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Three new species of the family Scathophagidae (Diptera) from the Czech Republic and Slovakia[1]

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Abstract. Three new species, *Microprosopa gruberi* sp. nov. from Slovakia, and *Microprosopa preisleri* sp. nov. and *Microprosopa zemani* sp. nov. from Czech Republic, are desribed. The subgenus *Paramicroprosopa* Ringdahl, 1936 is raised to generic status and the following new combinations are proposed: *Paramicroprosopa bartaki* (Šifner, 1999) comb. nov., *Paramicroprosopa hoberlandti* (Šifner, 1981) comb. nov., *Paramicroprosopa ozerovi* (Šifner, 2008) comb. nov., and *Paramicroprosopa pokornyi* (Šifner, 2011) comb. nov. A key to the Palaearctic species of the genera *Microprosopa* Becker, 1894 and *Paramicroprosopa* is provided and diagnostic characters are illustrated. Altogether, nine species of the genus *Microprosopa* and five species of the genus *Paramicroprosopa* were up to new discovered in the Palaearctic Region.
Key words. Diptera, Scathophagidae, *Microprosopa*, *Paramicroprosopa*, taxonomy, new species, new genus, Czech Republic, Slovakia, Palaearctic Region

INTRODUCTION

The genus *Microprosopa* Becker, 1894 (type species *Cordylura haemorrhoidalis* Meigen,1826, by original designation) is so far represented in the Palaearctic Region by 11 species (Ozerov 2008, Šifner 2008, 2011).

Ringdahl (1936) divided the genus *Microprosopa* into two subgenera: *Microprosopa* s.str. and *Paramicroprosopa* (type species *Scatomyza frontata* Zetterstedt, 1838, by present designation). Séguy (1952) and Hackman (1956) accepted this Ringdahl's concept. Hackman (1956: 9–10) during the study of north Europaean species combined the species of *Microprosopa* (including a subgenus *Paramicroprosopa*) and *Trichopalpus* Rondani, 1856 in an unnamed genus group. Gorodkov (1986) synonymized the subgenus *Paramicroprosopa* with the genus *Trichopalpus* Rondani, 1856. Šifner (2003) established the tribe Microprosopini including the Palaearctic genera *Acanthocnema* Becker, 1894, *Allomyella* Maloch, 1923, *Megaphthalmoides* Ringdahl, 1936, *Microprosopa* Becker, 1894, and *Trichopalpus*. In this paper the genus *Microprosopa* is reclassified and the subgenus *Paramicroprosopa* is raised to generic rank, providing key to the genera of the Microprosopini. Three new species of *Microprosopa*, *M. gruberi* sp. nov from Slovakia, and *M. preisleri* sp. nov. and *M. zemani* sp. nov. from the Czech Republic, are described.

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MATERIAL AND METHODS.

For the purpose of the reclassification of the genus *Microprosopa* and preparing the identification key the following material was examined:

Microprosopa gruberi sp. nov. – **Slovakia**: see the description below.

Microprosopa haemorrhoidalis (Meigen, 1826) – **Austria**: Gerlos, edge of spruce wood, 1400 m a.s.l., 9 August 1988, 1 ♂, Barták leg. **Canada**: Aklavik, N.W.T., 6 July 1956, 4 ♂♂, 2 ♀♀, R.E.Leach leg., Vockeroth det. **Czech Republic**: Orlické hory Mts., Polom (5663), MT, 24 May 2008, 1 ♂, Hájek leg. (FSPC); Riesengebirge [= Krkonoše Mts.], No. 49436, ix., 1 ♂, Vockeroth det. 1956 (ZMB).

Microprosopa heteromyzina (Zetterstedt, 1838) – **USA**: East Portal, Gilpin Co., Color., 6 July 1961, 1 ♂, 1 ♀, J. G. Chillcott leg., det. Vockeroth (FSPC).

Microprosopa lacteipennis Ringdahl, 1920 – I could not examine any specimens of this species and it is not included in the key.

Microprosopa lineata (Zetterstedt, 1838) – **Sweden**: Abisko, Lpl, 27 June 1951, 1 ♂, Vockeroth leg. et det.; Kvikkjokk, 8 July 1989, 1 ♀, 12.vii.1988, 1 ♂, A. Engelmark leg. et det.; T. Lpm., 1 km E of NVS, 350 m a.s.l., birch forest, 24-31 July 1993, 1 ♂, D.M. Ackland leg.; Abisko, Lakeshore, 0.5 km NE of NVS, 350 m a.s.l., 15 July 1995, D. M. Ackland leg., all M. Nelson det. (FSPC).

Microprosopa pallidicauda (Zetterstedt, 1838) – **Russia**: Abramtsevo, 200 m a.s.l., 56.23°N, 37.98°E, along brook, 28 May 1989, 2 ♂♂, 2 ♀♀, Barták leg., Šifner det. **Sweden**: Taraluobal, S. LU. 1, 21 July 1993, 1 ♂; Skallefteå , S.Vb., 28 June 1997, 1 ♀, Engelmark leg. et det. **USA**: King Salman, Naknek, R. Alaska, 10 July 1952, 1 ♂, 1 ♀, J. H. Hartley leg. (FSPC).

Microprosopa preisleri sp. nov. – see the description below.

Microprosopa zemani sp. nov. – see the description below.

Microprosopa zlobini Ozerov, 2008 – I could not examine any specimens of this species and it is not included in the key. This species is probably very similar to *M. pallidicauda* (Meigen, 1826) or *M. preisleri* sp. nov.

Paramicroprosopa frontata (Zetterstedt, 1838) – I could not examine any specimens of this species and it is not included in the key. This species is probably valid species; see the Fig. 52 (cf. Hackman 1956: 17), an abdominal sternite 5 of the species *M. lacteipennis*.

Paramicroprosopa bartaki (Šifner, 1999) – **Austria**: Schladminger Tauern, Donauesbachwald – 6 km E, 42.35°N, 14.20°E, 1600 m a.s.l., 5-7 August 1995, 2 ♂♂; Niedere Tauern, Solker pass, 47.34°N, 14.08°E, 1900 m a.s.l., 6 August 1995, 1 ♂, Barták leg. **Czech Republic**: Šumava Mts., Jezerní slať [peat bog] (6947), 980 m a.s.l., 49.03°N, 13.57°E, 4-6 July 1996, 1 ♂, Barták leg. (holotype); Šumava Mts., Trojmezná Mt. (7248), MT, 12-24 June 2003, 3 ♂♂, 1 ♀, Farkač leg.; spruce forest, MT, 1200 m a.s.l., 14-26 June 2006, 1 ♂, 2 ♀♀, Modlinger leg.; Šumava Mts., Boubín Mt. (7048),

1250 m a.s.l., 21 June 2004, 1 ♂, Nakládal et Farkač leg.; Horská Kvilda (6947), dump meadow, 1000 m a.s.l., 49.05°N, 13.57°E, 1 ♀, Barták leg. (FSPC).

Paramicroprosopa hoberlandti (Šifner, 1981) – **Iran**: NW Iran, 10 km NW Zamjan, Loc. No. 264, 4-5 July 1973, 1 ♂ (holotype), 2 ♀♀ (allotype, paratype), Exp. Nat. Mus. Praha leg. (holotype and allotype in NMP, paratype in FSPC).

Paramicroprosopa ozerovi (Šifner, 2008) – **Slovakia**: Pribilina (68–6984), 900m a.s.l., 13 July 1975, 1 ♂ (holotype), Rozkošný leg.; Vysoké Tatry Mts. (67–6886), Bielovodská dolina [= valley], 16 July 1975, 1 ♂ (paratype), Rozkošný leg.; Tichá dolina [= valley] (67–6885), 1300 m a.s.l., 1 August 1984, 1 ♀, Šifner leg. (FSPC).

Paramicroprosopa pokornyi (Šifner, 2011) – Czech Republic: Chyňava (5950), Benešův luh [valley], YPT, along brook, 11-14 June 2010, 1 ♂ (holotype), Šifner leg. (FSPC).

The following abbreviations are used in the text: FSPS – František Šifner private collection, Praha, Czech Republic; NMP – National Museum, Praha, Czech Republic; MT – Malaise trap; YPT – yellow pan water traps; ZMB – Museum für Naturkunde der Humboldt-Universität, Berlin, Germany. Morphological terminology follows Cumming & Wood (2009). All localities in the Czech Repuiblic are accompanied with the grid mapping codes according to Pruner & Míka (1996).

TAXONOMY

Descriptions of new taxa

***Microprosopa gruberi* sp. nov.**
(Figs. 1-4)

Holotype: ♂, Slovakia, Malá Fatra Mts., Štefanová, Stohové pol'any [meadows], 17 May 1975, Šifner leg. (FSPC).

Description. Body lenght 6 mm; primary colour grey. **Head** yellow-grey, frontal vitta yellow, face, orbits and genae white dusted, scape and pedicel brown, first flagellomere black and rounded apically, arista bare and black, palpi yellow, vibrissal callus with two short bristles. **Thorax.** Chaetotaxy standard for the genus, with one postpronotal, two weak intraalar and two strong supraalar bristles, basal and apical scutellar bristles of equal size, all legs yellow, wings including both cross-veins without dark coloration. **Abdomen.** *Male*. The short lobes of sternite V in medial part shortly and densely bristled, sternites II–IV rounded apically with long fine bristles (Fig. 1), cerci with short bristles apically, surstyli straight, narrowed and pointed apically (Figs. 2–3), praegonite widened apically, without seta, postgonite weakly arched apically, epiphallus short and sharp (Fig. 4). *Female*. Unknown.

Differential diagnosis. See the key below.

Etymology**.** I dedicate this species to my friend Adolf Gruber (Chyňava, Czech Republic).

Distribution**.** Slovakia (this paper).

Note**.** The holotype was originally determined as *Microprosopa pallidicauda* (Meigen, 1826) (Šifner 2003, 2008).

***Microprosopa preisleri* sp. nov.**
(Figs. 5-9)

Type material**.** Holotype: ♂, Czech Republic, Krkokoše Mts., Modrý důl [valley] (5260), 10 August 1965, Šifner leg (FSPC). Allotype: ♀, Czech Republic Krkonoše Mts, NNR Úpské rašeliniště [peat bog] (5260), 21-22 July 1966, Šifner leg. (FSPC), Paratypes: 2 ♂♂, the same data as holotype (FSPC).

Another material examined**. Czech Republic**: Krkonoše Mts., Obří důl [valley] (5260), 6 July 1976, 1 ♂, Šifner leg., Čertův důl [valley] (5260), 17 August 1965, 1 ♂, Růžová hora Mt. (5260), 11 June 1964, 1 ♀, Kotel (5259), 14 June 1966, 1 ♀, Pančická louka [meadow] (5259), 10 June 1963, 2 ♂♂ 1 ♀, all Doskočil leg.; Jeseníky Mts.,Velký Kotel (5969), MT, 14-26 July 1994, 1 ♂, Grim & Preisler leg., Orlické hory Mts, NNR Bukačka (5664), 1000 m a.s.l., 12 July 1995, 1 ♂, Mocek leg., 22 August 2009, MT, 1 ♂ 1 ♀, Hájek leg., 28 June – 11 July 1994, YPT, 1 ♀, 18 July – 5 August 1994, YPT, 1 ♀, all Hájek & Vašek leg. (all FSCP). **Slovakia**: Malá Fatra Mts., Stoh Mt., 1200 m a.s.l., 20 June 1973, 1 ♂, Šifner leg.; Vysoké Tatry Mts., Javorová dolina [valley] (6786–87), louka [meadow], 3 August 1985, 1 ♀, Barták leg. (all FSPC).

Description**.** Body lenght 7–8 mm, in primary colour grey. **Head.** Posterior part dark, frontal vitta in upper half brown, in lower part yellow-brown, orbits, face, and genae yellow and white dusted, scape, pedicell and first flagellomere dark, arista bare and weak, palpi yellow-white, vibrissal callus with four to five fine bristles. **Thorax.** Chaetotaxy standard for the genus, with one postpronotal, two intraalar and two supraalar bristles, four scutellar bristles in equal size, all legs including first coxae yellow, wings with small dark colouration, all veins distictly brown. **Abdomen.** *Male.* Lobes of the sternite V very shortly bristled medially and with short projection laterocaudally, sternite IV oval, sternite III more or less square (Fig. 5), cerci wide, separate and with short bristles caudally, surstyli straight, narrowed apically and pointed (Figs. 6-7), praegonite with short seta subapically, postgonite weakly arched, epiphallus very short (Fig. 8). *Female*. Sternites VIII narrow, pointed and with fine bristles caudally, sternite VII more or less rectangular and narrowed caudally, sternite VI square with fine bristles laterocaudally, sternites III–V more or less circular (Fig. 9).

Differential diagnosis. See the key below.

Etymology. I dedicate this species to my friend and Czech entomologist Jiří Preisler (Liberec, Czech Republic).

Distribution. Czech Republic, Slovakia (this paper).

Note. All specimens were originally identified as *M. pallidicauda* (Meigen, 1826) by Šifner (2003, 2008).

***Microprosopa zemani* sp. nov.**
(Fig. 10)

Type material. Holotype: ♀, Czech Republic, Krkonoše Mts, Sedmidolí (5259), Erlenbachova bouda environs, 8-15 June 1966, Doskočil leg. (FSPC).

Description. Body lenght 6 mm; primary colour grey. **Head.** Posterior part dark, frontal

vitta in upper half grey, in lower part yellow, face and genae yellow, scape and pedicell black-brown, first flagellomere black, arista bare, palpi yellow, vibrissal callus with two bristles and one very short between them. **Thorax.** Chaetotaxy standard for the genus, with two postpronotal, two weak intraalar and one supraalar bristles, four scutellar bristles in equal size, all legs yellow with all coxae grey, wings including both cross-veins without dark colouration. **Abdomen.** *Female*. Sternites VIII very narrow with very fine setulae caudally, sternite VII wide and with two lobes laterocaudally without bristles, sternite VI wide with three distinct bristles laterocaudally, sternite V more or less circular with one bristle laterocaudally, sternite IV oval (Fig. 10). *Male*. Unknown.

Differential diagnosis. See the key bellow.

Etymology**.** I dedicate this species to my friend Vladimír Zeman (Hradec Králové, Czech Republic), Czech hymenopterologist and specialist in Ichneumonidae.

Distribution. Czech Republic (this paper).

Note. The holotype was identified as M. pallidicauda (Meigen, 1826) by Šifner (2003, 2008).

Microprosopa varitibia Becker, 1897 and *Microprosopa lacteipennis* Ringdahl, 1920

Microprosopa varitibia Becker, 1897: 400: Holotype: ♂, Russia, European part, Nowaja Semlja [= Novaya Zemlya], Malije Karmankuli [Malie Karmankuli], 16.vi.1896 (ZMB).

Microprosopa lacteipennis Ringdahl, 1920: 38. Holotype: ♂, Sweden, Lappland, Gebirge Tjuontjäkko [= Tjuonjäkko], vii.1918, 1000m a.s.l., auf Carexwiesen [= on meadows with *Carex* sp.] (probably MZLU).

Comments**.** Both species, considered synonyms until recently, were listed by Šifner (2008) in the Palaearctic catalogue incorrectly under the name of the junior synonym *Microprosopa lacteipennis* Ringdahl, 1920. The holotype of *M. varitibia* was incorrectly indicated as a male in the original description by Becker (1897). However, Ozerov & Krivosheina (2013) reexamined the holotype found the female abdominal sternites identical with those of *Allomyella frigida* (Holmgren, 1883), recognizing *M. varitibia* Becker, 1897 as a junior synonym of *A. frigida* (Holmgren, 1883) (for details see Ozerov & Krivosheina 2013).

Ringdahl (1931: 173) mentioned for *Microprosopa lacteipennis*: 'Dieser Art kann ... *varitibia* aus Nowaja Semlja identisch sein' [= This species may be ... identical with *varitibia* from Nowaya Zemlya]. Later Hackman (1956: 58) synonymized *M. lacteipennis* with *M. varitibia* Beck. However, considering the discovery by Ozerov & Krivošeina (2013), the validity of *Microprosopa lacteipennis* become unclair. As I have no possibility to examine the type material or any other material of *M. lacteipennis* I treat the species here as *incertae sedis* and do not include it in the key.

Key to genera of the tribe Microprosopini

1. First tibia with small and short anteroventral spine-like bristles arranged completely or partially in two rows. 2
- First tibia with longer anteroventral bristles sometime completed by hair-like and fine bristles. 4

2 Proepisternal and proepimeral bristles distinctly developed. 3

- Proepisternal and proepimeral bristles missing. . . . . ***Allomyella*** Malloch, 1923

3 Proepisternal and proemimeral bristles only hair-like, first flagellomere approximately 1.5 times as long as wide. . . . . ***Microprosopa*** Becker, 1894

- Proepisternal and proepimeral bristles distinct, first tibia with a strong ventroapical spine projecting in a right angle. . . . . ***Acanthocnema*** Becker, 1894

4 Palpi distinctly broadened to flattened, proepisternal and proepimeral bristles distinctly developed, first flagellomere 2.0 to 2.5 times as long as wide. . . . . ***Paramicroprosopa*** Ringdahl, 1936 stat. nov.

- Palpi weakly broadened only in middle part. 5

5 First flagellomere in upper portion acutelly pointed, proepisternal and proepimeral bristles distinct. Dark species. . . . . ***Trichopalpus*** Rondani, 1856

- First flagellomere widely rounded apically. Yellow to brown species . . . . . ***Megaphthalmoides*** Ringdahl, 1936

Comments**.** The genus *Microprosopa* Becker, 1894 was characterized by the presence of short anteroventral spines on first tibiae (in Becker's (1894) text: 'Die Innenseite der Vorderschienen ist, wie bei fast allen Arten dieser Gattung, sehr kurz bewimpert.' [= Inner side of fore tibiae is shortly bristeled as in nearly all species of this genus.]); this character was commonly accepted (Sack 1937, Séguy 1952, Hackman 1956). Ringdahl (1936) distinguished two subgenera within *Microprosopa*: *Microprosopa* s. str. and *Paramicroprosopa*. He distinguished both subgenera by the lenght of anteroventral spines on fore tibiae. Subgenus *Microprosopa* s. str.: fore tibia with short anteroventral spines (in Ringdahl's text 't^{1} på insidan med mycket korta smålborst'), subgenus *Paramicroprosopa*: fore tibia only haired anteroventrally (in Ringdahl's text ' t^{1} på insidan endast finhåriga'). Ringdahl (1936) mentioned ten species of *Microprosopa*, but some of them were later either synonymized or transfered into other genera.

The status of *Paramicroprosopa* Ringdahl, 1936 as a separate genus is based on the characters mentioned by Ringdahl himself and newly established traits: a) the thickness of proepisternal and proepimeral bristles, b) ratio of width to lenght of the first flagellomere.

Key to species of the genera *Microprosopa* and *Paramicroprosopa*

1 Proepisternal and proepimeral bristles thin or hair-like, first flagellomere at most 1.5 times longer than wide. 2

– Proepisternal and proepimeral bristles distinctly developed, first flagellomere approximately 2.0 to 2.5 times longer than wide. 8

2 Two proepisternal and one proepimeral bristles, all abdominal sternites of female weakly sclerotized, sternite VII with a wide incision caudally (Fig. 10). . . . . ***Microprosopa zemani*** sp. nov.

– One proepisternal and one proepimeral bristle. 3

3 Lobes of the abdominal sternite V of male without distinct bristles, abdominal sternite of female wide. 4

– Lobes of the abdominal sternite V of male complemented with short bristles including a caudal promontory without bristles. 5

4 Lobes of the abdominal sternite V of male in caudal half very narrow (Fig. 11), cerci more or less triangular, surstyli wide and pointed apically (Figs. 12-13), praegonite of male broadened apically, epiphallus wide (Fig. 14), the abdominal sternite VII of female wide (Fig. 15). . . . . ***Microprosopa lineata*** (Zetterstedt, 1838)

– Lobes of the abdominal sternite V of male arched inwards and pointed (Fig. 16), cerci pointed caudally, surstyli narrow and pointed (Figs. 17-18), praegonite of male broadened apically, epiphallus short (Fig. 19), the abdominal sternite 7 of female very wide (Fig. 20). . . . . ***Microprosopa haemorrhoidalis*** (Meigen, 1826)

5 Lobes of the abdominal sternite V of male with a promontory without bristles. . . . 6

– Lobes of the abdominal sternite V of male without a promontory, lobeswith short or long fine bristles only. 7

6 Promontory projecting caudally (Fig. 21), cerci with short bristles caudally, surstyli weakly arched inwards (Figs. 22-23), praegonite of male flattened with one subapical seta (Fig. 24), abdominal sternite VII of female wide, sternites V and VI more or less triangular with short bristles caudally (Fig. 25). . . . . ***Microprosopa palllidicauda*** (Zetterstedt, 1838)

– Promontory projecting laterocaudally (Fig. 5), cerci wide with short bristles caudally, surstyli straight (Figs. 6-7), praegonite of male flattened with one seta subapically, epiphallus very short (Fig. 8), abdominal sternite VII of female more or less rectangular and narrowed caudally (Fig. 9). . . . . ***Microprosopa preisleri*** **sp. nov.**

7 Lobes of the abdominal sternite V of male wide caudally, covered with short and dense bristles (Fig. 1), cerci with short bristles apically, surstyli straight (Figs. 2-3), praegonite of male flattened without seta (Fig. 4). . . . . ***Microprosopa gruberi*** **sp. nov.**

– Lobes of the abbdominal sternite V of male narrowed caudally and covered with fine bristles (Fig. 26), cerci in caudal half long haired, surstyli straight and pointed (Figs. 27-28), praegonite of male with two short setae, i.e. one apical and one dorsal (Fig. 29), abdominal sternite VII of female very wide with lateral lobes, sternite VI caudally narrowed (Fig. 30), ... ***Microprosopa heteromyzina*** (Zetterstedt, 1838)

8 Lobes of the abdominal sternite V of male distinctly widened caudally 9

– Lobes of the abdominal sternite V of male pointed caudally and arched inwards. . 10

9 Lobes of the abdominal sternite V of male prolonged caudally, abdominal sternite IV more or less square with six to eitht strong bristles caudally (Fig. 31), cerci long haired, surstyli long, wide and haired caudally (Figs. 32-33), praegonite of male arched in a right angle with one short seta dorsally, epiphallus long and pointed (Fig. 34), abdominal stertnite VII of female narrowed apically and with short bristles laterally (Fig. 35). . . . . ***Paramicroprosopa bartaki*** (Šifner, 1999) **comb. nov.**

– Lobes of the abdominal sternite V of male prolonged, sternite IV with an incision, sternite III with a promontory caudally, both sternites without bristles (Fig. 36), cerci weak and long haired caudally, surstyli moderatory widened caudally and weakly arched in caudal half (Figs. 37-38), praegonite of male arched in a right angle and without seta, epiphallus short and pointed (Fig. 39), abdominal sternites VIII of female long and haired caudally, sternite VII long with a small promontory proximally, sternite VI more or less rectangular with two strong bristles. . . . . ***Paramicroprosope ozerovi*** (Šifner, 2008) **comb. nov.**

10 Lobes of the abdominal sternite V of male pointed caudally, both sternites III and IV rectangular and haired laterocaudally (Fig. 41), cerci haired caudally, surstyli wide and haired (Figs. 42-43), praegonite of male arched in a right angle, without seta, posgonite of male narrow (Fig. 44). . . . ***Paramicroprosopa pokornyi*** (Šifner, 2011) **comb. nov.**

– Lobes of the abdominal sternite V of male arched inwards and covered with short bristles (Fig. 45), cerci small and in upper half haired, surstyli straight and pointed (Figs. 46-47), praegonite of male wide with two short setae, i.e. one apical and one subdorsal (Fig. 48), abdominal sternites VIII wide and with setullae, sternite VII long, shortly bristled caudally, sternites V and VI oval (Fig. 49). . . . . ***Paramicroprosopa hoberlandti*** (Šifner, 1981) **comb. nov.**

Comments**.** I could not examine any specimens of *Microprosopa zlobini* Ozerov, 2008, *M. lacteipennis* Ringdahl, 1920 and *Paramicroprosopa frontata* (Zetterstedt, 1838); for that reason, they are not included in the key. The species *M. zlobini* is very similary to *M. pallidicauda* and *M. preisleri* sp. nov.

An unsatisfactory situation is in the current knowledge of the distribution of the species mentioned in the key: a limited number of the specimens of all species collected throughout Europe results in the lack of correct faunistic data and likewise in some taxonomic problems. At present, the known distribution of species is as follow:

Microprosopa gruberi sp. nov. – known only from Slovakia;

M. haemorrhoidalis – Nearctic (Vockeroth 1965) and Palaearctic (Šifner 2008) Regions, confirmed in the Czech Republic;

M. heteromyzina – Nearctic (Vockeroth 1965) and Palaearctic (Šifner 2008) Regions, does not occur in the Czech Republic and Slovakia;

M. lacteipennis Ringdahl, 1920 – Sweden (Ringdahl 1920), Finland (Hackman 1956, 1980).

M. lineata – North Europe (Šifner 2008);

M. pallidicauda – Euro-Siberian (Šifner 2008)

M. preisleri sp. nov. – known only from the Czech Republic and Slovakia;

M. zemani sp. nov. – known only from the Czech Republic;

M. zlobini – known only from Russia (North Ossetia) and Switzerland;

Paramicroprosopa bartaki – known only from Austria and Czech Republic;

P. frontata – known only from Sweden (Hedström 1991);

P. hoberlandti – known only from Iran; the faunistic data from the Czech Republic, Slovakia and Hungary (Šifner 2003, 2008) are incorrect and based on erroneous determination of *Trichopalpus fraternus* (Meigen, 1826).

P. ozerovi – known only from Slovakia;

P. pokornyi – known only from the Czech Republic.

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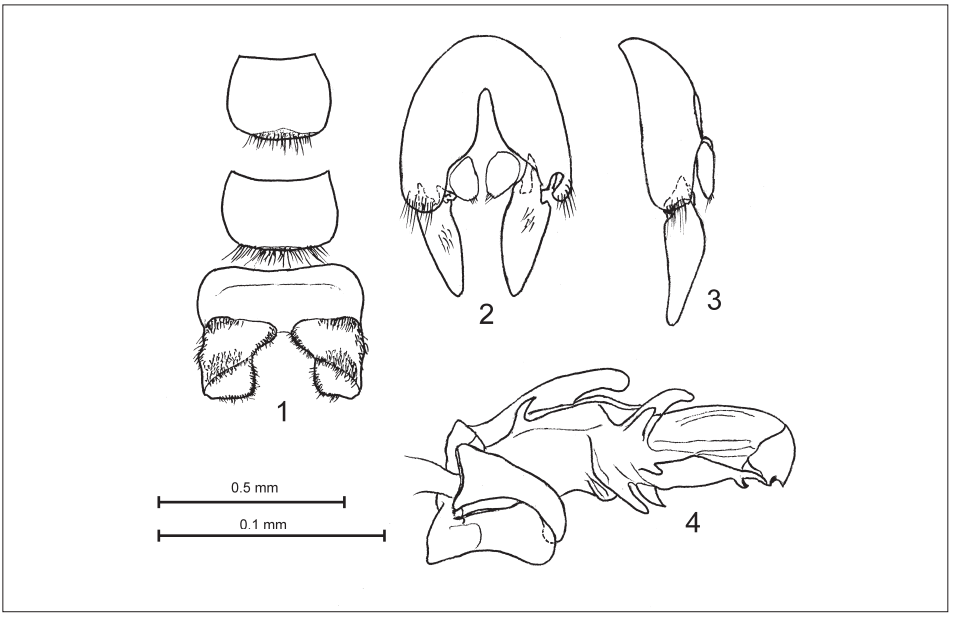
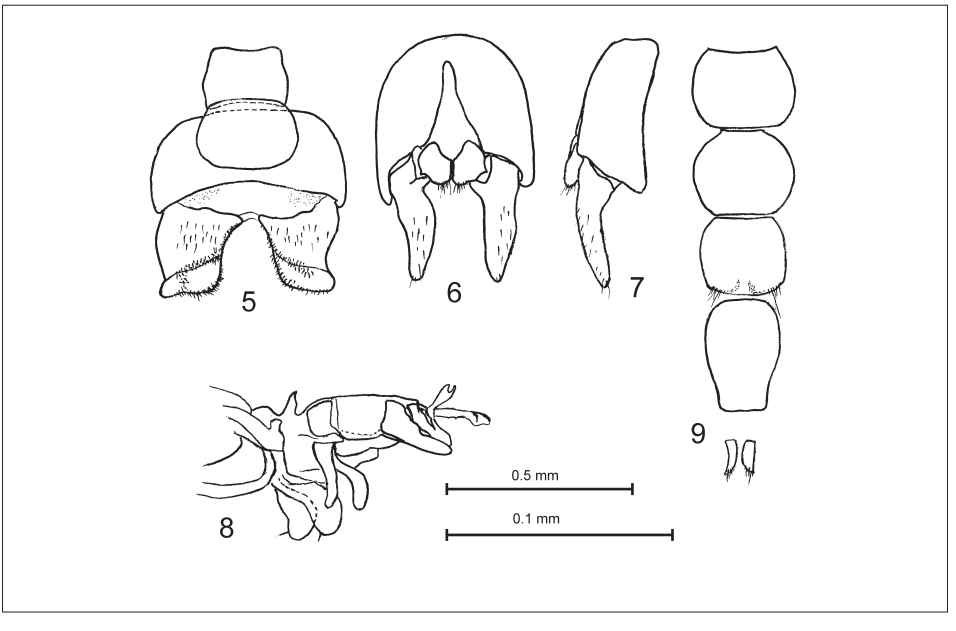


Figs. 1-4. *Microprosopa gruberi* **sp. nov., ♂, holotype: 1 – male abdominal sternites III to V; 2-3 – male cerci and surstyli (caudal and lateral view); 4 – penis apparatus with praegonite, postgonite and epiphallus. Scale bars: 0.5 mm (Figs. 1, 2, 3); 0.1 mm (Fig. 4).**



Figs. 5-9. *Microprosopa preisleri* **sp. nov., ♂, holotype: 5 – male abdominal sternites III to V; 6-7 – male cerci and surstyli (caudal and lateral view); 8 – penis apparatus with praegonite, postgonite and epiphallus; 9 – ♀, allotype: female abdominale sternites IV to VIII. Scale bars: 0.5 mm (Figs. 5, 6, 8); 0.1 mm (Fig. 9).**

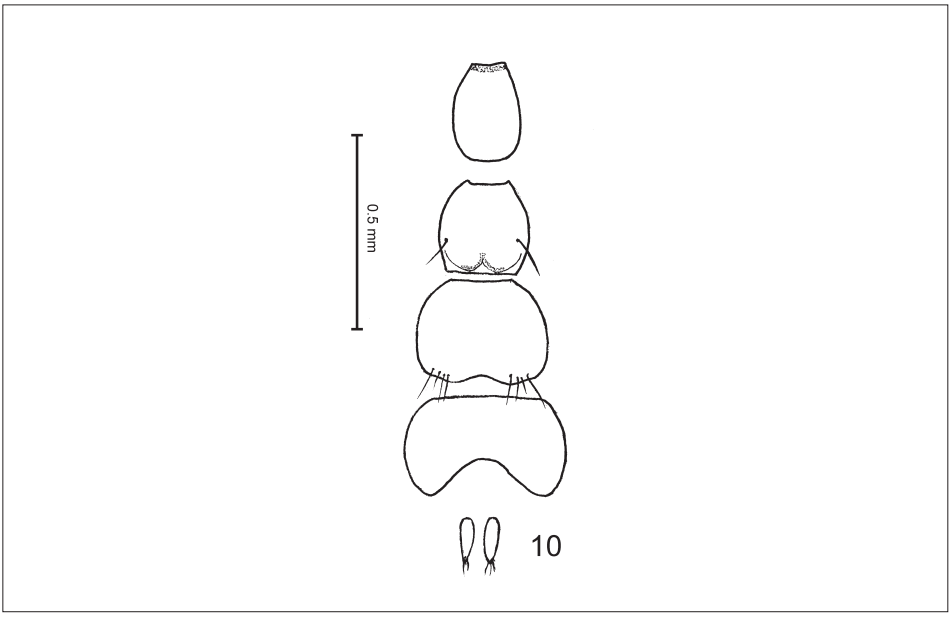
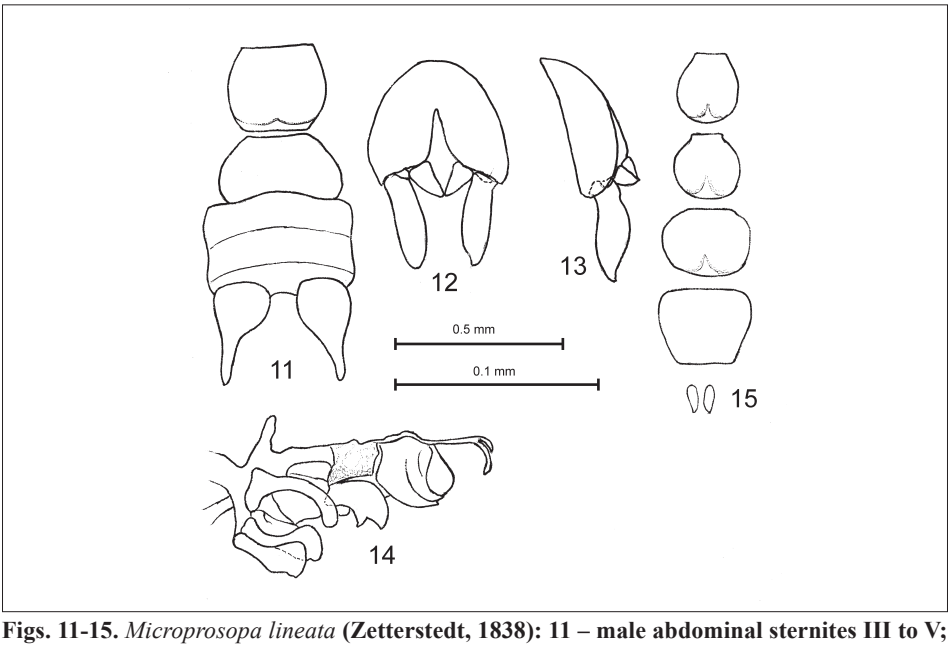
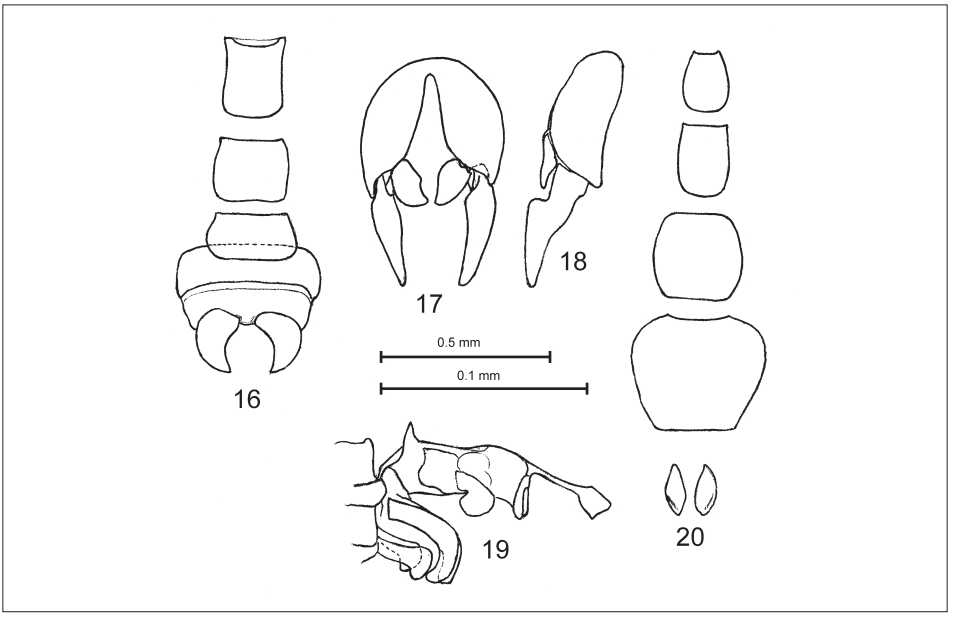


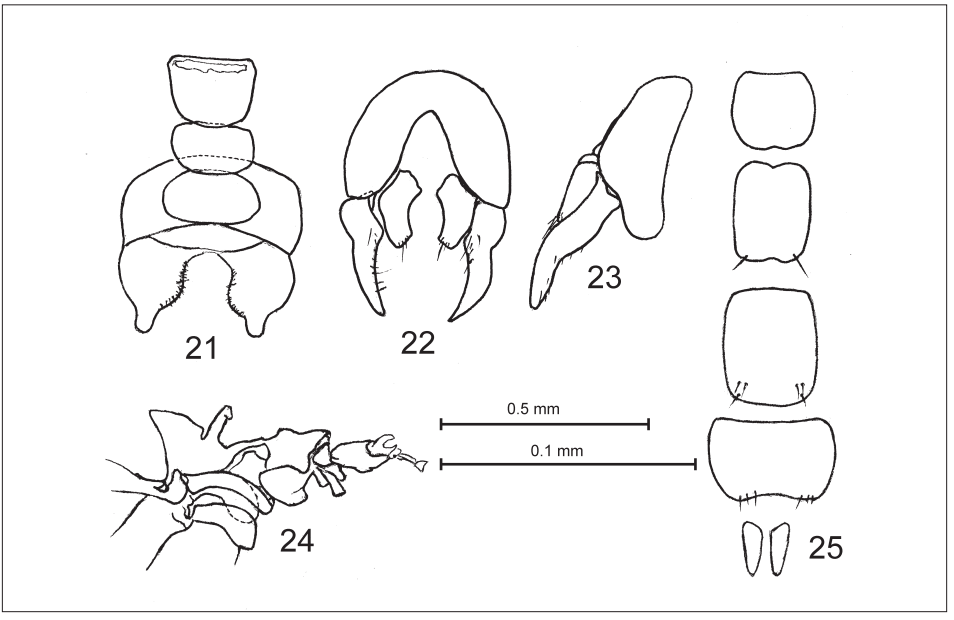
Fig. 10. Microprosopa zemani sp. nov., ♀, holotype: 10 – female abdominal sternites IV to VIII. Scale bar: 0.5 mm (Fig. 10).



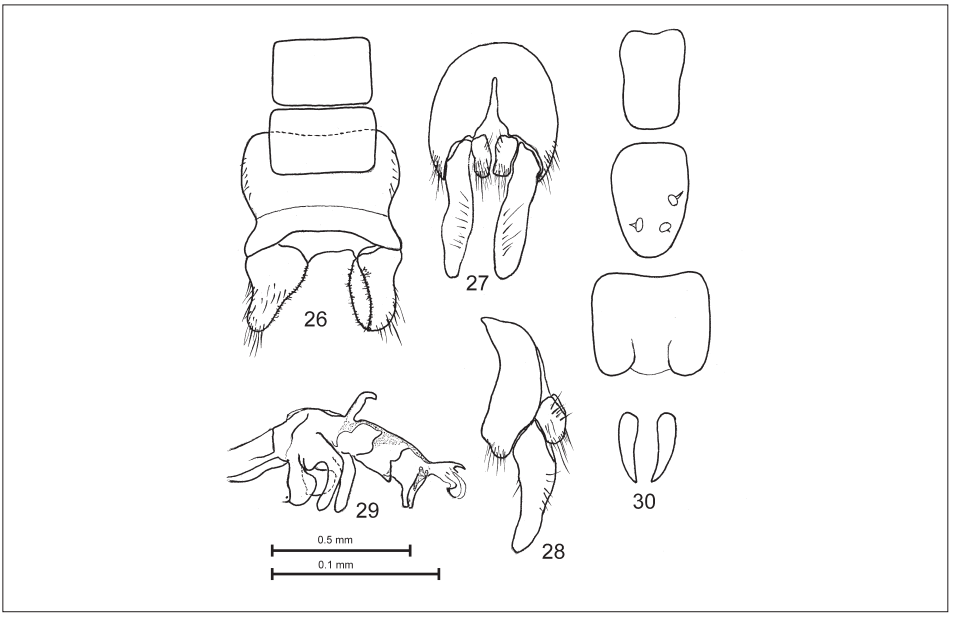
Figs. 11-15. *Microprosopa lineata* **(Zetterstedt, 1838): 11 – male abdominal sternites III to V; 12-13 – male cerci and surstyli (caudal and lateral view); 14 – penis apparatus with praegonite, postgonite and epiphallus; 15 – female abdominal sternites IV to VIII. Scale bars: 0.5 mm (Figs. 11, 12, 13, 15); 0.1 mm: (Fig. 14).**



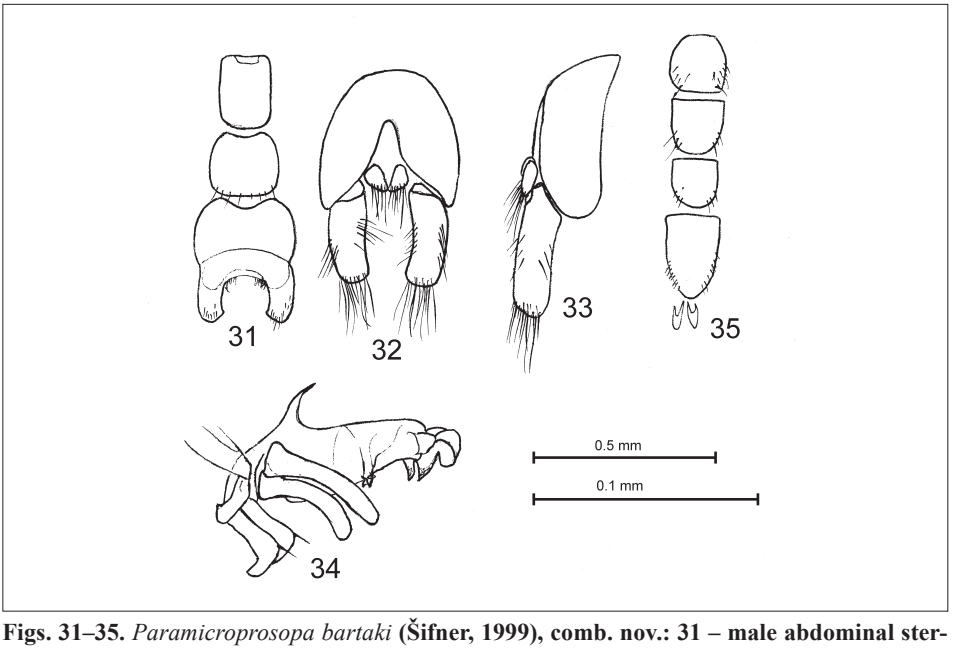
Figs. 16-20. *Microprosopa haemorrhoidalis* **(Meigen, 1826): 16 – male abdominal sternites II to V; 17-18 – male cerci and surstyli (caudal and lateral view); 19 – penis apparatus with praegonite, postgonite and epiphallus; 20 – female abdominal sternites IV to VIII. Scale bars: 0.5 mm (Figs. 16, 17, 18, 20); 0.1 mm (Fig. 19).**



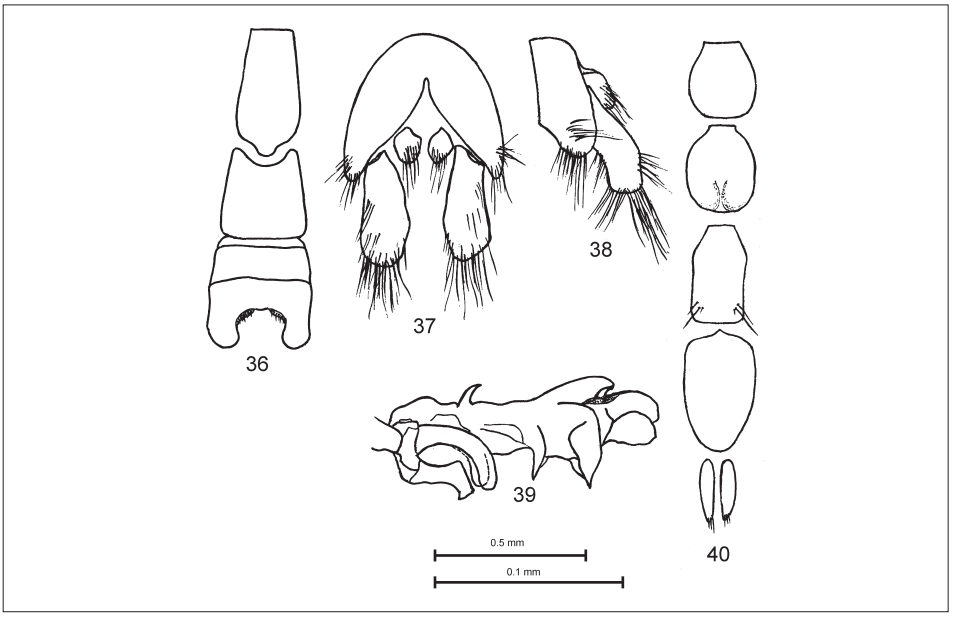
Figs. 21-25. *Microprosopa pallidicauda* **(Zetterstedt, 1838): 21 – male abdominal sternites II to V; 22–23 – male cerci and surstyli (caudal and lateral view); 24 – penis apparatus with praegonite, postgonite and epiphallus; 25 – female abdominal sternites IV to VIII. Scale bars: 0.5 mm (Figs. 21, 22, 23, 25); 0.1 mm (Fig. 24).**



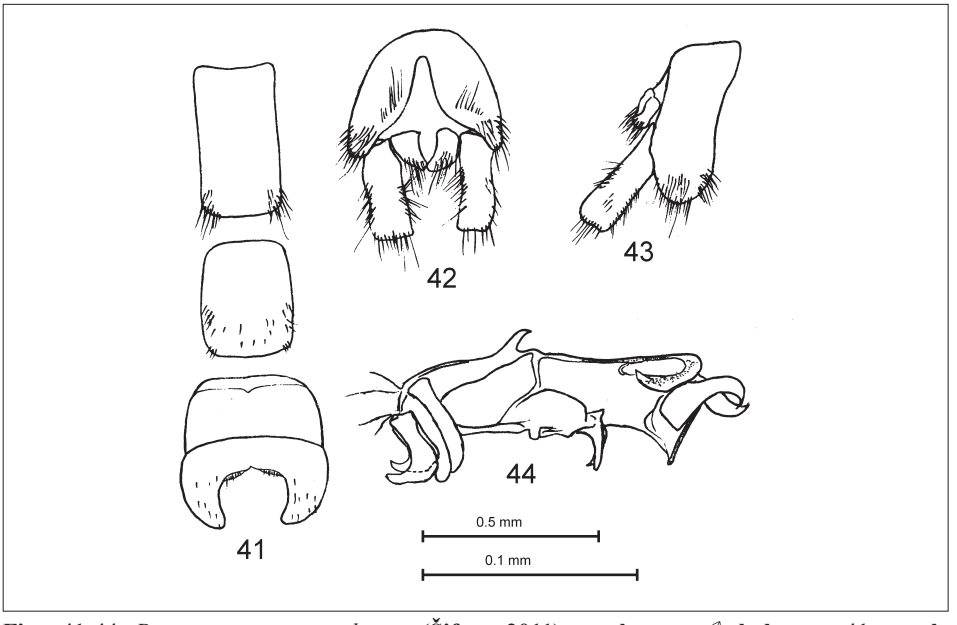
Figs 26-30. ***Microprosopa heteromyzina*** **(Zetterstedt, 1838): 26 – male abdominal sternites III to V; 27-28 – male cerci and surstyli (caudal and lateral view); 29 – penis apparatus with praegonite, postgonite and epiphallus; 30 – female abdominale sternites V to VIII with spermathecae. Scale bars: 0.5 mm (Figs. 26, 27, 28, 30); 0.1 mm (Fig. 29).**



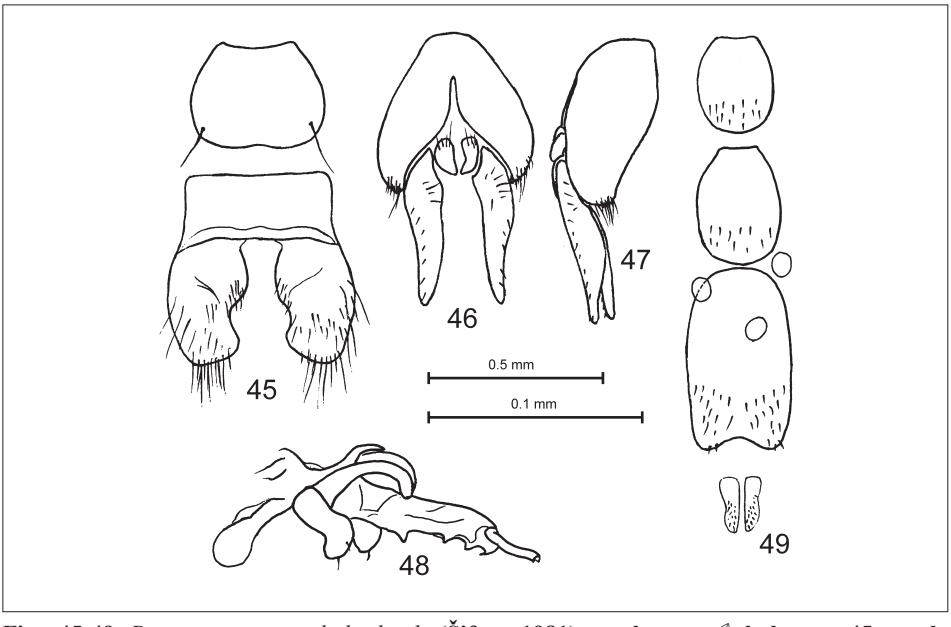
Figs. 31–35. *Paramicroprosopa bartaki* **(Šifner, 1999), comb. nov.: 31 – male abdominal sternites III to V; 32-33 – male cerci and surstyli (caudal and lateral view); 34 – penis apparatus with praegonite, postgonite and epiphallus; 35 – female abdominal sternites IV to VIII. Scale bars: 0.5 mm (Figs. 31, 32, 33, 35); 0.1 mm (Fig. 34).**



Figs. 36-40. ***Paramicroprosopa ozerovi*** **(Šifner, 2008), comb. nov.: 36 – male abdominale sternites III to V; 37–38 – male cerci and surstyli (caudal and lateral view); 39 – penis apparatus with praegonite, postgonite and epiphallus; 40 – female abdominale sternites IV to VIII. Scala bars: 0.5 mm (Figs. 36, 37, 38, 40); 0.1 mm (Fig. 39).**



Figs. 41-44: *Paramicroprosopa pokornyi* **(Šifner, 2011), comb. nov., ♂, holotype: 41 – male abdominal sternites III to V; 42-43 – male cerci and surstyli (caudal and lateral view); 44 – penis apparatus with praegonite, postgonite and epiphallus. Scale bars : 0.5 mm (Figs. 41, 42, 43, 44).**



Figs. 45-49: *Paramicroprosopa hoberlandti* **(Šifner, 1981), comb. nov., ♂, holotype: 45 – male abdominal sternites IV to V; 46-47 – male cerci and surstyli (caudal and lateral view); 48 – penis apparatus with praegonite, postgonite and epiphallus; 49 – ♀, allotype, female abdominale sternites V to VIII with spermathecae. Scale bars: 0.5 mm (Figs. 45, 46, 47, 49); 0.1 mm (Fig. 48).**