Panelius, 1965, *Acta zool. fenn.*, 113: 47.

Detail description of this species had been published by S. Panelius (1965). Parameres of this species do not cross each other; ventral plate with very weakly sclerotized projections.

## Descriptions of new taxa

### *Spungisomyia* Mamaev et Zaitzev gen. n.

(Figs 8—11)

Type species *Porricondyla media* Spungis, 1981, *Latvijas entomologs*, 24: 54.

**Material examined.** 7 ♂, 6 ♀, Latvia, Saulkalne, 26.III.1978, V. Spungis leg. (deposited in V. Spungis collection).

V. Spungis (1981) expressed the opinion, that species *Porricondyla media* is morphologically aberrant in comparison with *Porricondyla* s. str. In contrast to *Porricondyla* s. str. new genus with sensoria on 1—10th flagellar segments of male, sensoria of basal segments waved, with short transparent needle-shaped longitudinal branch in distal part of basal enlargement; tarsal claw multidentate, ventral plate without projections. Eye bridge removed on frontal surface of head; wing narrow; stem of middle flagellar segments 1.6 times as long as basal enlargement; thorax with brown dorsal streaks. Male genitalia adequately figured by V. Spungis (1981). Abdomen of female 3 times as long as thorax with short, but protractile ovipositor.

New genus is similar to *Sensepidosis* Mamaev, 1990, but claw of the last genus simple and male genitalia without parameres.

### *Porricondyla amurensis*

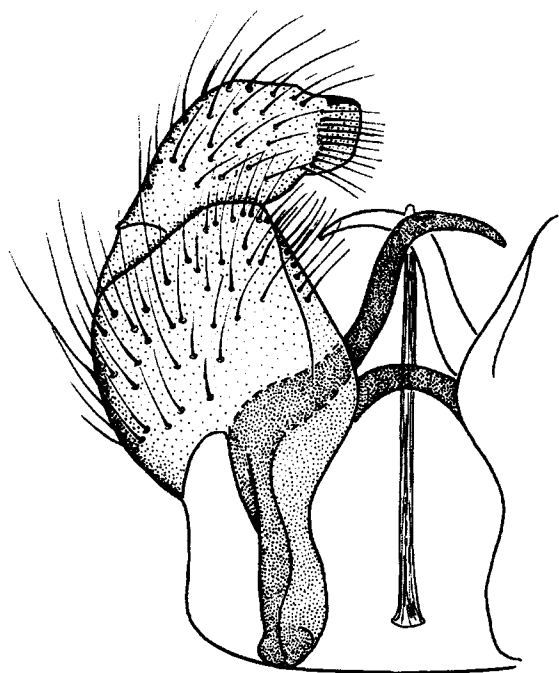
Mamaev et Zaitzev, sp. n.

(Figs 12, 24)

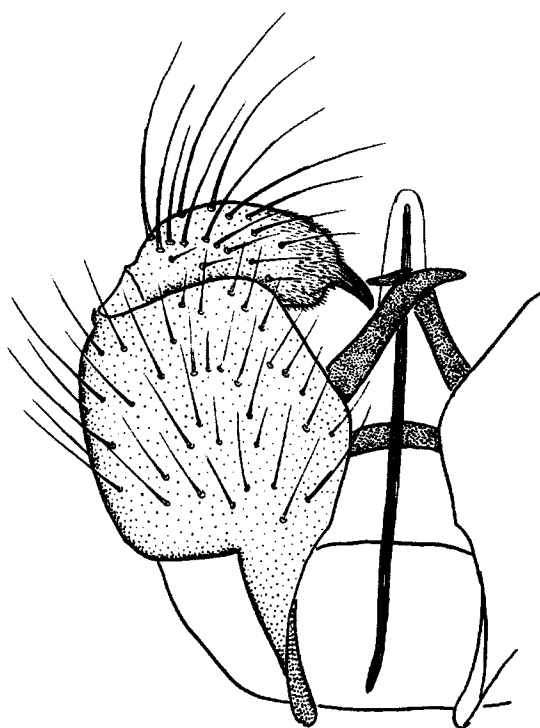
**Holotype.** ♂, Russia, Amur Prov., near Zeja, netting, 14.VIII.1982, M. Krivosheina leg. (deposited in B. Mamaev collection).

Large species, length of body 2.8 mm. Eye bridge consists of 12 rows of facets; scapus and pedicellum with setae; middle flagellar segments with stem 2 times as long as basal enlargement; sensoria on the 1—13 flagellar segments; palpi considerably longer than height of head. Thorax with brown basal streaks and lateral patches; mesopleural setae present; wing broad, with typical venation; legs 2 times as long as wing; femur and tibia equally long, tarsus 2 shorter than tibia; claw evenly curved, empodium thick, as long as claw. Coxite of genitalia with short apical lobe; style short, dilated with broad transparent lamellar claw and numerous subapical hairs; 9th tergite with indistinct margin; 10th tergite and 10th sternite bilobed; transverse bridge strongly sclerotized; parameres long, overlapping, ventrally and distally curved; genital rods longer than coxites; ventral plate with round emargination and a pair of short and thick projections.

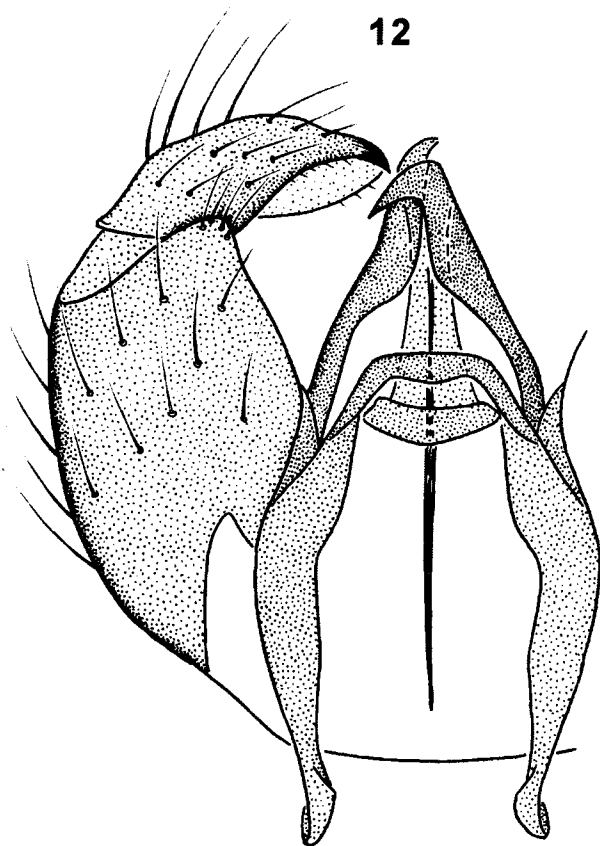
Female unknown.



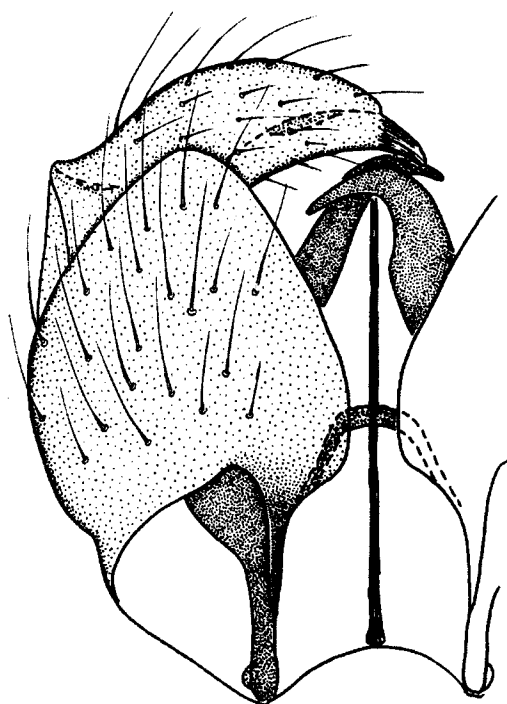
12



13



14



15

Figs 12—15. *Porricondyla*, male genitalia, dorsal view, tergites and sternite removed.  
12, *P. amurensis* sp. n.; 13, *P. caucasicola* sp. n.; 14, *P. ussuriensis* sp. n.; 15, *P. lobifera* sp. n.



*Porricondyla caucasicola*

Mamaev et Zaitzev, sp. n.

(Figs 13, 25)

*Holotype*. ♂, **Russia**, *N. Caucasus*, Sober-Oash Mt. near Ubinskaya, netting, 13.VI.1952, Mamaev leg.

*Paratype*. ♂, with same label (deposited in B. Mamaev collection).

Male. Large species, length of body 2.0 mm. Eye bridge consists of 8 rows of facets; scapus and pedicellum with setae; middle flagellar segments with stem 2.0 as long as basal enlargement; sensoriae on all flagellar segments; palpi as long as height of head. Thorax with brown dorsal streaks and lateral patches; mesopleural setae present; wing narrow with typical venation; legs 2 times as long as wings; tibia as long as femur; claw evenly curved; empodium as long as claw. Coxite of genitalia dilated, styles 2 times as long as broad, round apically, with acute claw; 9th tergite indistinct, 10th tergite large, deeply bilobed, 10th sternite indistinct, transverse bridge strongly sclerotized, parameres simple, overlapping, genital rods longer than coxites.

Female unknown.

*Porricondyla lobifera*

Mamaev et Zaitzev, sp. n.

(Figs 15, 23, 32)

*Holotype*. ♂, **Russia**, *Far East*, Ussuri reserve, near Ussuriysk, netting, 13.VI.1969, G. Krivotshapov leg.

*Paratypes*. 3 ♂, the same region, 4.V.1969, 13.VI.1969, G. Krivotshapov leg. (deposited in B. Mamaev collection).

Male. Middle size species, length of body 2.0—2.2 mm. Eye bridge consists of 8 rows of facets; scapus and pedicellum with few setae; middle flagellar segments with stem 1.6 times as long as basal enlargement, sensoriae on the 1—13th flagellar segments; palpi as long as height of head. Thorax brown; mesopleural setae present; wing broad with well developed anal lobe and typical venation; legs 2 times as long as wing; tibia shorter than femur and as long as tarsus 2; claw evenly curved, empodium as long as claw. Coxite of genitalia broad, with short, round apical lobe and broad ventral flange; style as long as coxite with yellow claw; 9th tergite indistinct; 10th tergite bilobed; 10th sternite indistinct; transverse bridge thick, strongly sclerotized, arched; parameres simple, overlapping, genital rods longer than coxites.

Female unknown.

*Porricondyla ussuriorum*

Mamaev et Zaitzev, sp. n.

(Figs 14, 26)

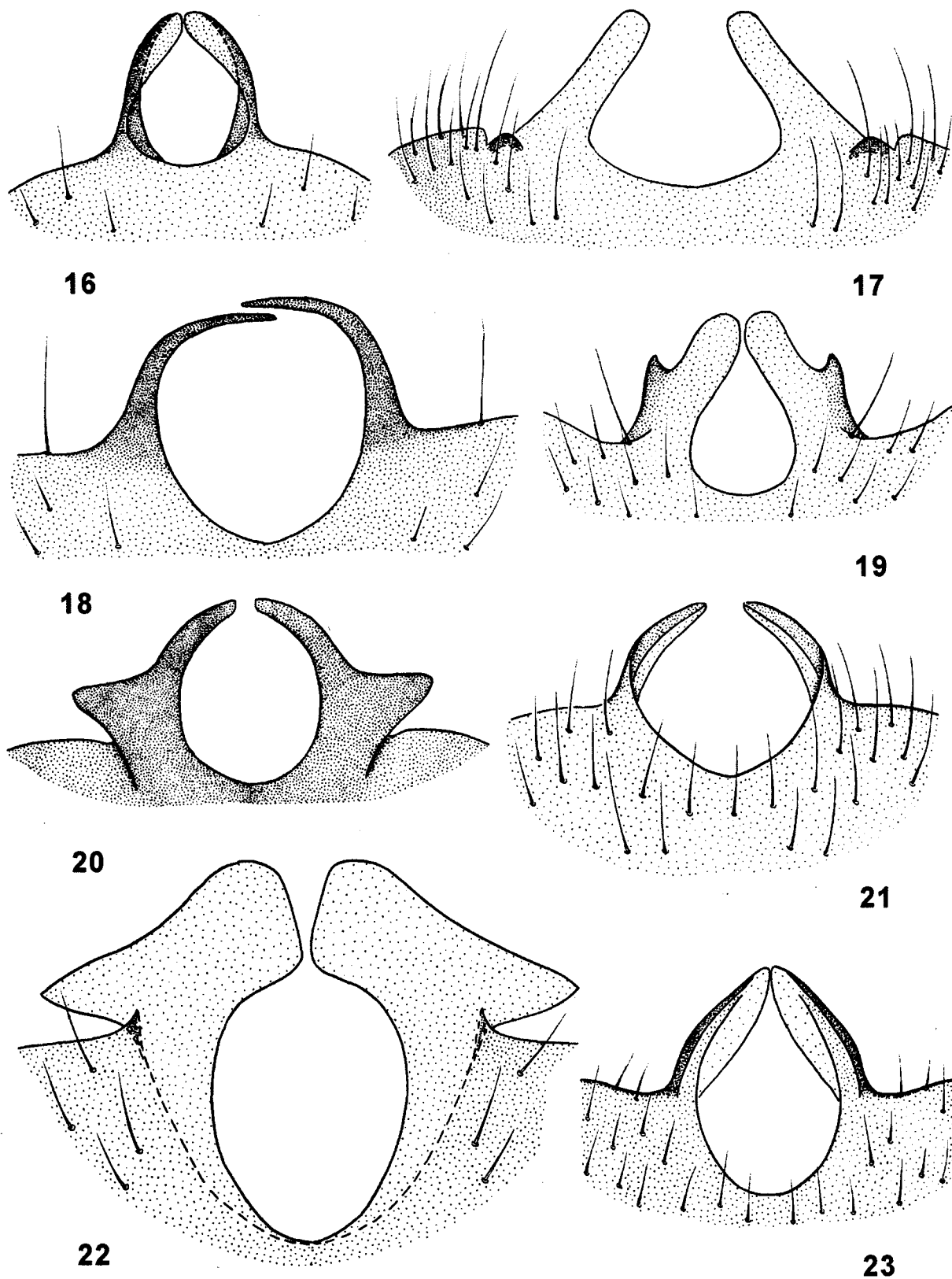
*Holotype*. ♂, **Russia**, Ussuri reserve, near Ussuriysk, netting, 14.VIII.1969, G. Krivotshapov leg. (deposited in B. Mamaev collection).

Male. Small species, length of body 1.2 mm. Eye bridge consists of 6 rows of facets. Scapus and pedicellum with 1—2 setae; middle flagellar segments with stem 1.7 times as long as basal enlargement; sensoria on the 1—12th flagellar segments. Palpi as long as height of head. Thorax with brown dorsal streaks and large lateral patches; mesopleural setae present; wing much long, narrow, with typical venation; legs 2 times as long as wing; femur slightly longer than tibia; tarsus 2 as long as tibia; claw evenly curved, slightly longer than empodium. Coxites of genitalia 2 times as long as broad; styles 0.2 times as long as broad, with inner excavation and small apical claw; 9th tergite indistinct, 10th tergite bilobed, 10th sternite indistinct; transverse bridge long, trapezium-shaped; parameres overlapping distally, thin, with dilation in apical third; genital rods as long as coxites.

Female unknown.

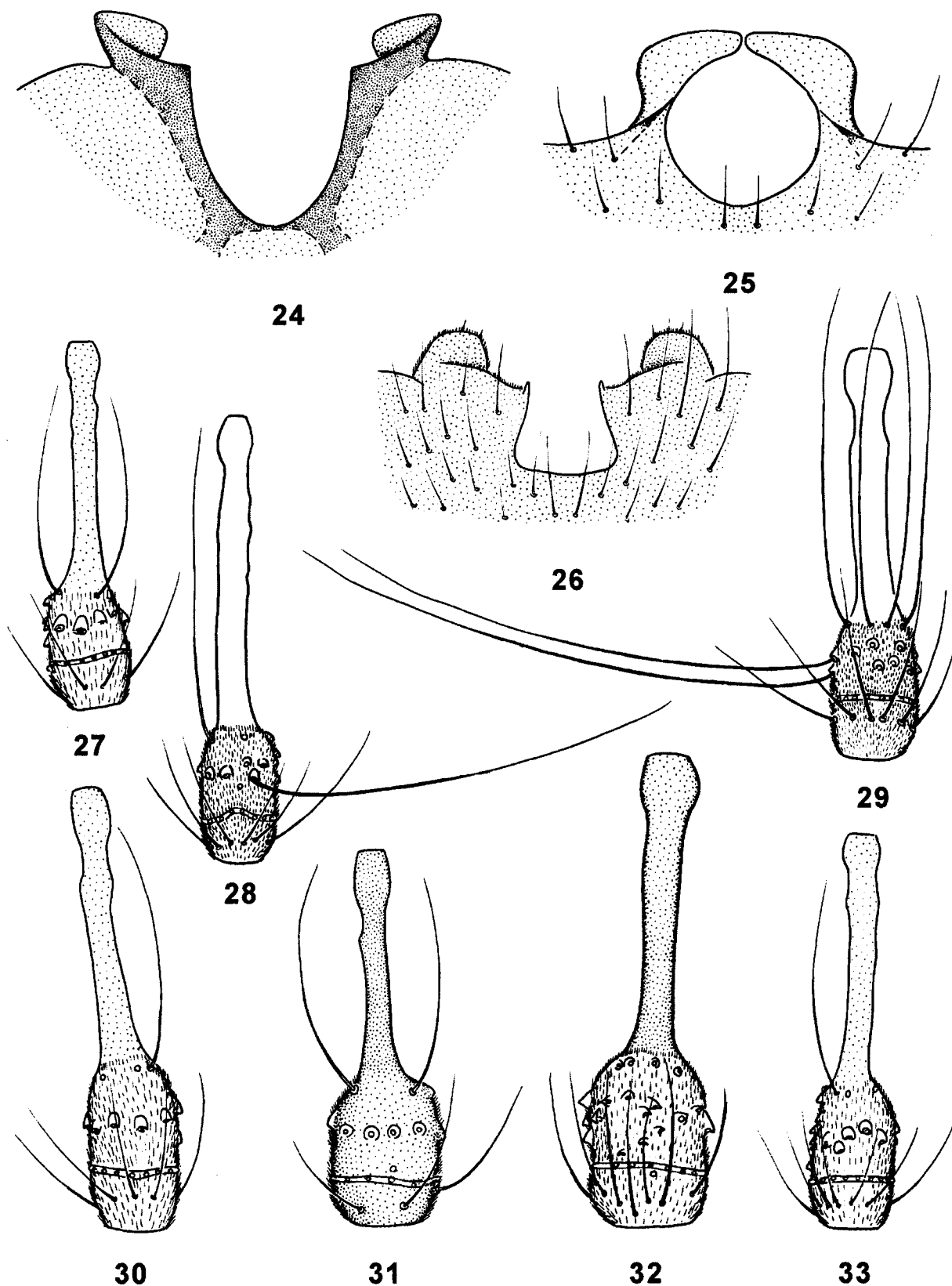
Key to species of *Porricondyla* s. str.

- 1(2) One paramere deeply bifurcated, second paramere simple (Fig. 1) . . . . *bifurcata* Mam.
- 2(1) Both parameres simple.
- 3(6) Antennae with sensoria on the first 8 flagellar segments.
- 4(5) Ventral plate of male genitalia with a pair of short, acute projections. Parameres curved basally and distally. . . . . *neglecta* Mam.
- 5(4) Ventral plate of male genitalia with a pair of short, blunt projections. Parameres curved distally. . . . . *lata* Mam.
- 6(3) Antennae with sensoria on the first 11—14 flagellar segments.
- 7(16) Style with pectinate or multidentate claw.
- 8(13) Style with pectinate claw.
- 9(12) Parameres long, overlapping, without denticulation.
- 10(11) Parameres thick, not strongly curved. Ventral plate with a pair of long finger-shaped, strongly sclerotized projections. . . . . *nigripennis* (Meig.)
- 11(10) Parameres thin, strongly curved distally. Ventral plate with a pair of broad, rounded, weakly sclerotized projections. . . . . *leacheana* Pan.



Figs 16—23. *Porricondyla*, projections of ventral plate.

16, *P. colpodoides* Mam.; 17, *P. hamifera* Mam.; 18, *P. distinguenda* Mam.; 19, *P. bifurcata* Mam.; 20, *P. petiolata* Mam.; 21, *P. hyalinata* Mam.; 22, *P. petrophila* Mam.; 23, *P. lobifera* sp. n.



Figs 24—33. *Porricondyla*.

24—25, projections of ventral plate; 27—33, middle flagellar segment. 24, *P. amurensis* sp. n.; 25, *P. caucasicola* sp. n.; 26, *P. ussuriorum* sp. n.; 27, *P. distinguenda* Mam.; 28, *P. colpodioides* Mam.; 29, *P. petrophila* Mam.; 30, *P. hamifera*; 31, *P. hyalinata* Mam.; 32, *P. lobifera* sp. n.; 33, *P. petiolata* Mam.

- 12(9) Parameres of middle length, convergent, with denticulation . . . . . *pubescens* (Walk.)
- 13(8) Style with multidentate claw.
- 14(15) Ventral plate with a pair of weakly sclerotized projections. Stem of middle flagellar segments 1.3 times as long as basal enlargement. Genital rod shorter than coxites . . *rufocinerea* Pan.
- 15(14) Ventral plate with a pair of short lobes. Stem of middle flagellar segments 1.6 times as long as basal enlargement. Genital rod longer than coxites . . . . . *armata* Spun.
- 16(7) Style with unidentate or lamellar claw.
- 17(20) Style truncate, with broad weakly sclerotized lamellar claw.
- 18(19) Ventral plate with a pair of setose lobes. Roots of coxite 1/2—2/3 as long as distance separating them. . . . . *lamellata* Yuk.
- 19(18) Ventral plate with a pair of short projections. Roots of coxites as long as distance separating them (Fig. 12) . . . . *amurensis* sp. n.
- 20(17) Style tapering apically with unidentate or narrow lamellar claw.
- 21(28) Eye bridge consists of 2—5 rows of facets, removed on frontal part of head; 2/3 of vertex devoid of facets.
- 22(25) Style rounded apically.
- 23(24) Eye bridge consists of 1—2 rows of facets. Claw of style acute. Ventral plate with curved projections (Fig. 21) . . . . . *hyalinata* Mam.
- 24(23) Eye bridge consists of 4—5 rows of facets. Claw of style lamellar. Ventral plate with straight convergent projections (Fig. 17) . . . . . *hamifera* Mam.
- 25(22) Style acutely tapering apically.
- 26(27) Stem of middle flagellar segments 2.5 times as long as basal enlargement. Wing 3 times as long as broad. Male genitalia — Fig. 2. . . . . *colpodoides* Mam.
- 27(26) Stem of middle flagellar segments 2.0 times as long as basal enlargement. Wing 4—4.5 times as long as broad. Male genitalia — Fig. 3. . . . . *distinguenda* Mam.
- 28(21) Eye bridge consists of 6—10 rows of facets, not considerably removed on frontal part of head.
- 29(38) Ventral plate with well developed projection. Style without excavation.
- 30(33) Projection of ventral plate laterally with large triangular lobe.
- 31(32) Style dilated, 1.6 times as long as broad, with acute apical claw (Fig. 7). . . . . *petiolata* Mam.
- 32(31) Style elongated, 2.4 as long as broad, with thick blunt claw (Fig. 6) . . . *petrophila* Mam.
- 33(30) Projection of ventral plate simple or with basal dilatation.
- 34(35) Wing narrow, 3.3 times as long as broad. Style with round apex (Fig. 13). . . . . *caucasicola* sp. n.
- 35(34) Wing broad, 2.6 times as long as broad. Style tapering to apex.
- 36(37) Style shorter than coxites, with black strong claw of fused teeth, without ventral flange. Projection of ventral plate sharply bent, with basal dilatation. Length of body 1.8 mm. . . . . *rufescens* Pan.
- 37(36) Style as long as coxites (Fig. 15) with yellow lamellar claw, with ventral flange. Projection of ventral plate evenly curved. Length of body 2.3 mm. . . . . *lobifera* sp. n.
- 38(29) Ventral plate with pubescent lobes. Style with inner excavation (Fig. 14) . . . . . *ussuriorum* sp. n.

# Species removed from *Porricondyla* Rond.

## *Dendrepidosia longipennis* (Spungis), comb.n.

Spungis, 1981, Latvijas entomologs, 24: 50 (*Porricondyla*).

## *Dirhiza fulvescens* (Panelius), comb.n.

Panelius, 1965, Acta zool. fenn., 113: 45 (*Porricondyla*).

## *Epidosis aurantiaca* (Panelius), comb.n.

Panelius, 1965, Acta zool. fenn., 113: 52 (*Porricondyla*).

## *Epidosis modesta* (Spungis), comb.n.

Spungis, 1981, Latvijas entomologs, 24: 50 (*Porricondyla*).

## *Monocolpodia gracilipennis* (Yukawa), comb.n.

Yukawa, 1971, Mem. Fac. Agric. Kagoshima Univ., 8: 68 (*Porricondyla*).

## *Stomatocolpodia decussata* (Yukawa), comb.n.

Yukawa, 1971, Mem. Fac. Agric. Kagoshima Univ., 8: 67 (*Porricondyla*).

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