

Description of two species (one new species) of the genus *Microchelonus* from Austria

(Insecta: Hymenoptera: Braconidae)

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Abstract

Studies on *Microchelonus* species are presented: *Microchelonus fischeri* sp.n. is described from Austria, Hungary, Finland, Lituania and Russia. *Microchelonus temporalis* TOBIAS stat. rev. is redescribed. Its synonymy with *Chelonus rugicollis* THOMSON (PAPP 1990) is abolished.

Key words: Braconidae, *Microchelonus*, new species, Austria, Hungary, Finland, Lituania, Russia.

Zusammenfassung

Ein Studienaufenthalt am Naturhistorischen Museum Wien lieferte einen interessanten Beitrag zur Kenntnis der Gattung *Microchelonus*: *Microchelonus fischeri* sp.n. wird aus Österreich, Ungarn, Finnland, Litauen und Rußland beschrieben. *Microchelonus temporalis* TOBIAS stat. rev. wird nach österreichischem Material wiederbeschrieben. Seine Synonymie mit *Chelonus rugicollis* (THOMSON) (PAPP 1990) wird aufgehoben.

During a short period of work in Naturhistorisches Museum Vienna (NMV) I was able to study a collection of material belonging to the subfamily Cheloninae. Some results of this study are presented in this article. I am very grateful to Dr. Maximilian Fischer who has helped me in many ways.

Microchelonus fischeri sp.n.

(figs. 1 - 4)

Holotype: ♂, Austria inf., Klippe Ruine Staatz, 6.7.83, leg. Fischer (in collection NMV). Paratypes: Hungary: 1 ♂, Bukk hgs., Létrás tető, 1966.VII.13, leg. Móczár L.; 1 ♀, Matra, Galyatető, 1952.VI.25, leg. Sólymosné; 1 ♀, Bajánsenye Csertaerdő, 1980.VII.9, leg. Podlussány (in collection of Hungar. Nat. Hist. Mus., Budapest). Finland: 2 ♂♂, U. Helsinki, 6880:390, 23.7.1976, M. Koponen leg.; 1 ♂, EH. Hattula, 6775:356, 11.7.1976, M. Koponen leg.; 1 ♂, V. Nauvo Sell, 699:22, 18.7.1978, M. Koponen leg. (in collection of Dept. Agric. and Forest Zool. of University Helsinki, partly in Zool. Inst. Russian Acad. Sci.). Lituania: 1 ♂, Rojus-2, 1972.VI.20, V. Jonaitis. Russia: 2 ♂♂, Karelia, Kizhi, 24.VII.1962, V. Trjapitzin leg. (in collection of Zool. Inst. Russian Acad. Sci., St. Petersburg).

Description. Holotype (♂). Body 3.5 mm. Head behind eye rounded, about temples slightly narrower than about eyes, 1.1 times broader than mesonotum, 1.9 times as broad as long, 1.2 times as broad as high. In dorsal view eye 1.4 times longer than temple. Ocellar triangle on diameter ocellus longer than OOL. Distance between hind ocelli twice longer diameter of an ocellus. Eye in lateral view 1.7 times as long as wide, 3 times as long as malar space. Face 2.3 times as wide as high, the same width as longitudinal diameter of eye. Maxillar palpi as long as height of face with clypeus.

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Antenna as long as head and mesosoma together. First flagellar joint 2.5 times as long as broad, second joint twice as long as broad, 12-15th joints as long as broad, without dents. Mesosoma 1.5 times as long as high. Propodeum with clear transverse keel and a pair of rounded tubercles laterally. Pterostigma as long as radial cell along metacarp, r2 as long as r1, 4.5 times as long as r3, 1.8 times as r1. Hind femur 3 times as long as broad, fifth joint of hind tarsus longer than third, but shorter than second joint. Carapace oval, apically incurved ventrally on 0.1 its length, 1.75 times as long as broad, 3.2 times as long as maximum height. Ovipositor short.

Head not roughly sculptured, faintly shiny. Vertex behind ocelli and temple transversally striato-rugulose, face irregularly rugulose. Clypeus punctate, shining. Mesosoma rather roughly sculptured, but mesonotum with extremely smooth sculpture, shining, front of scutellum longitudinally rugose. Middle part of scutellum punctate, shining. Carapace longitudinally rugulose, on basal part rugulo-rugose, on apical part striato-rugulose.

Body black. Apical part of mandibula and first tibia yellow-brown. Wings infuriate. Pterostigma and veins brown, mediocubital and basal veins light-brown.

Variability of paratypes. Body 2.7 - 3.7 mm. Radial cell along metacarp sometimes a little shorter than pterostigma, r2 a little shorter or longer than r1, 4-5 times as long as r3, 1.6 - 2 times as long as r1.

Joints of apical part of antenna sometimes with dents. Sculpture of mesonotum often less smooth, scutellum sometimes rugoso-punctate. Face often vertically (near eyes) or concentric rugulose.

Male. Body 3 - 3.5 mm. Antennae with 19 joints. Preapical joints of flagellum as long as broad or its length a little more than width. Carapace 1.75 - 2 times as long as broad. Apical aperture disposed on lower half of carapace, oval, 0.25 - 0.33 as broad as carapace, about 2 times as broad as high. Middle tubercles of apical aperture a little longer than its height, about 0.3 height of aperture.

Differential diagnosis. *Microchelonus fischeri* sp.n. is related to *M. contractus* (NEES); differs by smoother sculpture of mesonotum combined with reticulate-rugose sculpture in front of scutellum and dark colored without medial yellow band on hind tibia. Because of the infumate wings *M. fischeri* is similar to *M. scabrosus* (SZEPLIGETI); but differs by smoother sculpture of mesonotum and small oval apical aperture of male (aperture of *M. scabrosus* is very wide - several times as wide as high).

Microchelonus temporalis TOBIAS stat. rev.

(Figs. 5 - 6)

Material. Austria: 5 ♀♀, 11 ♂♂, Stmk., 345, Mariahof, 1000 m, Waldlichtung, 14.7.75, leg. Fischer; 2 ♀, 12 ♂♂, Stmk., 289, Muhr Teich, Zeutschach, Waldlichtung, 1000 m, 14.7.57, leg. Fischer; 1 ♀, 2 ♂♂, Stmk., 258, Tischbach, Ofenluger, Kleewiese, 1000 m, 5.8.74, leg. Fischer; 1 ♀, 1 ♂, Stmk., (48), Drauenberg a. d. Enns, Osthang, 750 m, überwiegend sonnig, 10.7.1970, leg. Fischer; 1 ♀, 2 ♂♂, Stmk., 292, Kalkberg b. Zeutschach, 1150 m, Waldlichtung, 18.7.75, leg. Fischer; 1 ♂, Kärnten, 344, Rudolfshöhe, Huttenberg, Knappenberg, 1000 m, 11.7.77, Fischer; 2 ♂♂, Stmk. (55), Gesäuse, Jonsbachbrücke, 650 m, windstill, sonnig, 8.7.1970, leg. Fischer; 1 ♂, Stmk., Mödlinger Hütte (44), Ennstaler Alpen, 1500 m, sonnig warm, 22.7.1970, leg. Fischer; 1 ♂, Stmk., 270, Mariahof bis Furtner Teich, 900-1000 m, 7.7.71, leg. Fischer; 1 ♂, Stmk., 263, Fischbach, Falkenstein, Ofenluger, 1000 m, 15.8.74, leg. Fischer; 1 ♂, Salzburg, Parsch, 26.6.1968, P.P. Babiy leg. an Busch; 1 ♂, Alt-Schlaining, Bgld., 12.8.58, leg. Fischer; 1 ♂, Mischendorf, Bgld., 6.8.1958, Fischer (all NMV).

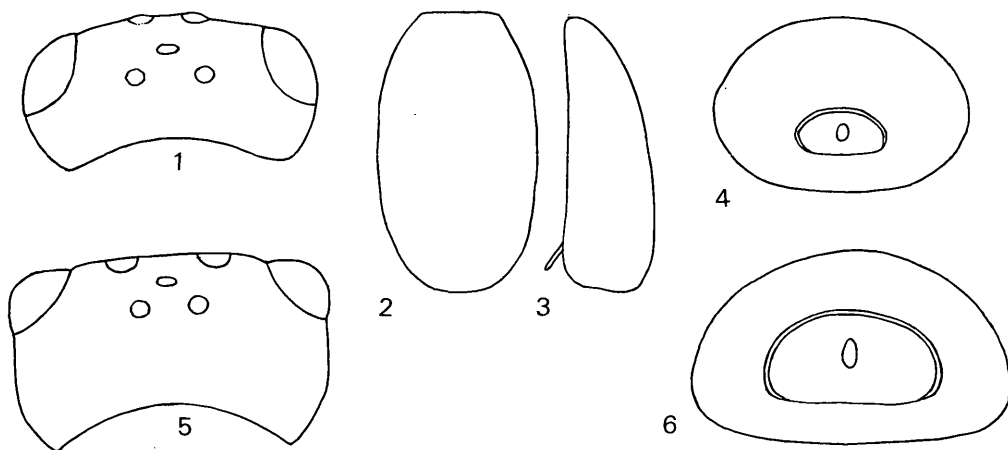


Fig. 1 - 4. *Microchelonus fisheri* sp.n. (1) head in dorsal view, (2) carapace in dorsal view, (3) carapace in lateral view, (4) posterior end of male carapace.

Fig. 5 - 6. *Microchelonus temporalis*. (5) head in dorsal view, (6) posterior end of male carapace.

Description. Male. Body 2.9 - 3.8 mm long. Head a little broader than mesonotum, in dorsal view 1.65 - 1.7 times as broad as long. Temple 2 - 2.3 times longer than eye in dorsal view. Ocellar triangle as broad as OOL. Distance between hind ocelli 2.5 times longer than diameter of an ocellus. Eye 1.7 times as long as wide in lateral view, 1.7 longer than malar space. Face about 1.7 times as broad as high, 1.5 times as wide as longitudinal diameter of eye. Maxillar palps as long as height of face with clypeus. Antenna as long as body, with 20 - 21 joints. First flagellar joint three times as long as broad, further joints gradually attenuating and shortening so that penultimate joint 1.5 - 2 times as long as broad. Mesosoma 1.35 - 1.4 times as long as high. Propodeum with weak transverse keel ending in a pair of rounded tubercles. Pterostigma 1.1 times as long as length of radial cell along metacarp; r2 much shorter than r1, rarely equal to r1; r3 almost straight, twice as long as rm1. Hind femur 3.5 times as long as broad, fifth hind tarsal joint longer than third, but shorter than second joint. Carapace slightly broadening posteriorly, apically incurved ventrally on 0.16 its length, in dorsal view 1.8 - 1.9 times as long as maximum breadth, in lateral view 3.3 times as long as maximum height. Apical aperture beans shaped or oval, about half as wide as carapace, sometimes a little wider, 1.8 - 2.5 times as wide as high.

Head not roughly sculptured, faintly shiny. Vertex behind ocelli and temple transversely striato-rugulose. Face with irregular concentric strigosity. Clypeus subpunctate, shining. Mesosoma rather roughly sculptured. Mesonotum in front of scutellum reticulate-rugose, with longitudinal elements. Scutellum roughly sculptured. Carapace longitudinally rugoso-rugulose, the apical third rugulose, without longitudinal elements.

Body black. Fore tibia and basal part of middle tibia yellow-brown or brown. Bigger part of middle tibia and all tarsi brown. Hind tibia dark brown, on basal part sometimes yellowish. Wings infumate. Pterostigma and veins brown, mediocubital and basal veins light brownish.

Distinction of female. Antenna as long as body. First flagellar joint 3.5 times as long as

broad, 8 - 16 or 9 - 16 joints twice as long as broad, to apical part of flagellum refined. Carapace 1.7 - 1.8 times as long as broad.

Remarks. PAPP (1990) synonymised *M. temporalis* TOBIAS with *Chelonus rugicollis* THOMSON, but the lectotype of *M. rugicollis* (THOMSON) designated by PAPP (1990) is a male, while *M. temporalis* was described from a female (TOBIAS 1986); and the male of *M. temporalis* was unknown. The big series of *M. temporalis* from Austria corresponding to the holotype essentially differ from lectotype of *M. rugicollis*. Head of *M. rugicollis* in dorsal view "twice as broad as long, eye as long as temple" (PAPP 1990: p. 314, fig. 314), but head of *M. temporalis* 1.65 - 1.7 times as broad as long and temple 2 - 2.3 times longer than eye (fig. 5). Apical aperture of lectotype carapace "almost three times as wide as high" (PAPP 1990: p. 315), but apical aperture of male carapace of *M. temporalis* 1.8 - 2.5 times as wide as high (fig. 6). These characters of *M. temporalis* are not consistent with the synonymy of this species and *M. rugicollis*.

References

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