# A key to the Ponerinae species of the Carpathian Basin (Hymenoptera: Formicidae)

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Abstract – This paper deals with six species belonging to four genera of Ponerinae, of which five occur in the Carpathian Basin. Only three Ponerinae species were known from Hungary until 2002. Cryptopone ochraceum (MAYR, 1855) is reported for the first time from the Carpathian Basin. Ponera testacea EMERY, 1895, which was formerly considered a synonym of P. coarctata (LAT-REILLE, 1802) is reported from the Carpathian Basin. A key for the identification of workers, gynes and males is given. With 20 figures.

**Key words** – Hymenoptera, Formicidae, Ponerinae, key, Hungary.

#### INTRODUCTION

Faunistical and taxonomical studies of the ants were neglected in the countries of the Carpathian Basin, even in Hungary. In the first decades of the 20th century only a few myrmecologists paid attention to the ants of our region. SOMFAI (1959) recorded 66 ant species from Hungary with only three Ponerinae species belonging to two genera. Later GALLÉ et al. (1998) published a check list of the Hungarian ant fauna and it still included three Ponerinae taxa belonging to three genera. Recently, new faunistical assessment was made in the Carpathian Basin, by which the ant-species number rose from 101 (GALLÉ et al. 1998) up to ca. 120. CsősZ and SEIFERT (2003) gave a redescription and rank elevation of the so far neglected Ponera testacea EMERY, 1895 which is also present in the Carpathian Basin and included in this paper. Despite any efforts only three Ponerinae taxa were known until 2002. The present paper lists altogether 6 Ponerinae species including the genus Cryptopone BROWN, 1963 reported for the first time in Carpathian Basin. A sixth species. Hypoponera eduardi (FOREL, 1894), which has not yet been found but expected to occur in our region, is also considered.

#### MEASUREMENTS AND INDICES

All measurements were taken from dry preparations using Olympus BX 40 microscope at magnification  $\times 100$ . All data were given in  $\mu m$ , accuracy of the measurements was  $\pm 2~\mu m$ . Measurements of hair length on the eyes and average distance of the fine cuticular points on the first gastral tergite were taken at magnification  $\times 200$ . The accuracy of the measurements taken at  $\times 200$  magnification was  $\pm 1~\mu m$ , as far as it was possible. Measured characters and the abbreviations are as follows:

Head length (HL) = Maximum head length excluding the mandibles. Occiput of *Ponera* species is concave, hence the measurement has to be taken from the mid-point of clypeus to the mid-point of occipital borderline, measured in median straight line. The head must be carefully turned until the maximum length would be visible.

Head width (HW) = Maximum head width in full-face view.

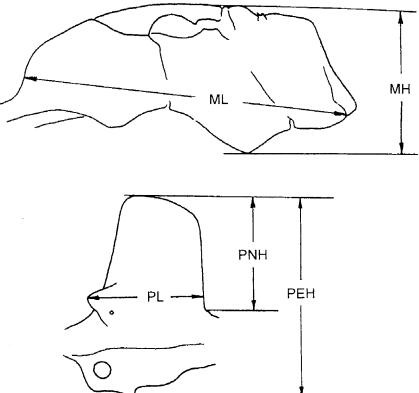
Head size (HS) = Arithmetic mean of HL and HW.

Frons width (FW) = Minimum distance between frontal carinae in full face-view.

Frontal lobe Width (FL) = Maximum width of frontal lobes in full-face view.

Scape length (SL) = Maximum straight-line scape length excluding articular condyle.

Mesosoma length (ML) = Diagonal length of alitrunk in profile. Measured as maximum distance from anterior border of promesonotum to the most posterior lower margin of the metapleural lobe (Fig. 2).



Figs 1-2. Morphometric measurements in Ponerinae ants after CSŐSZ & SEIFERT (2003). 1 = alitrunk (ML = mesosoma length, MH = mesosoma height), 2 = petiole (PL = petiole length, PNH = petiole node height, PEH = petiole height)

Mesosoma height (MH) = Maximum height of mesosoma, must be measured from the most ventral point of katepisternum to dors'al surface of mesonotum (Fig 2).

Petiole height (PEH) = Maximum height of petiole, from subpetiolar tooth-like process to top of petiole (Fig. 1).

Petiole node height (PNH) = Height of petiole node (Fig. 1).

Petiole length (PL) = Height of petiole node (Fig. 1).

Petiole width (PW) = Maximum width of petiole in dorsal view.

Petiole index (PI) = PH/PL.

Terminology of the body hairs or pilosity is based on the system used by Hölldobler & Wilson (1990). The adpressed (0–5°) hairs run parallel, or nearly parallel to the body surface. Decumbent hairs stand 10–15°, subdecumbent hair stands 30°, suberect hairs stand 35–45°, the erect hairs stand more than 45° from the body surface.

#### CHARACTERISATION OF PONERINAE ANTS

The subfamily Ponerinae is one of the most species-rich subfamilies, containing 42 genera and ca. 1300 species worldwide (BOLTON 1995). About 40 species occur in the Palaearctic Region. Ponerinae ants belong to the most ancient and primitive forms, both in their habits and structure. The subfamily Ponerinae is characterised by their petiole forming a thickened node which may be simple or variously ornamented, the first gastral segment separated from the rest of the gaster, but not markedly reduced in size. A well-developed sting is always present in the worker and female castes. All tibiae are with pectinate spurs. Wings, if present, have two closed cubital cells and one discoidal cell. Their colonies are mostly small, adults are all predaceous, their pupae are always enclosed in cocoons. The subfamily Ponerinae comprises a number of different tribes including 42 genera worldwide, width the majority distributed in the tropics and subtropics. In the Carpathian Basin five species representing four genera are known to occur. One of them belongs to the tribe Ectatommini, the rest of the species are members of the tribe Ponerini.

#### LIST OF THE SPECIES

# Ectatommini

Proceratium melinum (ROGER, 1860)

# Ponerini

Cryptopone ochraceum (MAYR, 1855)

Ponera coarctata (LATREILLE, 1802)

Ponera testacea EMERY, 1895

Hypoponera punctatissima (ROGER, 1859) Hypoponera eduardi (FOREL, 1894) [does not occur in the Carpatian Basin]

#### KEY TO THE SPECIES

Sting always present and well-visible workers and gynes
 Sting absent, only the genital apparatus is visible males

#### Workers and gynes

1 Tergite of the second gastral segment strongly arched so that the rest of the segments pointed anteriorly (Fig. 3)

Proceratium melinum (ROGER, 1860)

- Tergite of the second gastral segment not arched so that the remaining segments pointed posteriorly
- Petiole with a tooth-like ventral process in profile with an acute angle posteroventrally and with a fenestra anteriorly (Figs 12–13) (genus *Ponera* LATREILLE, 1804)
- Subpetiolar process in profile with a simple lobe, without an acute posteroventral angle and lacking an anteroventral fenestra (Fig. 9) 4
- 3 Subpetiolar tooth-like process small but distinct, not forming a well-developed triangular projection down- and backward (Fig. 12). Mesosoma of worker is longer than 860 µm (average ML: 893.05 [850–960])

Ponera coarctata (LATREILLE, 1802)

– Subpetiolar tooth-like process of petiole forming a well-visible triangular projection down- and backward (Fig. 13). Mesosoma of worker is shorter than 860 μm (average ML: 818.61 [760–870])

Ponera testacea EMERY, 1895

- Basal portion of mandibles with distinct subcircular or ovate pit dorsolaterally (Fig. 8). Extensor surface of middle tibiae with a row of outstanding bristles

  Cryptopone ochraceum (MAYR, 1855)
- Basal portion of mandibles lacking subcircular or ovate pit. Extensor surface of middle tibiae with fine hairs only

- Scape shorter, not reaching occipital margin (Fig. 19)

  Hypoponera punctatissima (ROGER, 1859)
- Scape longer, reaching occipital margin

Hypoponera eduardi (FOREL, 1894)

#### Males

Male of Hypoponera eduardi (FOREL, 1894) is missing from the key, because I have never met any of them.

Male ergatoid, wingless. Funiculus 11-segmented. Scape very long, as long as the first 7 funicular segments. (Fig. 18)

Hypoponera punctatissima (ROGER, 1859)

Male winged. Funiculus 12-segmented

2

- Wings darkened, distally weakening fomous. Scape very long, as long as the first 4 funicular segments. (Fig. 17) *Proceratium melinum* (ROGER, 1860)
- Wings not darkened, hyaline entirely. Scape much shorter
- Petiole ventrally without lamella; petiolar node subtriangular, symmetric, with broadly rounded dorsum (seen in profile). Scape and first funicular segment short, remaining segments are very long, twice as long as scape (Fig. 20)

  Cryptopone ochraceum (MAYR, 1855)
- Petiole ventrally with a well-wisible lamella; posterior surface of petiolar node steeper than anterior one, node asymmetric (seen in profile). Scape and first funicular segment short, remaining segments nearly as long as scape (Fig. 16) (Two *Ponera* species occur in the Carpathian Basin, without reliable characters to distinguish them. See the description below.)

Ponera LATREILLE, 1804

# DESCRIPTION OF THE SPECIES

Proceratium melinum (ROGER, 1860) (Figs 3–5, 17)

Ponera melina ROGER, 1860: 291.

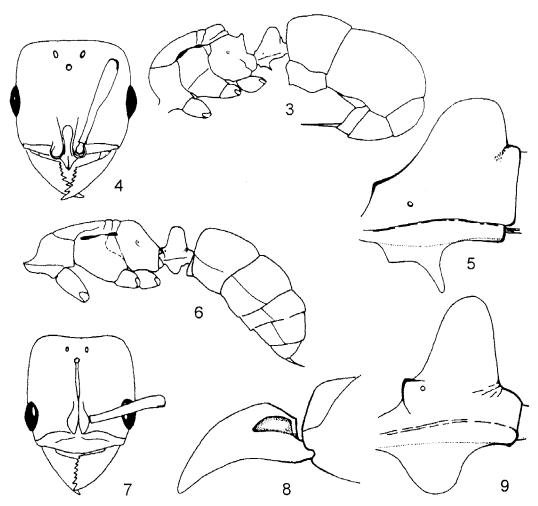
Proceratium melinum: MAYR, 1886: 438.

Sysphincta europaea FOREL, 1886: 158. Sysphincta fialai KRATOCHVIL, 1944: 54.

*Material examined* – Kiskunhalas (Hungary), 20.VIII.1924, leg. Szabó-Patay (2 gynes and 1 male); Révfülöp (Hungary), 1936, leg. Szabó-Patay (3 gynes); Gyula (Hungary) 20.VII.1996, leg. CSŐSZ (1 male); Krapina (Slovenia) leg. Hensch (1gyne).

Worker – Not collected in Hungary as yet; according to the literature similar to the gyne, see the description below.

*Gyne* – HL: 832.50; HW: 825.00; HS: 828.75; SL: 577.50; ML: 1132.50; MH: 785.00; PEH: 512.50; PH: 203.33; HL/HW: 1.01; HL/SL: 1.44. Average body length 3.4–3.6 mm. Head nearly\_as long as broad, or slightly longer, cephalic index (HL/HW) 1.01. Colour light brown to reddish brown.



Figs 3–9. 3–5. Proceratium melinum (ROGER, 1860): 3 = lateral view of gyne, 4 = head of gyne in dorsal view, 5 = petiole of gyne, lateral view. 6–9. Cryptopone ochraceum (MAYR, 1855): 6 = lateral view of gyne, 7 = head of gyne in dorsal view, 8 = basal portion of mandibles with a dorso-lateral ovate pit, 9 = petiole of gyne, lateral view

Mandibles triangular, with a row of irregular minute, hardly visible denticles on the masticatory border with 3 well-developed apical teeth. Clypeus acute, triangular in dorsal wiew. Whole body with dense, short decumbent hairs. Extensor surface of tibiae and scapes with outstanding suberect or erect hairs. Triangular area between ocelli darker than rest of head. Subpetiolar process in profile with a large lobe, with a long, acute posteroventral tip. Anteroventral fenestra lacking. Gaster large and bulbous, tergite of the second gastral segment strongly arched so that the rest of the segments pointed anteriorly. First gastral tergite with densely pubescent hairs and with coarse erect or suberect hairs.

Male – Average body length 3.5 mm, entirely dark brown, or blackish. Whole body with consistent hairs. Funiculus 12-segmented. Scapus long, as long as first four funicular segments. Head wider than thorax. Dorsum of petiole asymmetric, rounded in profile. Petiole with a smaller ventral lamella and a well developed acute toothlike process.

Distribution – Very few specimens have been collected in the Carpathian Basin. Localities are Kiskunhalas (Hungary), Révfülöp (Hungary), Gyula (Hungary) and Krapina (Slovenia). This is a Mediterranean species known to occur in Albania, Greece (AGOSTI & COLLINGWOOD 1987), Bulgaria, France, the former Yugoslavia, Italy, Moravia, Romania, Ukraine (BARONI-URBANI 1971) and South Austria (SEIFERT 1996).

## Cryptopone ochraceum (MAYR, 1855) (Figs 6–9, 20)

Ponera ochracea MAYR, 1855 p. 390.

Euponera (Pseudoponera) ochracea: EMERY 1909: 364. Euponera (Trachymesopus) ochracea: EMERY 1911: 84.

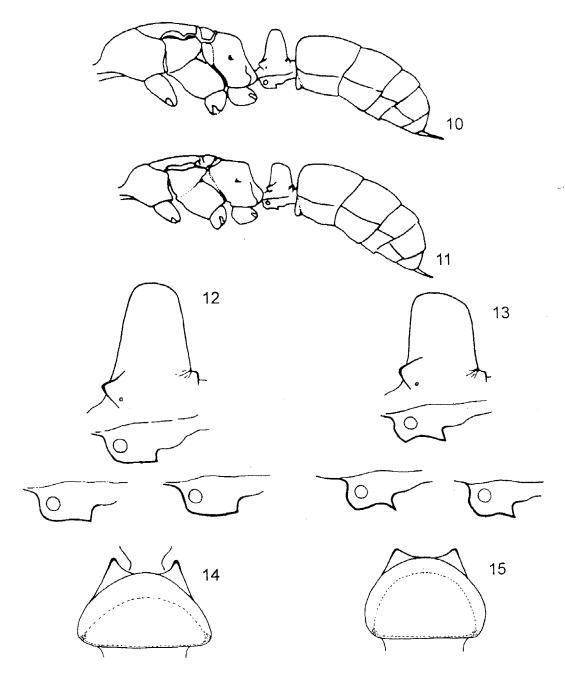
Cryptopone ochraceum: BROWN 1963: 6.

Material examined – Ruma, South Slavonia (Serbia), leg. Dr. Hensch (1 gyne and 1 male); Szeghalom (Hungary), 5.IX.2000, leg. Csősz (1 gyne); Debrecen, Botanical Garden (Hungary) 19.IX.2002, leg. Tartally (1 gyne); Herkulesfürdő (Baile Herculane, Romania), 19.IX.1998, leg. I. Máthé (1 gyne).

Worker - Not known from Hungary, according to the literature similar to the gyne, see the description below.

Gyne – HL: 850; HW: 770; HS: 810; SL: 600; ML: 1375; MH: 680; PEH: 575; PH: 255; HL/HW: 1.01; HL/SL: 1.42. Average body length 3.4–3.6 mm. Head longer than broad, cephalic index (HL/HW) 1.10. Colour light brown to reddish brown. Mandibles triangular, with 6–8 more or less similar teeth on masticatory border. Basal portion of mandibles with distinct circular or semi-circular pit or fovea located on top and to outer side. Clypeus with barely distinct raised longitudinal carina. Whole body with thick decumbent hairs. Extensor surface of middle tibiae with a row of outstanding bristles. Triangular area between ocelli much darker than rest of head. Petiole with a simple, large ventral lamella, without fenestra.

Male – Average body length 3.3–3.8 mm, black or brownish black. Whole body with consistent hairs. Head nearly as long as broad. Eyes nearly half as long as sides of head. Funiculus 12-segmented. Scapus much shorter than second funicular segment. First funicular segment slightly shorter than scapus. Thorax as broad as head. Dorsum of petiole rounded in profile. Petiole without ventral lamella or toothlike process.



Figs 10–15. Ponera details: 10 = lateral view of P. coarctata (LATREILLE, 1802) gyne, 11 = lateral view of P. testacea EMERY, 1895 gyne, 12 = petiole of P. coarctata (LATREILLE, 1802) worker, lateral view with the extremes below, 13 = petiole of P. testacea EMERY, 1895 worker, lateral view with the extremes below, 14 = petiole of P. coarctata (LATREILLE, 1802) worker, dorsal view, 15 = petiole of P. testacea EMERY, 1895 worker, dorsal view

Distribution – This is the first report on this species from the Carpathian Basin. Very few specimens have been collected so far. Localities are Ruma (South Slavonia in Serbia), Szeghalom (Hungary), Debrecen (Hungary), Herkulesfürdő (Baile Herculane, Romania). Workers have not been found in the Carpathian Basin as yet. This species is distributed mainly in East Europe, but known also from Italy. Corsica, Southern France, Romania, Crimea (EMERY 1909), Bulgaria, former Yugoslavia (AGOSTI & COLLINGWOOD 1987) and Southern Switzerland (SEIFERT 1996).

# Hypoponera punctatissima (ROGER, 1859) (Figs 18–19)

Ponera punctatissima ROGER, 1859: 246 Hypoponera punctatissima: TAYLOR 1967b: 12.

Material examined – Budapest (Hungary), leg: Szabó (3 workers); Szentes, greenhouse (Hungary), 19.V.1999, leg GALLÉ (a nest series with 6 gynes, 4 males and 8 workers)

Worker – Average body length 2.5–3.0 mm. Colour brownish yellow to dark brown. Whole body surface including legs and scapes with very dense, fine pubescence. Mandibles with numerous small irregular teeth and with 3 or 4 apical teeth at the tip of masticatory border. Maxillary palps one-segmented, not terminated by a hair. Scape short, not reaching occipital margin. Funiculus 11-segmented, scape longer than on male, as long as first 9 funicular segments. Subpetiolar process of petiole in profile with a simple lobe, without acute posteroventral angle and lacking anteroventral fenestra. Eyes small, but larger on average than eyes of *Ponera* species.

*Gyne* – Similar to worker. Average body length more than 3.5 mm. Colour black, rarely dark brown. Head slightly broader than in *Ponera* species. Eyes larger than in *Ponera* species, extending very near to base of mandibles. Subpetiolar process of petiole in profile with a simple lobe, without acute posteroventral angle and lacking anteroventral fenestra.

Male – Apterous, ergatoid, very similar to workers but head clearly larger. Average body length more than 3.5 mm. Mandibles broader and with stronger teeth than in workers. Funiculus 11-segmented, scape shorter than in workers, but much longer than in – otherwise always winged – *Ponera* males, scape as long as first 7 funicular segments. Coulour shining reddish yellow to light yellow.

Distribution and biology – According to TAYLOR (1967a) the genus Hypoponera SANTSCHI, 1938 can be easily distinguished from the otherwise similar Ponera LATREILLE, 1804 by the absence of a bilateral subpetiolar tooth-like process and one-segmented maxillary palps. The genus Hypoponera includes about 133 small, hypogaeic species distributed mainly in the tropics, and only two species are known in Southern Europe (AGOSTI & COLLINGWOOD 1987). Only one, Hypoponera punctatissima as an adventive element occurs in the Carpathian Basin. Known localities are Budapest (Hungary), Szentes, greenhouse, (Hungary), Érd, (Hungary), Badacsony (Hungary), the latter two data were published by SOMFAI (1959). The majority of the recorded occurrences are from heated premises such as greenhouses. Queens sometimes can be captured by sweeping the vegetation or by light traps. Colonies consist of hundreds of animals and many alate queens may be produced to fly during the end of summer. The apterous males remain in the nests.

## Hypoponera eduardi (FOREL, 1894)

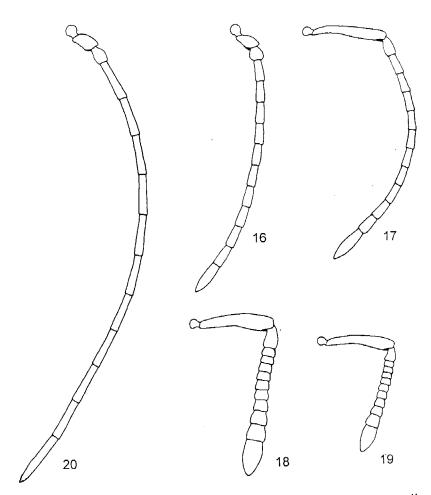
Ponera eduardi FOREL, 1894: 15.

Ponera punctatissima eduardi: EMERY: 1895: 296.

Hypoponera eduardi: TAYLOR 1967b: 12.

Material examined – Bosnia: Čapljina (Bosnia), leg. Wgth. [= Winneguth] (1 worker); Camargue, S. Maria de la Mer (France), 1919, leg. A. Chobaut (9 workers).

Worker – HL: 702.80 [16.43]; HW: 566.33 [16.41]; HS: 634.20 [14.82]; FW: 73.64 [6.07]; FI: 160.87 [8.01]; SL: 508.05 [15.18]; ML: 893.05 [108.66]; PEH: 428.77 [14.25]; PH: 234.73 [10.38]; PL: 218.45 [6.96]; PW: 302.79 [12.06]; PS: 262.46 [11.22]; CI: 1.20 [0.22]; PI: 1.04 [0.20]; PH/PS: 0.85 [0.20]; HL/SL: 1.36 [0.18]. Average body length 3.0 mm. Colour brown to yellowish brown somewhat. Whole body surface including legs, scapes and petiole with sparse, very fine pubescence. Mandibles with numerous small irregular teeth and with 3 or 4 apical teeth at the tip of masticatory



Figs 16–20. Scapes of Ponerinae males. 16 = Ponera sp. male, 17 = Proceratium melinum (ROGER, 1860) male, 18 = Hypoponera punctatissima (ROGER, 1859) male, 19 = H. punctatissima (ROGER, 1859) worker, 20 = Cryptopone ochraceum (MAYR, 1855) male

border. Maxillary palps one-segmented, not terminated by a hair. Scape long, reaching occipital margin. Subpetiolar process of petiole in profile with a simple lobe, without acute posteroventral angle and lacking anteroventral fenestra. Eyes small, but larger on average than eyes of *Ponera* species.

Gyne and male - Have not been collected in the Carpathian Basin as yet.

Distribution and biology – Hypoponera eduardii is very abundant along the Mediterranean parts of the Atlantic coasts as well as the Mediterranean Sea. This is one of the most abundant Ponerinae species in France (BERNARD 1967). Occurs in Bulgaria, Greece, Turkey, former Yugoslavia (AGOSTI & COLLINGWOOD 1987). This species is unknown in the Carpathian Basin; the nearest known locality is Čapljina, ca. 20 km south of Mostar (Bosnia). Colonies consist of thousands of workers with many queens. Nuptial flight takes place in August and September.

# Ponera coarctata (LATREILLE, 1802) (Figs 10, 12, 14, 16)

Formica coarctata LATREILLE, 1802a: 65. Formica contracta: LATREILLE, 1802b: 195; Ponera coarctata: LATREILLE, 1804: 178. Ponera coarctata var. lucida EMERY, 1898: 130.

Material examined – 182 coarctata workers and 51 coarctata gynes were investigated with metrical methods. All metrical data were taken after CSŐSZ & SEIFERT (2003), but the present paper contains CSŐSZ's data only.

*Worker* – HL: 702.80 [16.43]; HW: 566.33 [16.41]; HS: 634.20 [14.82]; FW: 73.64 [6.07]; FI: 160.87 [8.01]; SL: 508.05 [15.18]; ML: 893.05 [108.66]; PEH: 428.77 [14.25]; PH: 234.73 [10.38]; PL: 218.45 [6.96]; PW: 302.79 [12.06]; PS: 262.46 [11.22]; CI: 1.20 [0.22]; PI: 1.04 [0.20]; PH/PS: 0.85 [0.20]; HL/SL: 1.36 [0.18]. Average body length 3.0–3.5 mm. Colour brown to dark brown, sometimes brownish black. Mandibles triangular, with 3 apical teeth at the tip of masticatory border, followed by a regular series of 9–14 minute denticles. Clypeus slightly produced anteriorly, with a rather distinct raised longitudinal carina. Mesonotal furrow between mesonotum and anepisternum well-developed. Petiole high and scale-like. Subpetiolar tooth-like process not forming a well-developed triangular projection down- and backward. Subpetiolar fenestra present. First gastral tergit with dense vestiture. Average distance of fine cuticular points on first gastral tergite 19 μm [17.5–21μm].

Gyne-HL: 780.00~[25.12];~HW: 643.67~[17.88];~HS: 711.20~[21.10];~FW: 84.60~[6.09];~Fl: 178.20~[10.72];~SL: 561.00~[19.76];~ML: 1143.33~[48.47];~MH: 573.00~[33.27];~PEH: 510.00~[16.04];~PH: 280.000~[12.54];~PL: 245.00~[7.07];~PW: 380.00~[12.75];~CI: 1.21~[0.02];~ML/MH: 2.00~[0.07];~PI: 1.14~[0.08];~HL/SL: 1.39~[0.02].~Similar to worker.~Average body length more than 3.5~mm.~Colour brown to dark brown, sometimes black.~Alitrunk robust in profile.~Metanotal furrow between katepisternum and anepisternum well-developed and always visible. Petiole higher and more scale-like than on <math display="inline">Ponera~testacea. Subpetiolar tooth-like process not forming well-developed triangular projection down- and backward. First gastral tergit with dense hairs.

Male – Always winged. Average body length more than 3.00 mm. Colour always black. Whole body with decumbent hairs. Head with dense, long hairs. Eyes with long hairs among facets. Alitrunk more robust in profile than on *Ponera testacea*. Funiculus 12-segmented.

Distribution and biology – The genus Ponera includes about 30 small hypogaeic species worldwide. TAYLOR (1967) mentioned 28 species distributed mainly in the Indo-Australian region. Some representatives inhabit the North African temperate zone, two of them occur in Europe as well. A few species occur in the eastern coast of North America. BOLTON (1995) gave a figure of 33 extant Ponera taxa, with 5 species from the Palaearctic region.

According to the examined material, *Ponera coarctata* is widely distributed in the Carpathian Basin as well as everywhere in Europe except the northernmost areas. This species inhabits various habitat types, including loess grasslands as well as forests, and occurs mainly in mesoxerothermous habitats.

# Ponera testacea EMERY, 1895 (Figs 11, 13, 15–16)

Ponera coarctata var. testacea EMERY, 1895: 294.

Ponera coarctata var. testacea: TAYLOR, 1967a: 21 [as junior synonym of coarctata].

Ponera testacea: Csősz & Seifert 2003 [resurrected from synonymy].

Material examined – A total of 147 workers and 31 gynes were investigated with metrical method, all metrical data were taken after Csősz & SEIFERT (2003), but the present paper contains Csősz's data only.

*Worker* – HL: 645.46 [16.46]; HW: 505.19 [13.55]; HS: 576.48 [15.79]; FW: 66.37 [5.24]; FI: 139.62 [6.01]; SL: 463.94 [13.15]; ML: 818.61 [27.43]; PEH: 372.40 [12.38]; PH: 198.75 [7.13]; PL: 209.62 [8.45]; PW: 288.70 [10.14]; PS: 249.05 [7.77]; CI: 1.28 [0.02]; PI: 0.95 [0.04]; PH/PS: 0.80 [0.03]; HL/SL: 1.39 [0.02]. Small, slender species. Average body length 2.5–3.0 mm. Colour light ochraceous to brownish yellow. Whole body with decumbent hairs. Mandibles triangular, with 3 apical teeth at the tip of masticatory border, followed by a regular series of 9–14 minute denticles. Clypeus produced anteriorly, with a rather distinct raised longitudinal carina. Eyes very small, or invisible to absent, consisting of 0–3 facets. Mesonotal furrow often missing between mesonotum and anepisternum, or hardly visible. Petiole low and stubby in profile. Dorsal surface of petiole large and flat. Subpetiolar tooth-like process forming a well-visible triangular projection down- and backward. First gastral tergite with dense vestiture. Average distance of fine cuticular points on the first gastral tergite 14.5 μm [13–15.5 μm] per specimens.

Gyne – HL: 719.62 [18.73]; HW: 582.69 [16.01]; HS: 651.15 [17.40]; FW: 74.08 [5.35]; FI: 157.15 [8.28]; SL: 524.17 [13.76]; ML: 1051.70 [31.10]; MH: 490.00 [11.83]; PEH: 434.55 [17.95]; PH: 237.22 [12.28]; PL: 233.55 [9.35]; PW: 339.50 [16.20]; CI: 1.24 [0.02]; PI: 1.003 [0.04]; HL/SL: 1.37 [0.03]. Similar to worker. Average body length 3.0 mm. Colour light ochraceous to brownish yellow. Whole body with decumbent hairs. Frontal furrow clearly reaching the anteriormost ocellus. Eyes smaller than on *Ponera coarctata*. Tibiae with consistent short, decumbent hairs only. Alitrunk slender in lateral view. Metanotal furrow between katepisternum and anepisternum shallow, hardly visible, or sometimes missing. Petiole low and stubby in profile. Subpetiolar tooth-like process often forming a well-visible triangular projection down- and backward. First gastral tergite with dense vestiture.

Male - Always winged. Generally smaller than male of *Ponera coarctata*. Average body length smaller than 3.00 mm. Colour always black. Whole body with decumbent hairs. Head with

sparse shorter hairs. Eyes with long hairs among facets. Alitrunk less robust in profile than on *Ponera coarctata*. Funiculus 12-segmented.

Distribution and biology – For several decades only one Ponera species, i.e. P. coarctata (LATREILLE) was mentioned from Europe. Based on morphological and morphometrical characters, CSŐSZ and SEIFERT (2003) pointed out that Ponera testacea, which was earlier treated as a junior synonym of P. coarctata, is proved to be a valid species besides the widely distributed P. coarctata. According to the examined materials, Ponera testacea and P. coarctata are sympatric species in Central South Europe. Ponera testacea is less common than its sibling species, P. coarctata, with 20 known localities in the Carpathian Basin. This species is associated with open and xerothermic limestone and dolomite grasslands, siliceous rock or sand. The situation in other countries is almost unknown. A few data of Ponera testacea from Germany, Italy, Switzerland and Romania do not suggest rarity, since voucher specimens for P. coarctata are similarly scarce.

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