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Central-European species of *Microchelonus* SZÉPLIGETI (Hymenoptera, Braconidae) with very big apical metasomal aperture of males

V. TOBIAS & A. LOZAN

Abstract: The eleven species of genus *Microchelonus* SZÉPLIGETI - *M. magnifissus* TOBIAS, *M. fenestratus* (NEES), *M. ibericus* TOBIAS, *M. risorius* (REINHARD), M. fumipennis TOBIAS, *M. temporalis* TOBIAS, *M. scabrosus* (SZÉPLIGETI), *M. talitzkii* TOBIAS, *M. foersteri* TOBIAS, including two new species (*M. macrellips* sp.n. and *M. moravicus* sp.n.) with very big apical metasomal aperture of males from central Europe (former Czechoslovakia) and neighboring territories (Austria, Romania, Moldova) are explored (*M. talitzkii* mentioned only in the key, supposing that could occur in Central Europe). The female of *M. magnifissus* is described for the first time. A variability of complex characters, especially apical metasomal aperture of males, is discussed. An illustrated key to species is given.

Key words: Hymenoptera, Braconidae, *Microchelonus*, redescription, new species, Central Europe.

Introduction

The work is based on the material from Moravian Museum (Brno, Czech Republic), partially completed by material from the neighboring territories (Slovakia, Austria, Romania, Moldova). The all eleven investigated species are characterized by very developed apical metasomal aperture of males, chink-formed or oval (sometimes oval triangular-formed), almost as broad as carapace or at least much more (rarely a little more) than half of it. The key species for females has not been done (only descriptions of some are available). First, the males of such species as *Microchelonus magnifissus* TOBIAS, *M. risorius* (REINHARD) and *M. fumipennis* TOBIAS clearly differ in many features, meanwhile differences of females are slimly (probably, it is the cause that female of *M. magnifissus* has so far been unknown, described in the present paper for the first time). Second, the proposed key represents only a sum of incomplete parts of a general key and identification of the such not related species as *M. temporalis* TOBIAS and *M. talitzkii* TOBIAS[1] by using this key could be inexpediency because the precise identification of females when missing appropriates males is hardly probably.

Almost all labels' data from the material of Moravian Museum have been uniformed and

[1] *M. talitzkii*, described from the southwest Europe (Moldova), is mentioned only in the key, supposing that could be occurring in Central Europe.

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adjusted to the new status of two countries (e.g. from former Czechoslovakia). Thus, Czech Republic is noted by ČR (with indication of the provinces Moravia and Bohemia), Slovakia by SK and, respectively, Austria – AU, Romania – RO and Moldova – MD.

The following abbreviations are used: POL – postocellar line; OOL – ocular-ocellar line; Od – maximal diameter of lateral ocellus; LO – length of eye (dorsal view); LD – longitudinal diameter of eye; TD – transverse diameter of eye; R – marginal (radial) cell of forewing; Rm2 – 2nd submarginal (2nd cubital=areolet) cell of forewing; r – first sector of radial vein of forewing; 3-SR – second sector of radial vein of forewing; SR1 – third sector of radial vein of forewing; cu-a – nervulus in forewing; 1-CU1 – distance from nervulus to basal vein of forewing; AMA – apical metasomal aperture of male.

Species redescriptions

Microchelonus magnifissus TOBIAS 1986 (Figs 1-10)

Microchelonus fissus SZÉPLIGETI 1900: 218.
Microchelonus magniffisus TOBIAS 1986: 327. (nom.n. for *fissus* SZÉPLIGETI nec PROVANCHER)

Material examined: ČR, Mikovice, VII.1936, lgt. Hoffer ["fissa ♂"], 1♂; ČR, Mikovice, VII.1939, lgt. Hoffer ["fissa rugoseut ♂ 20"], 1♂; ČR, Mikovice, VII.1939, lgt. Hoffer ["fissa ♂19"], 2♂♂; SK, Piliš, 1.VIII.1937, lgt. Hoffer ["fissa ♂19"sinu"], 1♂; ČR, Čejč, VI.1940, lgt. Hoffer; ČR, Čejč, VI.1940, lgt. Hoffer ["*Chella* ♂19 *risoria* REINH."], 1♂; ČR, Čejč, VI.1940 ["fissa ♂"], 1♂; ČR, Mohelno, lgt. Gregor ["fissa ♂"], 1♂; ČR, Brno-Hády, Moravia, VII.1941, lgt. Hoffer, 1♂; ČR, Bzenec, Moravia, VII.1940, lgt. Hoffer, 3♂♂; ČR, Strážnice, Moravia, VIII.1942, lgt. Hoffer, 1♂.

Male (Figs 1-7)

Dimensions: Body length 3.8mm.

Head: Roundly narrowed behind eyes, about temples narrower than about eyes, about twice as broad as long, frontally 1.8 as broad as high. Ocellar triangle 1.5 times shorter than OOL. POL 2.5 times longer than Od. Temples 1.4 length of LO. In frontal view eye 2.2 times as high as long, 1.8 times as long as malar space. Face twice as broad as high and about twice as broad as LD, twice higher than clypeus. Maxillary palpi as long as height of face and clypeus combined. Antennae with 19 segments, shorter than body. Scape widened, almost twice as wide as flagellum, 2.5 times as long as wide; 1st flagellum segment 4 times as long as wide, apical segments twice as long as wide.

Mesosoma: 1.3 times as long as high. Propodeum with well-developed lateral tubercles.

Wings: Length of cell R along metacarp as long as length of pterostigma. Cell R 1.5 times greater than Rm2. 3-SR 1.5 times the length of r and 3 times the length of SR1. 1-CU1 shorter than cu-a.

Legs: Hind femur 3.5 times as long as broad. Inner spur of hind tibia 2.5 times shorter than 1st metatarsal segment; 5th segment as long as 4th, 1.5 times shorter than 2nd.

Metasoma: Carapace about twice as long as maximal broad. In lateral view posteriorly enlarged, twice as high posteriorly as anteriorly. AMA chink-formed, as broad as carapace, about half as perimeter as carapace, with almost parallel sides; in posterior end about 0.25 height of carapace, in lateral view about 0.5 length of carapace.

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S c u l p t u r e : Head pointed. Face and frons fine but somewhat converse longitudinally striate. Vertex finely transversely striate. Temple finely longitudinally striate. Clypeus scarcely punctate, shining. Mesonotum rugose punctate, pre-scutellar depression and area before it strongly striate with longitudinal rows. Scutellum longitudinally rugose-striate. Propodeum areolate-rugulose, with distinct longitudinal elements; two medial longitudinal carinas ending at transverse carina and looking as two teeth. Carapace longitudinally rugulose undulate basally, continuing in more finely longitudinal winding sculpture till its 2/3, apex without longitudinal sculpture.

C o l o u r : Body black. Palpi brown. Area around AMA dark brown with violet hue. Legs dark-brown: coxae almost black; fore femora brown with yellow apex, tibiae yellowish, tarsi yellowish with brown apex; hind femora dark-brown, tibiae brown with brown-yellowish basal part, tarsi light-brown with darker apex. Wings faintly infuscate with a transparent belt along medial vein. Pterostigma and veins brown.

V a r i a b i l i t y : Antennae with 19-20 segments. Body length 3.1-4.0 mm (from 13 specimens: 2 possessing 4mm, 3 - 3.9mm, 3 - 3.8mm, 2 –3.7mm, 2 - 3.6mm, and 1 3.1mm). AMA with almost parallel or slightly incurved sides; it varies: in lateral view from wide (almost 1/2 height of carapace [23:10]) to narrow (1/4 or 1/3 height of carapace [23:6]). In lateral view, AMA occupies almost 1/2 length of carapace (62:30) or shorter, but much longer than 1/3 length (62:25). Two medial longitudinal carinas of propodeum are more or less developed, lateral tubercles are small and sharp (by small body) or bigger and obtuse. By some light, prothorax and carapace dark-brownish.

D i a g n o s i s : The males of this species are very distinct because of their AMA (dimension and violet hue of aperture are also significant features).

F e m a l e (Figs 8-10)

M a t e r i a l e x a m i n e d : ČR, Strážnice, Moravia, VIII.1940, lgt. Hoffer, 2♀♀.

D i m e n s i o n s : Body length 3.8mm.

H e a d : As for male except as follows. Ocelli bigger. Ocellar triangle almost twice times shorter than OOL. POL twice longer than Od. Antennae as long as head and mesosoma combined. 1st flagellum segment 3 times as long as wide, apical segments 1.5 times as long as wide.

M e s o s o m a : As for male, but longer (1.5 times as long as high).

W i n g s : As for male except cell R being twice greater than Cu1, 3-SR equaling to r in length but 3.5 times shorter than SR1.

L e g s : Hind femur 4 times as long as broad. Inner spur of hind tibia as long as 5th metatarsal segment, 0.3 length of 1st.

M e t a s o m a : Carapace 1.85 times as long as broad. In lateral view incurved basally on its 0.3 height at apex. Ovipositor thin and longer, almost 0.25 length of carapace.

S c u l p t u r e : As for male.

C o l o u r : As for male except as follows. Fore femora brown with yellowish apex, first tibiae yellow and tarsi yellowish with brown apex, second tibiae brown-yellowish and tarsi brown-yellowish with darker apex; hind femora dark, tibiae dark-brown with brown-yellowish basal part, tarsi light-brown with darker apex. Pterostigma brown, basal veins yellowish, apical veins brown.

D i s t r i b u t i o n : Central Europe, Yakutia, Kasakhstsn, Mongolia.

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Microchelonus fenestratus **(NEES 1816) (Figs 11-18)**

Chelonus fenestratus NEES 1816: 269.
Microchelonus fenestratus (NEES), TOBIAS: 1986, 326.
Microchelonus fenestratus (NEES), PAPP: 1997: 7 (neotype).
Microchelonus fenestratus (NEES), TOBIAS: 2001: 155, 163, 175.

M a t e r i a l e x a m i n e d : ČR, Brno, Moravia, 5.VI.1942, lgt. Šnoflák ["*risoria* ♂"], 1♂; SK, Somotor, 13.VIII.1950, lgt. Hoffer ["*risoria* ♂ ml macul"], 1♂.

M a l e (Figs 11-15)

D i m e n s i o n s : Body length 3.6-3.8mm.

H e a d : Roundly narrowed behind eyes, about temples narrower than about eyes, 1.85 times as broad as long, in frontal view as broad as high, 1.1 times as wide as mesosoma. Ocelli small. Ocellar triangle 1.5 times shorter than OOL. POL 4 times longer than Od. Temples twice longer than LO. In frontal view eye 2.2 times as high as long, 1.8 times as long as malar space. Face 1.8 as broad as high and 1.6 as broad as LD, twice higher than clypeus. Maxillary palpi as long as height of face and clypeus combined. Antennae shorter than body. Scape widened, twice as wide as flagellum, 2.5 times as long as wide; 1st flagellum segment 3 times as long as wide, apical segments twice as long as wide.

M e s o s o m a : 1.3 times longer than high. Propodeum with well-developed transverse carina and lateral tubercles.

W i n g s : Length of cell R along metacarp as long as length of pterostigma. Cell R 1.5 times greater than Rm2. 3-SR 1.2 times as long as r, 3 times shorter than SR1. 1-CU1 longer than cu-a.

L e g s : Hind femur 4 times as long as broad. Outer spur of hind tibiae scarcely longer than inner, almost reaching 0.5 (much longer than 0.3) length of 1st metatarsal segment. 5th metatarsal segment as long as 4th and 1.5 times shorter than 2nd.

M e t a s o m a : Carapace twice as long as maximal broad, laterally incurved on its 0.3 height. In lateral view posteriorly enlarged, 2.5 times as high posteriorly as anteriorly. AMA chink-formed, 0.9 as broad as carapace; in back view about 0.25 height and in lateral view about 0.25 length of carapace.

S c u l p t u r e : Head dense and finely pointed. Face fine transversal striate with longitudinal sculpture about eyes. Frons finely sculptured. Vertex finely transversely striate and temples finely longitudinally striate. Clypeus finely punctate with polished transversal rows, shining. Mesonotum rugose-rugulose punctate and shining, pre-scutellar depression and area before it strongly striate with longitudinal rows. Scutum anteriorly more or less rugose punctate, sides of mesonotum roughly punctate. Scutellum finely punctate, shining. Propodeum areolate-rugulose, with two longitudinal carinas and distinct longitudinal elements. Carapace longitudinally undulate rugulose on its 1/2 almost reaching its 2/3, apex without longitudinal elements of sculpture.

C o l o u r : Body black. Palpi brown. Scape partially brown or brown-yellowish. Carapace basally with pair of yellow or yellow-brownish spots. Legs: coxae dark, almost black; fore femora dark-brown with yellow apex, tibiae yellowish, tarsi yellowish with brown apex; hind femora dark-brown, tibiae brown with yellowish central part (looking as a yellow belt), tarsi brown-yellowish with dark apex. Wings faintly infuscate with a transparent belt along medial vein. Pterostigma and veins brown.

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Variability: The two investigated specimens are almost identical. AMA of a second one's chink-formed, laterally about 0.3 length of carapace. Carapaces basally with more or less distinct yellow spots, at least with track of spots.

Female (Figs 15-18)

Material examined: ČR, Brno, Moravia, 5.VI.1942, lgt. Šnoflak [♀ 16], 1♀.

Dimensions: Body length 3.7mm.

Head: As for male except as follows. As wide as mesosoma, temple 1.4 times as LO. Antennae with 16 segments, scarcely longer than head and metasoma combined, apical segments 1.5-2 times as long as wide.

Mesosoma: 1.4 times as long as high. Propodeum with unclear two medial longitudinal carinas, but with well developed transverse carina and lateral tubercles.

Wings: As for male except as follows. 3-SR and r equal in length, but separately 3 times shorter than SR1. 1-CU1 equals to cu-a.

Legs: As for male but outer spur of hind tibiae as long as inner, almost reaching 1/2 of 1st metatarsal segment.

Metasoma: Carapace shorter than of male, 1.7 times as long as broad. In lateral view enlarged posteriorly and incurved on its 0.3 height, twice as high posteriorly as anteriorly. Ovipositor hidden.

Sculpture: As for male except as follows. Head finely pointed. Face dense punctate, fine longitudinally striate about eyes with more or less developed central carina. Clypeus finely punctate, shining. Sides of mesonotum areolate-punctate with unclear longitudinal sculpture. Propodeum areolate-rugulose, without distinct longitudinal elements. Carapace longitudinally undulate rugulose on its 2/3, apex without longitudinal elements of sculpture.

Colour: As for male except carapace with a larger pair of yellow or yellow-brownish spots, almost forming a belt.

Distribution: Almost all Palaearctic region.

Microchelonus ibericus TOBIAS 2001 (Figs 19-23)

Microchelonus ibericus TOBIAS 2001: 2001a: 1332.

Material examined: ČR, Moravany, Moravia, 5.V.1942, lgt. Šnoflák, 1♂; ČR, Pouzdřany, Moravia, 21.V.1942, lgt. Šnoflák, 1♂; ČR, Ražice, Bohemia, 15.VII.1945, lgt. Hoffer, 1♂.

Male

Dimensions: Body length 4.0mm.

Head: Widened and rounded behind eyes, about as wide as mesosoma, 1.7 times as broad as long, in frontal view almost as broad as high. Ocelli small. Ocellar triangle shorter than OOL. POL 5 times longer than Od. Temples 1.4 length of LO. In frontal view eye 2.2 times as high as broad, 1.8 times as long as malar space. Face about twice as broad as high and 1.8 as broad as LO, twice higher than clypeus. Maxillary palpi short, as long as height of face. Scape widened, almost twice as wide as flagellum, 2.5 times as long as wide; 1st flagellum segment 3 times as long as wide.

Mesosoma: 1.5 times as long as high. Propodeum with unclear medial longitudinal carinas, with well developed transverse carina and lateral tubercles.

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W i n g s : Length of cell R along metacarp almost as long as length of pterostigma. Cell R 1.5 times greater than Rm2. 3-SR 1.2 times as long as r, 3 times shorter than SR1. 1-CU1 and cu-a equal in length.

L e g s : Hind femur almost 4 times as long as broad. Outer spur of hind tibiae slightly longer than inner, almost reaching 0.5 length of 1st metatarsal segment. 5th segment as long as 4th and 1.7 times shorter than 2nd.

M e t a s o m a : Carapace elongate-oviform, twice as long as maximal broad, laterally incurved on its 0.3 height at apex. In lateral view enlarged posteriorly, twice as high posteriorly as anteriorly. AMA chink-formed and narrowed laterally (posterior end), almost as broad as carapace; in back view, about 0.25 height, in lateral view about 0.25 length of carapace.

S c u l p t u r e : Head dense and finely pointed. Face fine transversal striate with longitudinal sculpture about eyes. Frons and vertex fine transverse striate. Temples finely longitudinally striate. Clypeus finely punctate, shining. Mesonotum rugose punctate, prescutellar depression strongly sculptured and area before it with longitudinal rugosity. Scutum anteriorly weakly punctate and shining. Sides of mesonotum roughly punctate. Scutellum finely punctate, shining. Propodeum rugulose, without clear medial longitudinal carinas and longitudinal elements. Carapace basally with longitudinal rugulose undulations almost reaching its 2/3, apex without longitudinal sculpture.

C o l o u r : Body black. Palpi brown. Scape partially dark-brownish. Legs: coxae dark, almost black; fore femora dark-brown with yellow apex, tibiae yellowish, tarsi yellowish with brown apex; hind femora dark, tibiae brown with dark third part, tarsi brown-yellowish with darker apex. Wings faintly infuscate with a transparent belt along medial vein. Pterostigma and veins brown.

V a r i a b i l i t y : Body length 3.9-4.1mm. AMA even longer, in lateral view about 0.3 length of carapace.

D i s t r i b u t i o n : Europe (Spain, Czech Republic).

Microchelonus risorius (REINHARD) (Figs 24-34)

Chelonus risorius REINHARD 1867: 360
Neochelonella fissuralis TOBIAS 1964: 196
Microchelonus fissuralis (TOBIAS) 1986: 327
Microchelonus risorius (REINHARD), TOBIAS 2000: 542

M a t e r i a l e x a m i n e d : ČR, Ubučin, 27.VII.1928, lgt. Gregor, 1♂; ČR, Ubučin 2.VIII.1935, lgt. Gregor, 2♂♂; ČR, Pouzdřany, Moravia, VII.1941, lgt. A.Hoffer, 1♂; SK, Piliš, 27.VII.1936, lgt. Hoffer, 1♂; ČR, Roudnice, 25.VI.1943 ["*scabiosa*"], 1♂; ČR, Roudnice, 25.VI.1943, lgt. Hoffer ["*rimata*" 22], 1♂; ČR, Roudnice, 22.VI.1947, lgt. Hoffer, 1♂; ČR, Bořetice, 9.VI.1942, lgt. Hoffer ["*scabiosa*" 20], 2♂♂; ČR, Bořetice, 4.IX.1942, lgt. Hoffer ["*scabiosa*" 20], 1♂; SK, Parkan (=Štúrovo), 20.VII.1946, 2♂♂; ČR, Polička, 6.VIII.1939, ["*lugubroides nova*"], 1♂; ČR, Polička, 4.VIII.1939, ["*lugubroides*" 23] ["*aterrima* sp."], 1♂; ČR, Plešivec, 27.VII.1948, 1♂.

M a l e (Figs 24-31)

D i m e n s i o n s : Body length 4.0mm.

H e a d : Roundly narrowed behind eyes, twice as broad as long, in frontal view 1.2 times as broad as high, about as wide as mesosoma or little wider. Ocellar triangle shorter than OOL. POL 3 times longer than Od. Temples almost as long as LO (11:12).

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In frontal view eye 2.3 times as high as broad, twice as long as malar space. Face about twice as broad as high and 1.7 as broad as transversal diameter of eye, twice higher than clypeus. Maxillary palpi as long as height of face. Antennae with 23 segments, shorter than body, reaching to about middle of carapace. Scape widened, about twice as wide as flagellum, twice as long as wide; 1st flagellum segment 3 times as long as wide, apical segments 1-5-2 times as long as wide.

M e s o s o m a : 1.3 times as long as high. Propodeum with well-developed transverse carina and lateral tubercles.

W i n g s : Length of cell R along metacarp as long as length of pterostigma. Cell R 1.5 times greater than Rm2. 3-SR 1.2 as long as r, 3.5 times shorter than SR1. 1-CU1 and cu-a equal in length.

L e g s : Hind femur 4 times as long as broad. Outer and inner spurs of hind tibiae equal, reaching 1/2 of 1st metatarsal segment, 5th segment as long as 4th, 1.5 times shorter as 2nd.

M e t a s o m a : Carapace elongate-oviform, about twice (70:37) as long as maximal broad, incurved on 0.3 posterior height. In lateral view enlarged posteriorly, 2.5 times as high posteriorly as anteriorly. AMA chink-formed and arcuated, 0.8 times as broad as carapace; in back view about 0.3 height and in lateral view about 0.25 length of carapace.

S c u l p t u r e : Head finely pointed. Face fine and dense punctate with some longitudinal sculpture about eyes. Frons and temple finely longitudinally striate, vertex partially finely transversely striate. Clypeus finely punctate, weakly shining. Mesonotum at front dense punctate, pre-scutellar depression strongly sculptured and area before it with longitudinal rugosity. Sides of mesonotum roughly punctate. Scutellum distinctly undulate sculptured. Propodeum areolare-rugulose, with two longitudinal carinas ending at transverse carina (looking as two small teeth) and longitudinal elements. Carapace strongly longitudinally rugulose with uniform-rectilinear undulations reaching its apex.

C o l o u r : Body black. Palpi brown. Scape dark-brownish. Legs: coxae dark-brown; fore femora dark-brown with yellow apex, tibiae yellowish, tarsi yellowish with brown apex; hind femora dark-brown, tibiae brown with dark third part, tarsi brown-yellowish with darker apex. Wings infuscate. Pterostigma and veins brown.

V a r i a b i l i t y : Body length 3.0-4.0mm. Antennae with 20-23 segments. Carapace 1.8 times (51:29) as long as wide, with almost parallel sides. AMA varies: from chink-arcuated to chink-elongated, in lateral view shorter. Scutellum with less pronounced wrinkles. Carapace's sculpturing varies: from rectilinear undulations at its 1/2 to almost reaching the posterior end (in all cases undulations are well developed). By some light, scape and carapace brownish.

C o m p a r i s i o n : This species is easily distinguished by the sculpturing of carapace. Though the approximate sculpture we have within *M. scabrator* (Nees) and series of *M. fumipennis* Tob., the last species differ by the shape of carapace and unrectilinear undulations on it. The infuscation of forewings can vary in all species, from moderate to rather infuscate.

F e m a l e (Figs 31-34)

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M a t e r i a l e x a m i n e d : ČR, Polička, Moravia, 4.VIII.1939 ["*lugubroides*"], 2♀♀; ČR, Polička, Moravia, 5.VIII.1939 ["*lugubroides*"], 4♀♀; ČR, Polička, Moravia, 11.VIII.1939 ["*lugubroides*"], 1♀; ČR, Kobylí, Moravia, VII.1941. lgt. Dr. Hoffer ["fissa, 16 *glabrisc*"], 2♀♀.

D i m e n s i o n s : Body length 3.8mm.

H e a d : As for male except as follows. Ocelli smaller, ocellar triangle as long as OOL. POL 4 times longer than Od. Antennae with 16 segments, as long as head and mesosoma combined, apical segments 1.5 times as long as wide.

M e s o s o m a : As for male.

W i n g s : As for male except 1-CU1 shorter than cu-a.

L e g s : Hind femur 3 times as long as broad. Outer spur of hind tibiae longer than inner, almost reaching 1/2 of 1st metatarsal segment; 5th segment as long as third one, 1.3 times longer than 4th and 1.2 times shorter than 2nd.

M e t a s o m a : Carapace oval, incurved on 0.25 height of apex, 1.7 times as long as maximal broad. In lateral view enlarged posteriorly, twice as high posteriorly as anteriorly. Ovipositor short not protruded as carapace.

S c u l p t u r e : As for male.

C o l o u r : As for male except rather infuscate forewings.

D i s t r i b u t i o n : Europe, Kazakhstan, Kirghizia, Mongolia.

Microchelonus fumipennis TOBIAS 1986 (Figs 35-47)

Microchelonus fumipennis TOBIAS 1986: 328; 2000: 529, 545

M a l e (Figs 35-45)

M a t e r i a l e x a m i n e d : ČR, Mohelno, Moravia, 11.VII.1940, lgt. Gregor, ["*risoria*"], 1♂; ČR, Uherské Hradiště, Moravia, VIII.1940, lgt. Dr.Hoffer ["*risoria*"], 2♂♂; ČR, Pouzdřany, Moravia, 19.VII.1941, lgt. A. Hoffer ["*risoria*"], 1♂; ČR, Bzenec, 12.VII.1940 ["*risoria*" 23], 1♂; SK, Somotor, 3.VIII.1936, lgt. Hoffer ["*risor rugiccuta*" 23], 1♂; SK, Somotor, 3.VIII.1950, lgt. Hoffer, 1♂; SK, Parkan (=Štúrovo), 27.VII.1940 ["*risoria*"], 1♂; SK, Parkan (=Štúrovo), 20.VII.1946, 8♂♂; SK, Parkan (=Štúrovo), 7.VII.1947, lgt. Hoffer, 1♂; ČR, Moravany, Moravia, 28.V.1942, lgt. Šnoflák, 1♂; ČR, Moravany, Moravia, 15.VIII.1941 ["*risoria*" 23 sulciscu], 1♂; SK, Piliš, 1.VIII.1937, lgt. Hoffer, 1♂; ČR, Dolní Bořicovice, 16.VIII.1942, lgt. Hoffer, 1♂; ČR, Vlkov (=Veselí nad Lužnicí), Bohemia, 5.VII.1942, lgt. Hoffer ["*risoria*"], 1♂; SK, Plešivec, 24.VII.1948, 1♂; ČR, Ražice, 15.VII.1945, lgt. Hoffer, 1♂; ČR, Čejč, Moravia, VI.1940, lgt. Hoffer ["*risoria*"], 4♂♂; ČR, Čejč, Moravia, V.1941, lgt. Dr. Hoffer, 1♂; ČR, Vlkov (=Veselí nad Lužnicí), Bohemia, 26.VII.1944, lgt. Hoffer, 1♂; ČR, Pouzdřany, Moravia, 30.VIII.1946, 1♂; MD, Karmanovo, hillside 16.VII.1974, lgt. Kusliztkij, 1♂.

D i m e n s i o n s : Body length 3.8mm.

H e a d : Roundly narrowed behind eyes, about temples narrower than about eyes, almost twice as broad as long, in frontal view 1.2 as broad as high, almost as wide as mesosoma. Temples a little longer than LO (12:11). In frontal view eye 2.3 times as high as long, 1.5 times as long as malar space. Face about twice as broad as high and 1.8 as broad as LD, twice higher than clypeus. Maxillary palpi as long as height of face. Antennae shorter than body; scape widened, 1.5 times as wide as flagellum, 3 times as long as wide; 1st flagellum segment 3 times as long as wide, apical segments 1.5-2 times as long as wide.

M e s o s o m a : 1.5 times as long as high. Propodeum with two less distinct medial longitudinal carinas and a pair of lateral tubercles.

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W i n g s : Length of cell R along metacarp as long as length of pterostigma. Cell Rm2 comparatively big, 1.5 times smaller than cell R. 3-SR almost as long as r, 4 times shorter than SR1. 1-CU1 shorter than cu-a.

L e g s : Hind femur 3.5 times as long as broad. Outer spur of hind tibiae longer than inner, 5th metatarsal segment as long as 3rd, 1.2 times shorter than 2nd .

M e t a s o m a : Carapace oval-elongate, twice as long as maximal broad. In lateral view enlarged posteriorly, about 3 times as high posteriorly as anteriorly. AMA chink-triangle-formed; in back view of posterior end about 0.25 height and in lateral view about 0.25 length of carapace.

S c u l p t u r e : Head finely pointed. Face fine longitudinally striate about eyes, weakly shining. Vertex partially but finely transversely striate. Temple finely longitudinally striate. Clypeus finely punctate, weakly shining. Mesonotum rugose-rugulose punctate. Scutum anteriorly very finely punctate and longitudinally striate, area before scutellum with some longitudinal rugosities. Sides of mesonotum roughly rugose-punctate with unclear transversal sculpture. Scutellum finely punctate, shining. Propodeum rugose-rugulose, with distinct longitudinal elements; medial longitudinal carinas are less well developed, but looking as two small teeth at transverse carina. Carapace with longitudinal winding undulations on its 2/3, apex without longitudinal elements of sculpture.

C o l o u r : Body black. Palpi dark-brown. Scape dark brown. Legs: coxae dark, almost black; fore femora brown, tibiae yellowish, tarsi yellowish with brown apex; hind femora dark-brown; tibiae brownish at apex and basal part with a yellow belt in middle part; tarsi brown-yellowish with darker apex. Wings moderate infuscate with a lighted belt of the course of the medial vein. Pterostigma dark-brown, veins brown.

V a r i a b i l i t y : The all 33 investigated specimens posses a rather variability of some characters[2]. The series from Slovakia and neighboring Moravia (Czech Republic) have a comparatively big cell Rm2 (Figs 39, 42), moderate infuscate forewings and almost chink-formed AMA (Figs 38, 41). The last character even varies: in back view of posterior end almost as wide as carapace (Figs 38, 41), in lateral view 1/4 or 1/5 length of carapace (Figs 37, 40). And that corresponds to the initial description of species (TOBIAS 1986) from Moldova. Nevertheless, the specimen from Moldova dose not completely correspond to the description, having smaller cell Rm2 (Fig. 45) and chink-oval-formed AMA (Figs 43, 44), but stronger infuscate forewings. The series from Moravia distinctly varies in regard to body length (3.2-4.2mm), number of antennal segments (18-23) and their length[3]. Thus, the spectrum of species amplitude varies, meanwhile maintaining the comparatively stable sculpturing on (not excluded it could be only a transgression that not always characterizes species integrity), but not in regard to variable infuscation of forewings[4].

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[2] The issue on *M. fumipennis* is still opend, in support of this is the variegated material from Central Europe to Russian Far East. The further investigation within the virtual species range would show whether species strongly vary or there are several species in fact.

[3] In this concreate case the length of antennae dose not reflect the graduating dependence from body size, than smaller body than shorter antennae: some specimens of 4.2mm sized posses antennae with 18 segments and even shorter than of others.

[4] *Microchelonus fumipennis* is recorded also from Russian Far East (Tobias 2000) to posing very infuscate wings, meanwhile the other characters corresponding to the material from Central Europe. Author (Tobias V.) apologies of erroneous illustration in "Key to the insects of Russian Far East" (Tobias 2000: p.545, fig. 7) of the posterior end of *M. fumipennis* that in fact belongs to another species – *Microchelonus pellucens* (Nees).

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Comparision: This species is related to *M. risorius*, obviously differing by the softened sculpturing (head and mesosoma weakly shining, scutellum without pronounced rugosity and centrally weakly shiny, carapace with winding undulations), longer carapace and even AMA (analysis of series shows a strong variation of AMA's shape within both species).

Female (Figs 46-47)

Material examined: SK, Piliš, 1.VIII.1937, lgt. Hoffer ["*risoria sulcisc*..."], 1 ♀; SK, Parkan (=Štúrovo), 20.VII.1946, 16 ♀♀ ["*fissa glabrisc*..."], 1 ♀.

Dimensions: Body length 3.8mm.

Head: As for male, except as follows. Temples a little longer than LO. Antennae with 16 segments, as long as head and mesosoma combined; scape widened, twice as wide as flagellum, 2.5 times as long as wide; 1st flagellum segment 3 times as long as wide, apical segments a little longer as wide.

Mesosoma: As for male.

Wings: As for male except as follows. Cell Rm2 twice smaller than cell R, 3-SR almost as long as r, 4 times shorter than SR1 and 1-CU1 equals to cu-a.

Legs: As for male, except hind femur 3 times as long as broad.

Metasoma: Carapace oval-elongate and incurved on 0.25 height of apex, about twice as long as maximal broad of its middle part. In lateral view enlarged posteriorly, 2.5 times as high posteriorly as anteriorly. Ovipositor short not protruded as carapace.

Sculpture: As for male except as follows. Face with some fine transversal and converged sculpture about eyes. Scutellum distinctly undulate sculptured, weakly shining. Propodeum with two clear medial longitudinal carinas ending at transverse carina (looking here as two small teeth) and longitudinal elements. Carapace strongly longitudinally rugulose with almost rectilinear undulations at its 2/3, vanishing to apex.

Colour: As for male.

Comparision: The two females described here are practically identical and in many characters agree with *M. risorius*. The roughly sculpturing approaches them to females from Moravia's series of *M. risorius*, but differing in moderate infuscation of forewings, shorter antennal segments and shape of carapace.

Distribution: Republic of Moldova, Czech Republic, Russia (Far East).

Microchelonus temporalis TOBIAS 1986 (Figs 48-52)

Microchelonus temporalis TOBIAS 1986: 326; 1994: 170; 1994a: 357 (irrepertus); 2000: 514, 521, 549 (synon.).

Microchelonus temporalis TOBIAS; LOZAN & TOBIAS: 2002

Male

Material examined: ČR, Macocha, Moravia, 20.VI.1943, lgt. Šnoflák, 1 ♂; ČR, Ubušin, 6.VII.1936, lgt. Gregor, 1 ♂; AU, Stmk. –345- Mariahof, 1000m, Walddlichtung m. farn, 13.7.1975, lgt. Fisher, 1 ♂; CZ Bohemia South, Šumava Mts., 740m, Mrtvý luh peat bogs (meadows), 12.VII.2002, lgt. Lozan, 1 ♂.

Dimensions: Body length 3.3-3.9mm.

Head: Elongate-narrowed behind eyes, about temples narrower than about eyes, 1.4 times as broad as long, in frontal view about as broad as high, a little broader than meso-

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soma. Temples twice longer than LO. In frontal view eye 2.5 times as high as long, 1.5 times as long as malar space. Face 1.5 times as broad as high and about twice as broad as LD, twice higher than clypeus. Maxillary palpi as long as height of face and clypeus combined. Antennae with 21-22 segments, almost as long as body; scape widened, twice as wide as flagellum, 3 times as long as wide; 1st flagellum segment 3 times as long as wide, apical segments 1.5-2 times as long as wide.

Mesosoma: 1.3 times as long as high. Propodeum with two medial longitudinal carinas (ending to the transversal carina and looking as two well-developed teeth) and a pair of small lateral tubercles.

Wings: Length of cell R along metacarp as long as length of pterostigma. Cell Rm2 comaratively small, about twice smaller than cell R. 3-SR almost as long as r, 5 times shorter than SR1. 1-CU1 shorter than cu-a.

Legs: Hind femur 3.5 times as long as broad. Outer and inner spurs of hind tibiae almost equal, about 1/2 of 1st metatarsal segment, 5th segment as long as 4th, 1.2 times shorter than 2nd.

Metasoma: Carapace oval-elongate, apically incurved on its 0.15 length, twice (or a little more) as long as maximal broad. In lateral view about twice as high posteriorly as anteriorly. In back view of posterior end AMA bean-shaped (or almost oval), about 0.6 as broad as carapace; in lateral view about 1/6 length of carapace.

Sculpture: Head dense punctate. Face weakly shining with irregular concentric strigosity, about eyes with some fine longitudinal sculpture. Vertex transversely striate. Temple finely longitudinally striate. Clypeus finely punctate, shining. Mesonotum rather roughly sculptate. Scutum anteriorly densely punctate, area before scutellum with coarser longitudinal rugosity. Sides of mesonotum roughly rugose-punctate. Scutellum roughly sculptate. Propodeum rugose sculptured, without longitudinal elements. Carapace longitudinally rugose-rugulose with finding undulations at its 2/3, apex without longitudinal elements.

Colour: Body black. Palpi dark-brown. Legs: coxae dark, almost black; fore femora brown with yellowish apex, tibiae yellowish, tarsi yellowish with brown apex; hind femora dark-brown with yellowish apex; tibiae brownish with yellowish basal part; tarsi brown with dark-brown apex. Wings infuscate. Pterostigma dark-brown, veins brown.

Distribution: Central Europe, Russia (European Part, Far East).

Microchelonus scabrosus (SZÉPLIGETI 1896) (Figs 53-57)

Chelonus scabrosus SZÉPLIGETI 1896: 177, 238, 303, 373.
Microchelonus scabrosus (SZÉPLIGETI); TOBIAS 1986: 326, 331; 2000: 530, 551.

Male

Material examined: SK, Parkan (=Štúrovo), 1.VII.1947, lgt. Hoffer ["*risoria striose*"], 1♂; SK, Imbreg, 14.VIII.1950, 1♂.

Dimensions: Body length 3.6mm.

Head: A little widened and rounded behind eyes, about as wide as mesosoma, twice as broad as long, in frontal view 1.2 times as broad as high. Ocellar triangle shorter than OOL. POL 4 times longer than Od. Temples 1.2 times as LO. In frontal view eye 2.5 times as high as long, 1.5 times as long as malar space. Face twice as broad as high and

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1.5 as broad as LD, twice higher than clypeus. Maxillary palpi as long as face and clypeus combined. Scape 1.5 times as wide as flagellum, 3 times as long as wide; 1st flagellum segment 3 times as long as wide, apical segments 1.3-1.5 times as long as wide.

M e s o s o m a : 1.3 times as long as high. Propodeum with two clear medial longitudinal carinas, with well developed transverse carina and lateral tubercles.

W i n g s : Length of cell R along metacarp almost as long as length of pterostigma. Cell R 1.7 times greater than cell Rm2. 3-SR as long as r, 3.5 times shorter than SR1. 1-CU1 shorter than cu-a.

L e g s : Hind femur almost 4 times as long as broad. Outer and inner spurs of hind tibiae equal, 2.5 times shorter than 1st metatarsal segment. 5th segment as long as 3rd, 1.3 times shorter than 2nd.

M e t a s o m a : Carapace oviform, 1.8 times as long as maximal broad, laterally incurved on 0.3 height of apex. In lateral view obviously enlarged posteriorly, 3 times as high posteriorly as anteriorly. AMA bean-formed, in back view of posterior end 0.6 times as broad as carapace and about 0.3 height of carapace; in lateral view about 0.2 times as long as carapace.

S c u l p t u r e : Head dense and finely pointed, faintly shining. Face about eye and temple fine longitudinally striate. Vertex partially finely transversely striate. Clypeus finely punctate, shining. Mesonotum rugulose punctate, area before scutellum with coarser sculptured rows. Scutum anteriorly punctate and faintly shining. Sides of mesonotum roughly punctate. Scutellum with distinct rugosity. Propodeum rugose rugulose, without clear longitudinal elements. Carapace strong rugulose with longitudinal almost rectilinear undulations, at least on its 2/3 (even more).

C o l o u r : Body black. Palpi brown. Scape partially reddish. Legs: coxae dark, almost black; fore femora dark-brown with yellowish apex, tibiae brown-yellowish, tarsi yellowish with brown apex; hind femora dark-brown, tibiae brown with central yellowish spot, tarsi brown-yellowish with darker apex. Wings infuscate. Pterostigma and veins brown.

D i s t r i b u t i o n : Central Europe, Russia (European Part, Baikal region), Uzbekistan, Kirghizia, Mongolia.

Microchelonus foersteri TOBIAS 1999 (Figs 58-67)

Microchelonus foersteri TOBIAS 1999: 699.

M a l e (Figs 58-65)

M a t e r i a l e x a m i n e d : ČR, Moravia, 3.VII.1936, lgt. Fr. Gregor, [♂ *Ch-lla.* 24l=2/3R1, "*Gracilis gr. Gracilior* ♂"], 1♂; ČR, Děviu, Moravia, 16.4.38, lgt. Fr. Gregor ["*Ch-lla* ♂ 23, *Gracilis* Gr."], 1♂; ČR, Ratišbarvica, 23.VI.1942, lgt. Hoffer ["*Ch-lla* ♂"], 4♂; RO, Grajduri, Iasi, 20.VII.1994, lgt. Chiriac, 1♂.

D i m e n s i o n s : Body length 2.8mm.

H e a d : Roundly narrowed behind eyes, about temples narrower than about eyes, 1.7 times as broad as long, in frontal view 1.2 as broad as high, about as wide as mesosoma. Ocellar triangle almost as long as OOL. POL 4 times longer than Od. Temples a little longer than LO (9:8). In frontal view eye 2.3 times as high as long, 1.5 times as long as malar space. Face 1.7 times as broad as high and 1.5 as broad as LD, twice higher than

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clypeus. Maxillary palpi as long as height of face. Antennae with 23 segments, as body length; scape 1.5 times as wide as flagellum, 3 times as long as wide; 1st flagellum segment 3 times as long as wide, apical segments twice as long as wide.

M e s o s o m a : 1.6 times as long as high. Propodeum with two longitudinal carinas and a pair of small lateral tubercles.

W i n g s : Length of cell R along metacarp a little shorter (14:16) as length of pterostigma. Cell Rm2 comparatively big and elongate, 1.3 times smaller than cell R. 3-SR almost as long as r, 3.5 times shorter than SR1. 1-CU1 shorter then cu-a.

L e g s : Hind femur almost 4 times as long as broad. Outer and inner spurs of hind tibiae equal in length, a little longer that 1/2 of 1st metatarsal segment. 5th segment as long as 3rd and 1.3 times shorter than 2nd.

M e t a s o m a : Carapace elongate, gradually enlarged to apex, 2.3 as long as maximal broad. In lateral view weakly incurved, about 1.5 times as high posteriorly as anteriorly. In back view of posterior end AMA bean-formed, 0.5 times as broad as carapace, about 0.3 height of carapace; in lateral view about 0.2 length of carapace.

S c u l p t u r e : Head dense and finely pointed. Face centrally with fine longitudinal-converse strigosity and a few about eyes, weakly shining. Vertex partially finely transversely striate. Temple finely longitudinally striate. Clypeus finely punctate, shining. Mesonotum punctate. Scutum dense punctate without longitudinal strigosity, Sides of mesonotum roughly punctate with very weak rugosity. Scutellum weakly puctate, centrally largely smoother and shining. Propodeum roughly punctate with weak longitudinal elements. Two medial longitudinal carinas well developed forming a central keel, at transverse carina looking as two small teeth. Carapace with weak longitudinal winding undulations on its 1/2, apiex without longitudinal elements of sculpture.

C o l o u r : Body black. Palpi dark-brown. Legs: coxae dark, almost black; fore femora brown with yellowish apex, tibiae yellowish, tarsi yellowish with brown apex; hind femora dark-brown; tibiae yellowish with brown apex; tarsi brown. Wings weakly infuscate. Fore wings: pterostigma brown, basal veins yellow.

V a r i a b i l i t y : Body length 2.6-3.2mm. Antennae with 22-23 segments. Carapace 2.25-2.45 times as long as maximal broad (comparison on Figs 59, 60, 63, 64). In back view of posterior end AMA bean-formed or oval, almost 0.5 times as broad as carapace (comparison on Figs 61, 65). Forewings of small specimens vary in term of coloring: pterostigma brown-yellowish, almost all veins yellow and comparatively transparent.

D i a g n o s i s : This species is distinctly differed from others by the generally more elongate body, densely punctate sculpturing of the all body, the presence of only a few weak undulations on carapace, the bigger and/or elongate Rm2, weakly enlarged scape.

R e m a r k s : Although the nominal species description (TOBIAS 1999) indicates on extremely short r, the investigated series (20 males) have almost equaled 3-SR to r. Nevertheless, this character runs to shortening in case of specimens with smaller body, but not too short: r 1.3-1.5 times shorter than 3-SR.

F e m a l e (Figs 65-67)

M a t e r i a l e x a m i n e d : ČR, Račkov, 25.VIII.1930 [16 "*horusians*?" 2], 1♀; ČR, Brno Kmn., Moravia, 29.VII.40, lgt. Fr. Gregor ["*Chelonella* ♀ *microphthalma*, 16♀♀ nemáná"], 1♀.

D i m e n s i o n s : Body length 2.8-3.2mm.

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H e a d : As for male except as follows. 1.3 times as wide as mesosoma. In frontal view eye twice as high as long, about as long as malar space. Maxillary palpi as long as height of face and clypeus combined. Antennae with 16 segments, as long as head and mesosoma combined; scape widened, about twice as wide as flagellum, 2.5 times as long as wide; apical segments a little longer than wide.

M e s o s o m a : As for male except as follows. Propodeum with pair of obtuse and small lateral tubercles, but without transverse carina.

W i n g s : As for male except as follows. Cell Rm2 moderately big (1.3-1.5 times smaller than cell R), 3-SR shorter than r and 3 times shorter than SR1.

L e g s : As for male except as follows. Outer and inner spurs of hind tibiae almost equal in length, not longer that 1/2 of 1st metatarsal segment, 5th segment as long as 3rd and 1.3 times shorter than 2nd.

M e t a s o m a : As for male except shape of carapace with the broadest mean part. Ovipositor short.

S c u l p t u r e : As for male except as follows. Face without clear longitudinal-converse strigosity. Scutellum puctate. Propodeum areolate-rugose with less developed medial longitudinal carinas and a keel between them, without transverse carina.

C o l o u r : As for male.

R e m a r k s : r shorter than 3-SR being even twice shorter within specimens of smaller body.

D i s t r i b u t i o n : Central and Southwest Europe (Austria, Czech Republic, Romania).

Description of new species

Microchelonus macrellips sp. nov. (Figs 68-73)

M a l e

T y p e m a t e r i a l e x a m i n e d : Holotype: ČR, Nový Jičín, 29.V.1930, lgt. Gregor ["*macrellips*"20], 1♂.

E t y m o l o g y : This species is given a name *macrellips* that often is used on the labels of the Gregor's material.

D i m e n s i o n s : Body length 3.1mm.

H e a d : Narrowly elongated behind eyes, 1.55 times as broad as long, in frontal view 1.25 as broad as high. Ocellar triangle 1.3 times shorter than OOL. POL 4 times longer than Od. Temples look elongated, about twice longer than LO. In frontal view eye twice as high as long, about as long as malar space. Face 1.5 as broad as high, 1.5 times as broad as LD, 4 times higher than clypeus. Maxillary palpi as long as height of face and clypeus combined. Antennae with 20 segments, as long as body length. Scape slightly widened, 1.5 times as long as wide; 1st flagellum segment 3 times as long as wide, the others elongated and apical segments twice as long as wide.

M e s o s o m a : 1.5 times as long as high. Propodeum with a clear transverse carina and obtuse lateral tubercles.

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W i n g s : Length of cell R along metacarp 0.7 as long as length of pterostigma. Cell R twice greater than Rm2. 3-SR vein 1.5 times shorter than r, 4 times shorter SR1. 1-CU1 shorter than cu-a.

L e g s : Hind femur 3.5 times as long as broad. Outer and inners spurs of hind tibiae equal in length, as long as 1/2 of 1st metatarsal segment, 5th segment as long as 3rd, a little shorter than 2nd, 1.3 times longer than 4th.

M e t a s o m a : Carapace gradually enlarged posteriorly, 1.7 as long as maximal broad on its 1/3. In lateral view almost parallel-sided, about 1.2 times as high posteriorly as anteriorly. AMA big, bean-formed; 0.7 as broad as carapace, about 0.5 height of carapace.

S c u l p t u r e : Head dense puctate. Face very fine conversely striate. Vertex finelly transversely striate. Temple finely longitudinally striate. Clypeus finely punctate, shining. Mesonotum rugose-punctate and scutellum as well. Sides of mesonotum rugose without clear longitudinal elements. Propodeum rugulose punctate with granulate sculpture, anteriorly with a longitudinal carina ending to transverse carina and looking as two small teeth. Carapace longitudinally rugulose, fine winding undulations ending to its 2/3, apex without longitudinal elements of sculpture.

C o l o u r : Body black. Palpi dark brown. The basal part of antennae, prothorax, carapace and AMA partially dark-brownish. Legs dark, coxae almost black; fore femora brown with lightly apex, tibiae brown-yellowish with lightly basal part, tarsi light-brown; hind femora dark-brown, tibiae brown with lightly basal part, tarsi light-brown. Wings faintly infuscate. Pterostigma and veins brown-yellowish.

D i a g n o s i s : This species by some characters (antennae, head elongate behind eyes, shape of AMA, partially sculptured carapace) is closed to *M. temporalis*. The comparatively short 3-SR, enlarged carapace and almost parallel-sided carapace (laterally) within *M. macrellips* sp.n. are sufficient for delimitating these two species.

R e m a r k s : In the absence within series of *M. temporalis* of a similar tendency (shortened 3-SR, enlarged to apex carapace) and, at the same time, the absence of series within *M. macrellips* sp.n. to discern the variation and, of course, the direction of variation, then it represents an independent species. Ultimately, such feature as carapace's shape (that is obviously different at a simple examination in both species) put these two species apart. Although, as we have seen in case of *M. risorius* with variable shapes of carapace within big series, then quite possible that it is only a variety of *M. temporalis*. Even short 3-SR (that is distinctly apparent on specimen *M. macrellips* sp.n. in comparison to comparatively long 3-SR within *M. temporalis*) can be just a part of variation (a similar case is described within *M. foersteri*'s series).

D i s t r i b u t i o n : Czech Republic.

***Microchelonus moravicus* sp. nov. (Figs 74-79)**

M a l e

T y p e m a t e r i a l e x a m i n e d : Holotype: ČR, Brno, Moravia, 14.VIII.1942, lgt. Šnoflák, 1♂.

E t y m o l o g y : The species is named for the region (Moravia, Czech Republic) from which it is described.

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D i m e n s i o n s : Body length 3.0mm.

H e a d : Narrowed roundly behind eyes, about temples narrower than about eyes, twice as broad as long, in frontal view 1.2 times as broad as high. Ocellar triangle shorter than OOL. POL 4 times longer than Od. Temples 1.6 times longer than LO. In frontal view eye 2.5 times as high as long, about twice as long as malar space. Face twice broad as high, 1.5 times as broad as LD, twice higher than clypeus. Maxillary palpi as long as height of face. Antennae with 20 segments, shorter than body, longer than head and mesosoma combined and reaching to about middle of carapace. Scape widened, twice as long as wide; 1st flagellum segment 3 times as long as wide, apical segments 1.5 times as long as wide.

M e s o s o m a : 1.5 times as long as high. Propodeum with a transverse carina, polished centrally, and small and sharp lateral tubercles.

W i n g s : Length of cell R along metacarp almost 0.5 as long as length of pterostigma. Cell R 1.5 times greater than 2Cu. 3-SR short, 1.5 times shorter than r and 5 times shorter than SR1. 1-CU1 shorter than cu-a.

L e g s : Hind femur 3.5 times as long as broad. Outer and inner spurs of hind tibiae equal in length, as long as 1/2 of 1st metatarsal segment, 5th segment as long as 3rd, a little shorter than 2nd, 1.3 times longer than 4th.

M e t a s o m a : Carapace oval, twice as long as maximal broad, with almost parallel sides, rectilinearly narrowed basally. In lateral view about twice as high posteriorly as anteriorly. AMA oval triangular-formed, 0.6 as broad as carapace, about 0.3 height of carapace.

S c u l p t u r e : Face fine striate. Vertex finelly transversely striate. Temple finely longitudinally striate. Clypeus finely punctate, shining. Mesonotum rugose punctate, anteriorly faintly shining. Sides of mesonotum rugose punctate. Scutellum punctate, centrally smoother and shining. Propodeum rugulose punctate, area of leveled transverse carina smoother and faintly shiny; two medial longitudinal carinas form a central keel. Carapace longitudinally fine rugulose over its 1/3, weak undulations reaching till its 1/2. Another part of carapace without longitudinal elements of sculpture.

C o l o u r : Body black. Palpi brown. Area around AMA partially dark-brownish. Legs dark: coxae almost black; fore femora brown with lightly apex, tibiae brown-yellowish with yellowish basal part, tarsi brown-yellowish; hind femora dark-brown, tibiae brown with yellowish basal part, tarsi light-brown. Wings faintly infuscate with a transparent belt along medial vein. Pterostigma and veins brown-yellowish.

D i a g n o s i s : This species is clearly defined by shortened cell R along the metacarp, the shortened r, and the shape of carapace and triangular-formed AMA.

D i s t r i b u t i o n : Czech Republic.

Key species to Central-European males of *Microchelonsus* SZÉPLIGETI with very big apical metasomal aperture

1 AMA chink or almost chink-formed, as broad or almost (at least 0.6) as carapace in back view of posterior end (figs 4, 7, 14, 22, 27, 31, 38, 41, 44), laterally more than 0.2 times as long as carapace (figs 3, 6, 13, 21, 26, 30, 37, 40, 43). Pterostigma almost as long as length of cell R along the metacarp 2

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- AMA more or less oval and/or bean-formed (rarely oval triangular-formed); laterally not more than 0.2 as carapace (figs 50, 55, 60, 64, 71, 77), not more than 0.8 as broad as carapace in back view of posterior end (figs 51, 56, 65, 69, 72, 78) 6

2 AMA about half as perimeter as carapace (laterally almost reaching half of its length), as broad as carapace, chink-formed with almost parallel or slightly incurved sides; 1/4 or, rarely, 1/3 of carapace's height in back view of posterior end ..... *M. magnifissus* TOBIAS (*fissus* SZÉPLIGETI)

- AMA in lateral view not more that 0.3 length of carapace 3

3 Carapace with pair of basal yellow spots (sometimes with a track of basal spots). Female with well-developed basal spots, almost forming a basal belt. Wings slimly infuscate ..... *M. fenestratus* (NEES)

- Carapace without basal yellow spots 4

4 Head obviously widened behind eyes. Wings slimly obscured ..... *M. ibericus* TOBIAS

- Head roundly narrowed behind eyes 5

5 Carapace strongly longitudinally rugulose with uniform-rectilinear undulations (at least at its 1/3, sometimes till posterior end). Scutellum with pronounced longitudinal wrinkles or undulations. Propodeum areolare-rugulose. Wings moderate infuscate ..... *M. risorius* (REINHARD)

- Carapace longitudinally rugulose with winding rugulae, without uniform-rectilinear undulations. Scutellum sculptured, without pronounced longitudinal wrinkles, weakly shining. Wings more or less strongly infuscate ..... *M. fumipennis* TOBIAS

6 Carapace (in dorsal view) 1.8-2 times as long as maximal broad 7

- Carapace oval-elongate gradually enlarged to its apex, 2.2-2.4 as long as maximal broad. In back view of posterior end AMA bean-formed, 0.5 times as broad as carapace, about 0.3 as carapace's height. Pterostigma rather longer than cell R along the metacarp. Hind tibiae brown, anteriorly yellowish..... *M.foersteri* TOBIAS

7 Head elongate-narrowed behind eyes, temples in dorsal view twice (or more) longer than transverse diameter of eye. AMA oval, 0.6-0.65 times as broad as carapace, 0.4-0.5 times as high as carapace ..... *M. temporalis* TOBIAS

- Head roundly narrowed or a little widened behind eye, temple almost as long as TD 8

8 Head a little widened and rounded behind eyes. Pterostigma as long as length of cell R along the metacarp. Wings infuscate. Scape of antenna more or less reddish ..... *M. scabrosus* (SZÉPLIGETI)

- Head roundly behind eyes but not widened. Pterostigma much longer than length of cell R along the metacarp. Wings faintly infuscated. Antennae dark 9

9 Cell R big, about 3 times greater than 2Cu. Hind tibiae with yellow band ..... *M. talitzkii* TOBIAS

- Cell R not more than twice greater as 2Cu. Hind tibiae brown, partially in the mean part indefinable yellowish 10

10 Length of cell R along the metacarp 0.5 times as long as length of pterostigma. Sides of carapace almost parallel. AMA oval and wide triangular-formed, 0.6 times as broad as carapace, about 0.3 as high as carapace ..... *M. moravicus* sp. n.

- Length of cell R along the metacarp 0.7 as long as length of pterostigma. Carapace rectilinearly enlarged to its apex. AMA bigger and oval or bean-formed, 0.7 times as broad as carapace, about 0.5 as high as carapace ..... *M. macrellips* sp. n.

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Zusammenfassung

11 Arten der Gattung *Microchelonus* SZÉPLIGETI - *M. agnifissus* TOBIAS, *M. fenestratus* (NEES), *M. ibericus* TOBIAS, *M. risorius* (REINHARD), *M. fumipennis* TOBIAS, *M. temporalis* TOBIAS, *M. scabrosus* (SZÉPLIGETI), *M. talitzkii* TOBIAS, *M. foersteri* TOBIAS, einschließlich zweier neuer Arten (*M. macrellips* sp.n. und *M. moravicus* sp.n.) mit sehr grosser apikaler metastomaler Öffnung der Männchen aus Mitteleuropa (ehmalige "Tschechoslowakei") und benachbarter Länder (Österreich, Rumänien, Moldavia) wurden untersucht (*M. talitzkii* ist aus Mitteleuropa unbekannt, siehe Bestimmungschlüssel). Das Weibchen von *M. magnifissus* wurde neu beschrieben. Die Variabilitat (insbesondere die "metasomale Öffnung" der Männchen) wird diskutiert. Ein Bestimmungschlüssel mit Abbildungen ergänzt die Arbeit.

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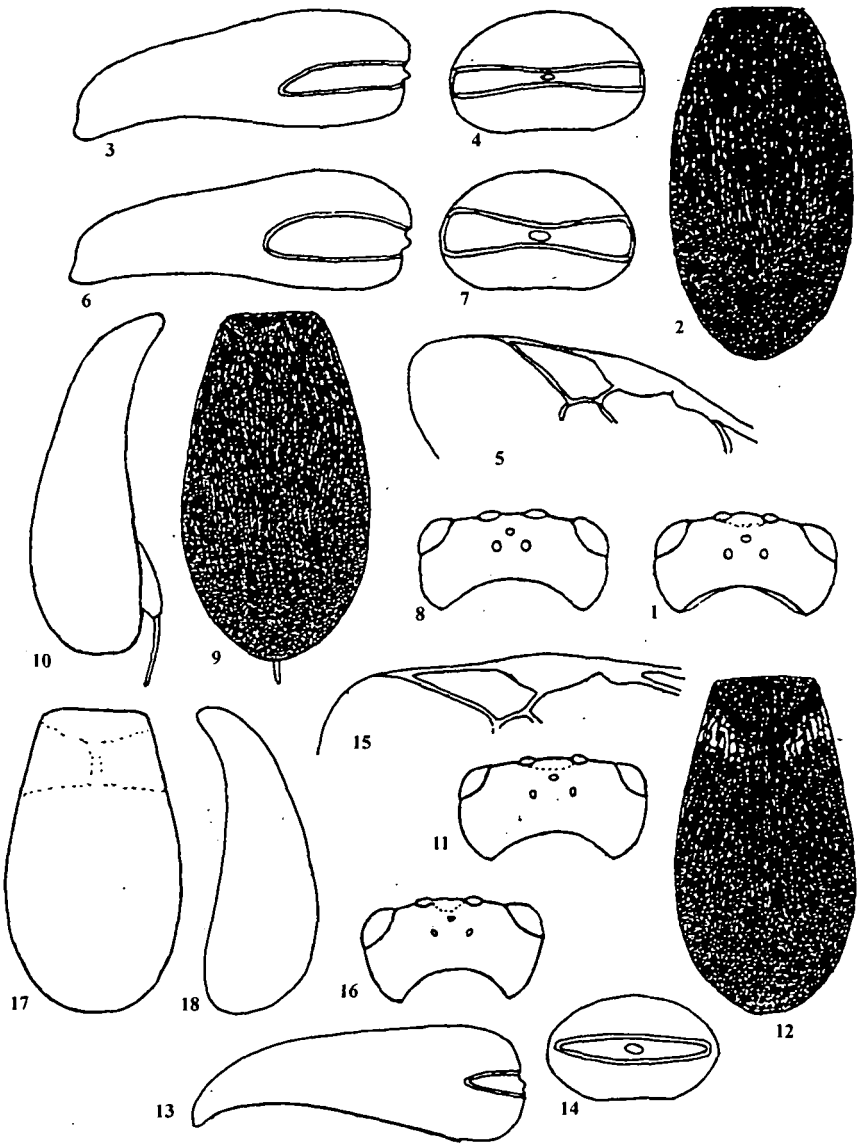

Figs 1-18. *Microchelonus magnifissus* TOBIAS, ♂. **1** – head in dorsal view; carapace: **2** – in dorsal view (with sculpture), **3** – in lateral view, **4** – posterior end; **5** – part of fore wing; variety with very big AMA, carapace: **6** – in lateral view, **7** – posterior. *M. magnifissus* TOBIAS, ♀. **8** – head in dorsal view; carapace: **9** – in dorsal view (with sculpture), **10** – in lateral view. *Microchelonus fenestratus* (NEES), ♂. **11** – head in dorsal view; carapace: **12** – in dorsal view (with sculpture and two small basal spots), **13** – in lateral view, **14** – posterior end; **15** – part of fore wing. *M. fenestratus* (NEES), ♀. **16** – head in dorsal view; carapace: **17** – in dorsal view (with shape of big basal spots), **18** – in lateral view.

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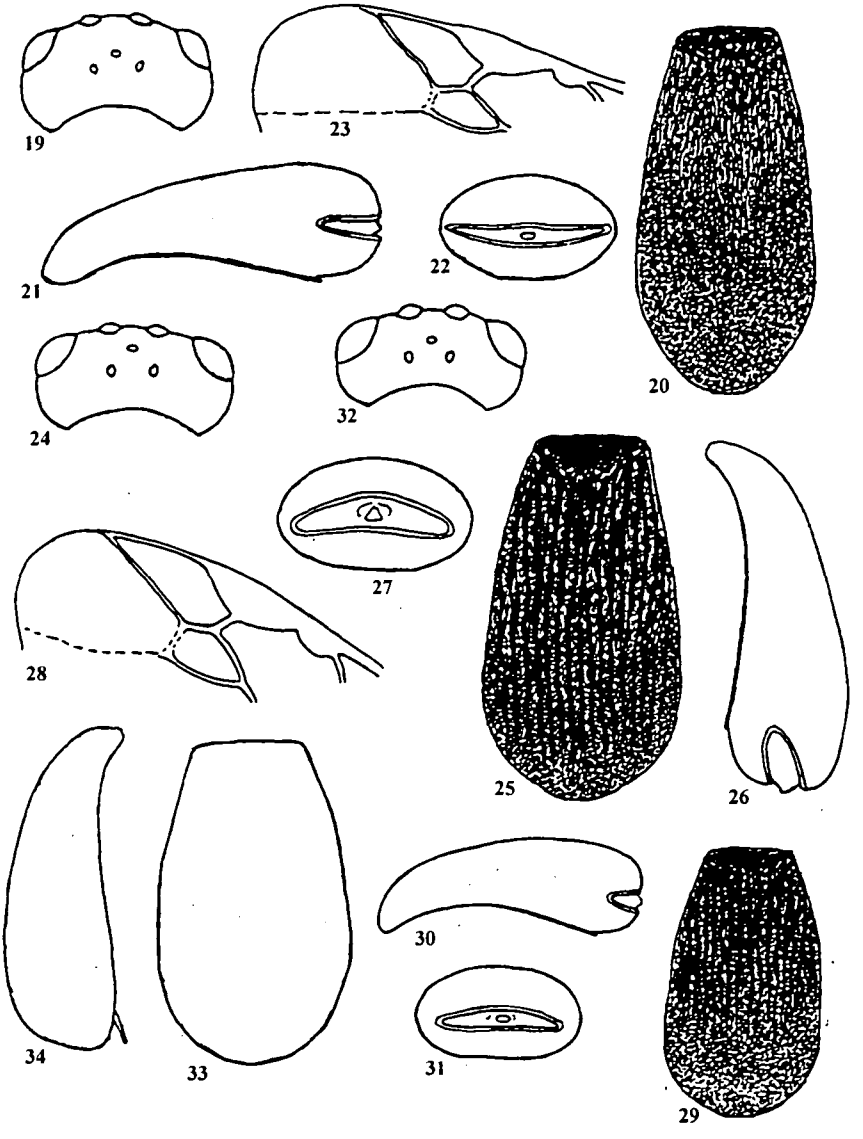

Figs 19-34. *Microchelonus ibericus* TOBIAS, ♂. **19** – head in dorsal view; carapace: **20** – in dorsal view (with sculpture), **21** – in lateral view, **22** – posterior end; **23** – part of fore wing. *M. risorius* (REINHARD), ♂. **24** – head in dorsal view; carapace: **25** – in dorsal view (with sculpture), **26** – in lateral view, **27** – posterior end; **28** – part of fore wing; variety (small body), carapace: **29** – in dorsal view (with sculpture), **30** – in lateral view, **31** – posterior end. *M. risorius* (REINHARD), ♀. **32** – head in dorsal view; carapace: **33** – in dorsal view, **34** – in lateral view.

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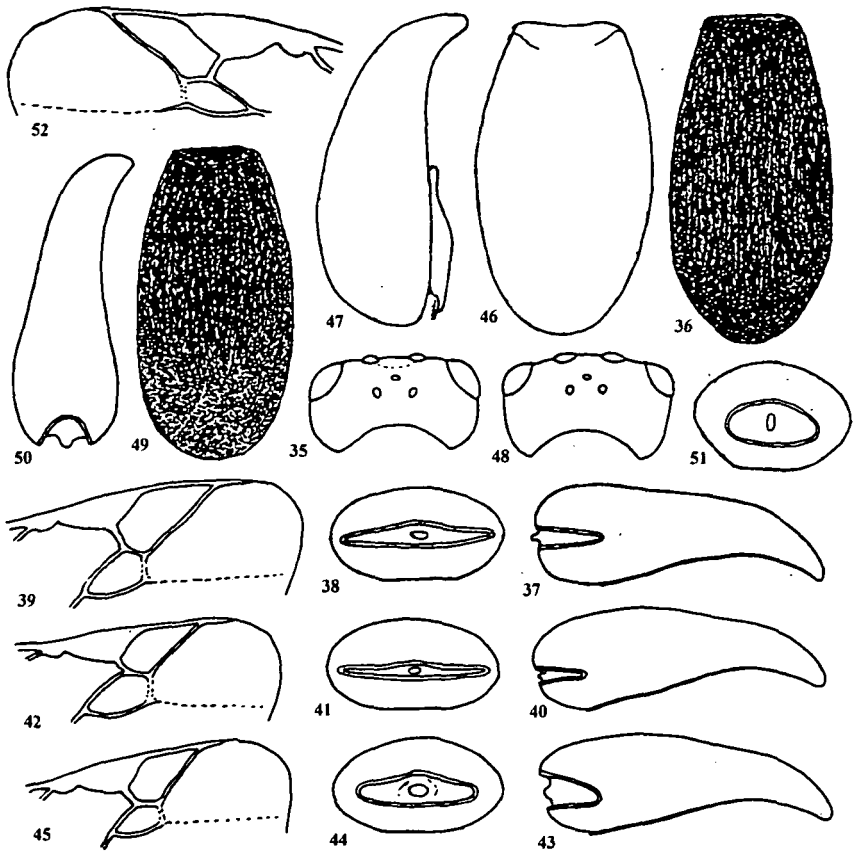

Figs 35-52. *Microchelonus fumipennis* TOBIAS, ♂. **35** – head in dorsal view; carapace: **36** – in dorsal view (with sculpture), **37** – in lateral view, **38** – posterior end; **39** – part of fore wing; varieties, carapace: **40/43** – in lateral view and **41/44** – posterior end, **42/45** – part of fore wing. *M. fumipennis* TOBIAS, ♀. Carapace: **46** – in dorsal view, **47** – in lateral view. *Microchelonus temporalis* TOBIAS, ♂. **48** – head in dorsal view; carapace: **49** – in dorsal view (with sculpture), **50** – in lateral view, **51** – posterior end; **52** – part of fore wing.

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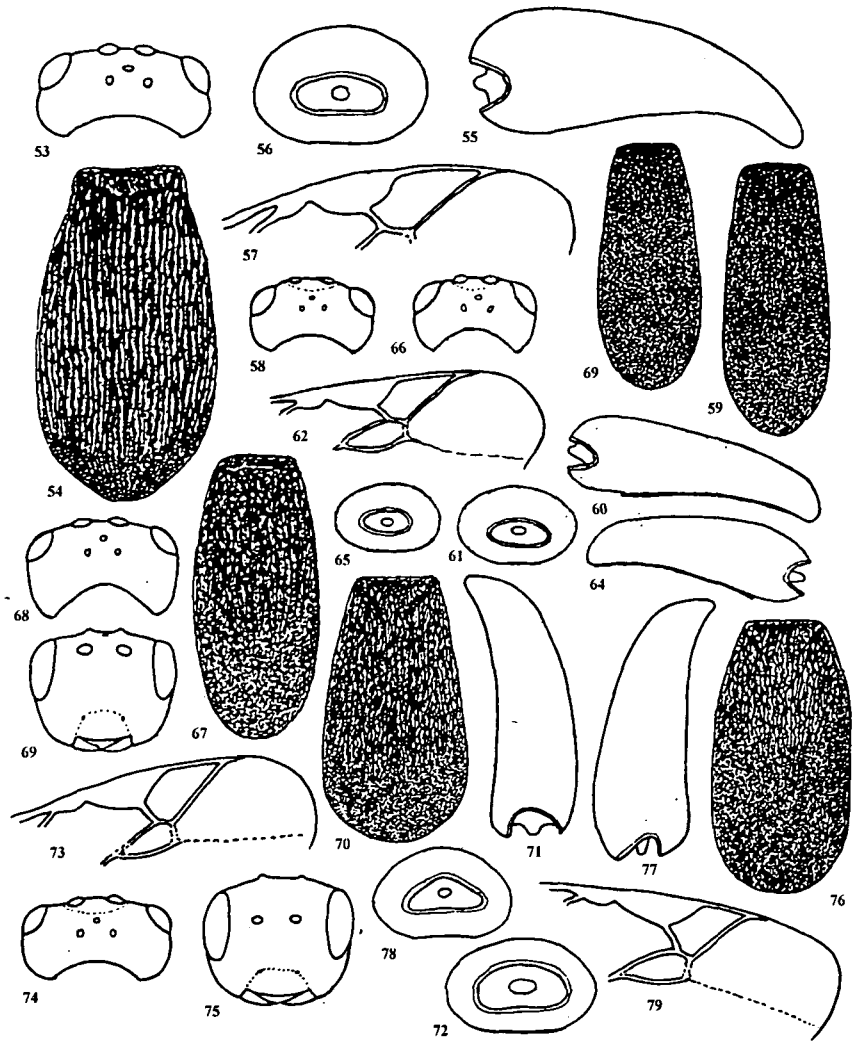

Figs 53-79. *Microchelonus scabrosus* (SZÉPLIGETI), ♂. **53** – head in dorsal view; carapace: **54** – in dorsal view (with sculpture), **55** – in lateral view, **56** – posterior end; **57** – part of fore wing. *Microchelonus foersteri* TOBIAS, ♂. **58** – head in dorsal view; carapace: **59** – in dorsal view (with sculpture), **60** – in lateral view, **61** – posterior end; **62** – part of fore wing; variety (small body), carapace: **63** – in dorsal view (with sculpture), **64** – in lateral view, **65** – posterior end. *M. foersteri* TOBIAS, ♀. **66** – head in dorsal view; **67** – carapace in dorsal view (with sculpture). *Microchelonus macrellips* sp. n., ♂. **68** – head in dorsal view; **69** – head in frontal view; carapace: **70** – in dorsal view (with sculpture), **71** – in lateral view, **72** – posterior end; **73** – part of fore wing. *Microchelonus moravicus* sp. n., ♂. **74** – head in dorsal view; **75** – head in frontal view; carapace: **76** – in dorsal view (with sculpture), **77** – in lateral view, **78** – posterior end; **79** – part of fore wing.

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