

NOTES ON SOME GREEK *MICROHORIA* CHEVROLAT, 1877 (INSECTA: COLEOPTERA: ANTHICIDAE) WITH NEW DESCRIPTIONS AND SYNONYMY

Dmitry Telnov*, Augusto Degiovanni

Telnov D., Degiovanni A. 2024. Notes on some Greek *Microhoria* Chevrolat, 1877 (Insecta: Coleoptera: Anthicidae) with new descriptions and synonymy. *Acta Biol. Univ. Daugavp.*, 2024(1): 81-127.

Abstract

Taxonomic changes, new records and descriptions of *Microhoria* Chevrolat, 1877 from Greece are presented. *Microhoria emgei* (Pic, 1897) *statt. restit.* is removed from synonymy with *M. terminata* (W.L.E. Schmidt, 1842) and considered valid species. The following five species new to science are described and illustrated: *Microhoria berrai*, *M. mammothus*, *M. melecisi*, *M. sabellai*, and *M. vetroveci* spp. nov., all from Crete. Lectotype designation is made for *M. funeraria* (Marseul, 1879) to maintain nomenclatural stability. The following new synonyms are introduced: *Microhoria basithorax* (Pic, 1941) = *M. cerrutii* Bucciarelli, 1976 syn. nov., *M. fasciata fasciata* (Chevrolat, 1834) = *M. caliginosa pannonica* (Kaszab, 1956a) syn. nov., *M. pinicola* (Reitter, 1889) = *Anthicus terminatus* var. *latebrunneus* Pic, 1901 syn. nov. (hitherto considered a synonym of *M. terminata*), *M. unicolor* (W.L.E. Schmidt, 1842) = *M. unicolor calliger* (Marseul, 1879) syn. nov., = *M. sydowi sydowi* (Pic, 1936) syn. nov., = *M. sydowi reductor* (Pic, 1936) syn. nov., = *M. sydowi olympiae* (Pic, 1941) syn. nov. Supplementary descriptions of eight poorly known species of *Microhoria* are made. An erroneous species-concept is corrected for *M. raveli* (Pic, 1899). Several new faunistic records and ecological observations are provided for poorly known species. Additionally, a new synonym is introduced for non-Greek taxa, *M. akbesiana* (Pic, 1896) = *M. fasciata helvetica* (Krekich-Strassoldo, 1929) syn. nov.

Keywords: Taxonomy, new species, synonymy, redescriptions, ecology, Microhoriini.

*Corresponding author: *Dmitry Telnov. Department of Life Sciences, Natural History Museum, SW7 5BD London, United Kingdom, E-mail: anthicus@gmail.com ORCID: 0000-0003-3412-0089. Coleopterological Research Center, Institute of Life Sciences and Technology, Daugavpils University, Vienibas Str. 13, LV-5401 Daugavpils, Latvia. Institute of Biology, University of Latvia, O. Vācieša iela 4, LV-1004 Rīga, Latvia*

Augusto Degiovanni. Via A. Costa 6, I-40027 Bubano di Mordano (BO), Italy

INTRODUCTION

The Anthicinae Latreille, 1819 tribe Microhoriini Bonadona, 1974 (Anthicidae Latreille, 1819) at present consists of five

genera - *Aulacoderus* La Ferté-Sénéctère, 1849, *Falsophilus* Kejval, 2015, *Liparoderus* La Ferté-Sénéctère, 1849, *Microhoria* Chevrolat, 1877, and *Neocrohoria* Telnov, 2019 (Telnov 2019, Kejval & Chandler 2020).

The taxonomy of the tribe has been revised recently, which resulted in the synonymy of *Clavicomus* Pic, 1894 and *Tenuicomus* Pic, 1894 with *Microhoria* Chevrolat, 1877 and the definition of ten species-groups within the highly speciose *Microhoria* (Kejval & Chandler 2020). These significant taxonomic changes were released after the acceptance of the most recent version of the Catalogue of Palaearctic Anthicidae (Telnov 2020a) and are not reflected in this account.

The Microhoriini is mainly a Palaearctic and Afrotropical group, with several *Microhoria* species known also from the northernmost parts of the Oriental Region (Telnov 2022), and the monotypical genus *Neocrohoria* Telnov, 2019 occurs only in Chile (Telnov 2019).

Microhoria, the most speciose and morphologically diverse genus of its tribe, can be defined by the set of the following features (Kejval & Chandler 2020, Telnov 2022): mandible with simple or uneven cutting edge, right mandible with small distal denticle, procoxal cavity with paired lateral incision at anterior margin, intercoxal process of proventrite generally well-developed but reduced in *M. fasciata* (Chevrolat, 1834), postcoxal bridge simple, mesoventrite transverse, laterally strongly expanded and rounded, mesepisterna transversely sulcate, mesepisterna medially narrowly separated, position of pore of mesothoracic gland at margin of mesothorax, orifice well-defined with sclerotized bridge separating it from intersegmental membrane, intercoxal process of first abdominal ventrite pointed or narrowly rounded apically, metathoracic coxa with fully developed posterior transverse carina, mesothoracic tibia with two, metathoracic tibiae with one or two terminal spurs, basal piece of tegmen tubular and well-developed.

Thirty-five species of what is now considered *Microhoria* are listed for continental and insular Greece in the most recent edition of the catalogue of the Palaearctic Coleoptera (Telnov 2020a). The most recent faunistic and

taxonomic notes on the Greek *Microhoria*, including new descriptions, were presented by Kejval & Chandler (2020) and Telnov (2022). Some of available Greek records require further confirmation (e.g., *M. gorgus* (Truqui, 1855)) while for numerous other taxa only published records older than 50 years are available. Additionally, several taxa were erected pre-1960 as varieties and subsequently routinely synonymized with their nominal taxa without examination of type material causing potential taxonomic issues as is demonstrated herein with *M. emgei* (Pic, 1897) stat. restit. While *Microhoria* species from several biodiverse European countries like France and Italy as well from the Eastern Mediterranean were adequately revised (Bonadonna 1990, 1991 for France; Bucciarelli 1980 for Italy; Telnov 2022 for the E Mediterranean), the Greek fauna of this group remains partially obscure and understudied.

The aim of the present work is to describe and illustrate five new Greek species of *Microhoria* (*M. berrai*, *M. mammothus*, *M. melecisi*, *M. sabellai*, and *M. vetroveci* spp. nov.), document taxonomic changes and a lectotype designation for two taxa, introduce seven new synonyms in the Greek *Microhoria*, and provide new faunistic records for several Greek species. Supplementary morphological data provided for eight poorly-known *Microhoria* from the Eastern Mediterranean. Additionally, a new synonym is introduced for non-Greek taxa from the Mediterranean and Black Sea region: *M. akbesiana* (Pic, 1896) = *M. fasciata helvetica* (Krekich-Strassoldo, 1929) syn. nov.

MATERIAL AND METHODS

All taxa are listed in alphabetical order since a phylogenetic arrangement is not yet possible. All label text is reproduced verbatim, with no corrections or additions. Labels (if more than one for the same specimen) are separated by double slash. Authors' comments are given in square brackets. Each type specimen of a

newly described species is provided with a printed, black framed label on red paper “HOLOTYPE” or “PARATYPE”, respectively.

For morphological studies, a Leica S6D binocular stereomicroscope was used. Genitalia were studied using a AmScope BH 200 optical microscope. Habitus digital images made with a Canon 5D SLR camera mounted on a stand with a Laowa 25 mm lens (D. Telnov) or a Pentax K20D digital camera mounted on a micrometric stand with a Lomo 3,7x lens (A. Degiovanni), while images of genital organs and terminal abdominal segments were prepared using an AmScope BH 200 light microscope with a Sony DSC-WX100 digital camera attached to a microscope (D. Telnov) or a Pentax K20D camera attached to a Nikon Labophot 1 stereomicroscope with Zeiss Epiplan HD 16/0,35 lens (A. Degiovanni). Helicon Focus version 7 (D. Telnov) or CombineZP (A. Degiovanni) software was used for image stacking. Further image manipulations were performed using the GNU Image Manipulation Program (GIMP) software.

The study area is defined as the territory of the Hellenic Republic.

The bibliography is given as completely as it was possible for most of the taxa discussed herein. Distribution chorotypes were defined according to Vigna Taglianti et al. (1999).

The material discussed below is housed in the following collections:

ADC – Collection Augusto Degiovanni, Bubano, Italy;

BMNH – Natural History Museum (formerly British Museum, Natural History), London, United Kingdom;

DTC – Collection Dmitry Telnov, Rīga, Latvia;

DUBC – Daugavpils University Coleoptera Collection, Ilgas, Latvia;

HMC – Collection Hans Mühle, München, Germany;

HNHM – Hungarian Museum of Natural History, Budapest, Hungary;

IRSNB – Institut royal des Sciences naturelles de Belgique, Brussels, Belgium;

JVC – Collection Jaroslav Větrovec, Hradec Králové, Czech Republic;

MEC – Collection Manfred Egger, Wattens, Austria;

MNHN – Muséum national d’Histoire naturelle, Paris, France;

MSNM – Museo civico di storia naturale di Milano, Milan, Italy;

MZH – Finnish Museum of Natural History (Zoological Museum), Helsinki, Finland;

NHMW – Naturhistorisches Museum Wien, Austria;

NME – Naturkundemuseum Erfurt, Germany;

NMP – Národní muzeum, Prague, Czech Republic;

SMZR – Museo di Zoologia, Sapienza Università di Roma, Rome, Italy);

ZKC – Collection Zbyněk Kejval, Domažlice, Czech Republic;

ZMC – Natural History Museum of Denmark (formerly Zoological Museum), University of Copenhagen, Copenhagen, Denmark.

The holotypes temporary deposited in ADC will be transferred to a public institution.

ZooBank URN for this publication:
urn:lsid:zoobank.org:pub:CB1CD336-79B2-4110-9BB0-AEC5ABC02A21

RESULTS

Species from Greece: new nomenclatural acts, descriptions, and records

Microhoria basithorax (Pic, 1941) (Figs. 1–3)

= *Microhoria cerrutii* Bucciarelli, 1976 **syn. nov.**

‘*Anthicus Magnini* [nomen nudum] subs. *basithorax*’ – Pic 1941a: 3 (description: Crete).

Anthicus basithorax – Chandler et al. 2004:

150 (taxonomy); Chandler et al. 2008: 425 (checklist; general distribution: Greece (Crete)); Telnov 2020a: 577 (checklist; general distribution: Greece (Crete)).

Microhoria basithorax – Kejval & Chandler 2020: 131 (new combination, taxonomy, assigned to the *M. terminata* species group).

'*Microhoria (Platyhoria) cerrutii*' – Bucciarelli 1876: 139 (description: 'Is. Creta').

Microhoria cerrutii – Uhmman 1996: 34 (records: 'Kreta, Akroriri, Chania Umg.', 'Kreta, Herakleion'); Kejval & Chandler 2020: 131 (assigned to the *M. terminata* species group); Chandler et al. 2008: 439 (checklist; distribution: Greece: Crete); Telnov 2020a: 608 (checklist; distribution: Greece: Crete).

Type material examined, *M. basithorax*. Syntype 1♀ MNHN: Ile de Crète [handwritten] // Magnini subs.*basithorax* Pic [handwritten].

Type material examined, *M. cerrutii*. Holotype ♂ SMZR (Fig. 1C): IS. CRETA (Iraklion) Gérgeri, m 600 M. Cerruti 25 e 30.IV.1971 [printed] // HOLOTYPUS [printed, label red] // Holotypus ♂ *Microhoria (Platyhoria) cerrutii* n.sp. det. Bucciarelli, 1974 [handwritten, label red].

New material examined. 1 specimen DTC: Creta occ: Acrotiri (Baie Sudha) 5 m. St.18 14-IV-'31 (Orch.) [printed] // R. Mus. Hist. Nat. Belg. I. G. 9.642 [printed]; 1 specimen IRSNB: Creta or. Hiraklion (Kassabonos) 5m. St.54 26-IV-'31 (Orch.) [printed] // Reg. Mus. Hist. Nat. Belg. I.G. 9642 [printed]; 1♂ DTC: Kreta, M.V.87 Chersonissos [sic!] leg. R. Frieser [printed] // *Microhoria ionica* (Pic) det. G. Uhmman 1992 [printed]; 1♂ DTC: GR – Kreta 1988 Agia Varvara 24.4. leg.: R. PESCHEL; 1♂ ADC (Fig. 1A–B): GRECIA-CRETA: CHANIA OMALOS m. 1000 / 1500 G. SAMA LEG. [printed] 22|6|89 [handwritten]; 1 specimen HNHM: GREECE, Crete, Prov. Iraklio, Vourvoulitis, 13.V.1993, I. Rozner [printed]; 1 specimen HNHM: GREECE, Crete, Prov. Iraklio, Amoudara

[printed] // Mt. Keri, 200 m, 9-10.V.1993, leg. A. Podlussany [printed]; 1 specimen BMNH: Crete : E. Phaistas 3.V.1998 R.T. Thompson // BMNH(E)1998-107; 2 specimens NME & 1♂ DTC: CRETE-E, Ierapetra, E, 0-20mNN 17.-23.04.2000 leg. A. Kopetz; 1♀ DTC: GR Kreta Umgeb. Matala 17.-23.4.01 Sieber [printed]; 1♂ ADC: GR CRETA 1000 m ALTOPIANO DI OMALOS 29 LUG 04 PYRUS, CRAT. M. BERRA LEG. [printed].

Note. Pic (1941a) described '*Anthicus magnini basithorax*' from Crete as a subspecies. Since the original description of '*Anthicus magnini*' is unknown and likely was never published, this name was treated as *nomen nudum* by Chandler et al. (2004: 150) and the subspecific taxon - as *Anthicus basithorax* (Chandler et al. 2004, 2008, Telnov 2020a). Kejval & Chandler (2020: 131) placed this taxon in *Microhoria* based on the examination of the syntypes (MNHN) of an apparently undescribed '*Anthicus magnini*'. We managed to allocate a female syntype of *M. basithorax* and herewith confirm the generic placement of this species in *Microhoria*.

Synonym. Only a single female syntype of *M. basithorax* was available for the present study. The specimen generally agrees in external morphology with the holotype of *M. cerrutii* and the additional specimens discussed herein and is slightly different from the externally similar specimens from Crete described herein as *M. berrai*, *M. mammothus*, and *M. melecisi* spp. nov. Since the shape and structure of male terminalia and genital organs of the examined specimens cannot be compared with those of the type material of *M. basithorax*, our concept of this species is tentative. However, considering the external similarity of the studied female syntype of *M. basithorax* with the comparative specimens and the type material of *M. cerrutii*, we introduce a new synonym.

Supplementary description. Male from the Omalos Plateau collected 22.6.1989, total body length 2.5 mm. Head 0.6 mm long, across compound eyes 0.5 mm wide,

pronotum 0.4 mm long, maximum width 0.4 mm, elytra 1.5 mm long, maximum combined width 0.95 mm. Dorsum and venter uniformly black to black-brown, basal groove of pronotum dorsally and laterally reddish brown (dark in the second studied male, reddish brown in the female syntype). Mouthparts, antenna and legs yellowish brown, four terminal antennomeres and femora darker brownish. Head slightly longer than wide, head base and posterior temporal angle rounded in one broad arc. Compound eye moderate, moderately protruding from lateral outline of head, about 1.6–1.7× as long as converging-rounded tempus. Head dorsum slightly glossy, moderately dense and rather large punctate. Intervening spaces smooth, about 1.5× as wide as punctures. Dorsal cranial setae yellowish, moderately long, rather dense, subdecumbent. Antenna hardly enlarged in apical third. Antennomeres 8–10 trapezoidal, shortened compared to antennomeres 1–5. Penultimate antennomere as long as wide. Terminal antennomere elongate, apically rounded, about 1.9× as long as penultimate antennomere, shorter than combined length of antennomeres 9–10. Terminal maxillary palpomere securiform. Pronotum as long as wide, slightly narrower than head across eyes, subtruncate medially at anterior margin, broadly rounded at anterolateral angles. Pronotal disc slightly glossy, flattened in dorsal aspect. Anterior portion of pronotum moderately wider than posterior, lateral margins slightly converge in posterior half. Latero-basal pronotal fovea broad and deep. Pronotal punctures less deep and sparser than those on head dorsum, generally elliptical. Intervening spaces as wide as to twice as wide as punctures, smooth. Dorsal pronotal setation similar to that on head. Scutellar shield small, apically broadly rounded, minutely punctate. Elytra about 1.6× as long as wide, laterally slightly rounded, rounded at apex, dorsally flattened. Humerus distinct, broadly rounded. Apex of elytron modified, with a bunch of short setae at gland channel opening. Elytral surface slightly glossy, smaller and sparser punctate than forebody. Intervening spaces

variable, gene-rally as wide as to 3× as wide as punctures, smooth. Elytral setae yellowish, moderately long and dense, subdecumbent, directed posteriorly. Metathoracic wings fully developed (functional). Legs without modifications, tibial terminal spurs paired. Basal metatarsomere as long as to slightly longer than combined length of remaining metatarsomeres. Tergite VII truncate at posterior margin (Fig. 2F). Morphological sternite VII broad, shallowly emarginate medially at posterior margin, with a long seta each side of emargination (Fig. 2E). Tergite VIII rounded at posterior margin, with several moderately long setae (Fig. 2G). Morphological sternite VIII narrow, rounded and medially emarginate at posterior margin (Fig. 2H). Morphological sternite IX Y-shaped, lateral arms long, basal stem short (Fig. 2I). Aedeagus (Fig. 2A–D) subcylindrical, apex of tegmen hooked; endophallic armature with long, paired, sickle-like, basally bifurcate (Fig. 2C) or widened (Fig. 2B), apically acutely-angulate spines and a group of shorter, subparallel, apically variably obtuse-shaped spines.

Intraspecific variability. Pronotum is entirely reddish or pronotal base is yellowish-brown in some specimens. Density of dorsal punctures vary, especially those on forebody.

Sexual dimorphism. Female body somewhat more robust, elytra comparatively wider, elytral apex without modifications, tergite VII apically shallowly, morphological sternite VII – rather deeply emarginate, morphological sternite IX rod-like (Fig. 3).

Differential diagnosis. This species is primarily specific in the shape and structure of the male aedeagus and the morphological sternite VII and the female tergite and morphological sternite VII.

Ecology. Occurs from coastal lowlands (5 m) to the Omalos Plateau at 1000–1500 m.

Distribution. Greece: Crete.

Chorotype. E-Mediterranean (3.03 EME).

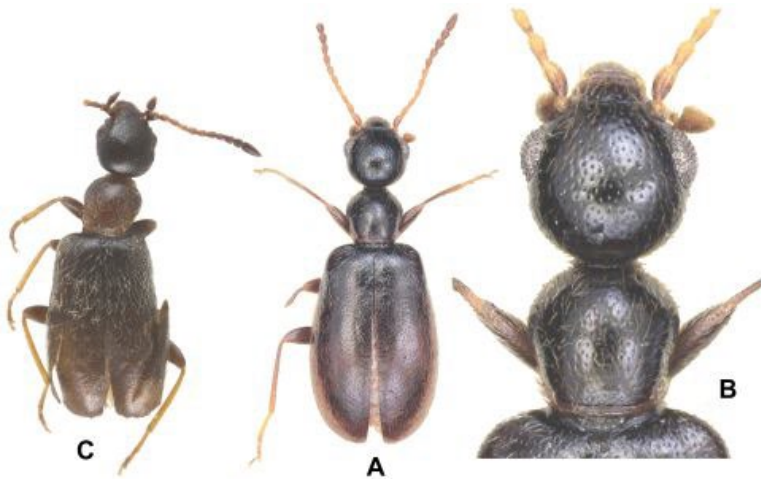


Figure 1. *Microhoria basithorax* (Pic, 1941). A – ♂ from Chania Omalos, Crete, habitus, dorsal view; B – ditto, dorsal forebody; C – Holotype ♂ *M. cerrutii* Bucciarelli, 1976, habitus, dorsal view; [not to scale]. Images: A. Degiovanni & D. Telnov.

***Microhoria berrai* sp. nov.** (Figs. 4–5)

urn:lsid:zoobank.org:act:90689928-9A07-4B55-9E65-EC0510358B9F

Type material designated. Holotype 1♂ ADC (Fig. 4A–B): GR CRETA 1000 m ALTOPIANO DI OMALOS 29 LUG 04 PYRUS, CRAT. M. BERRA LEG. [printed]. Paratypes 4 specimens. 1♂ ADC: same label as holotype; 1♂ (Fig. 4C), 1 not sexed specimen MNHN: [small black square label with no text] // Ins. Creta Reitter. [printed, black frame] // Coll. Reitter [handwritten] // *rubriceps* Pic [handwritten] // type [handwritten] // TYPE [printed, label red] [the two specimens from the MNHN are the paralectotypes of *M. rubriceps* (Pic, 1896) (see Telnov 2022)]; 1♂ IRSNB: Creta or. Vrysaes ± 400 m. St.65 30–IV–31 (Orch.) [printed, upper side of the label] 362 [handwritten, underside of the label] // Reg. Mus. Hist. Nat. Belg. I. G. 9642 [printed].

Note. Pic (1986: 180) described *Anthicus rubriceps* from ‘Syrie, Crète, Cyclades’. Telnov (2022: 282) discovered and redescribed a male syntype from ‘Syrie’ and designated it as the lectotype to maintain the

nomenclatural stability driven by the fact that ‘Syrie’ was listed first among the type localities for this taxon. Two other syntypes (one male, one not sexed) from ‘Ins. Creta’, became paralectotypes. Telnov (2022) suggested that the paralectotypes of *M. rubriceps* from Crete are mislabelled or belong to a different species. We here demonstrate that the two paralectotypes from Crete (see Differential diagnosis below) are not conspecific with the lectotype *M. rubriceps* and make them paratypes of *M. berrai* sp. nov. The type material of *M. rubriceps* from ‘Cyclades’ has not been found by any previous or present study, and it remains unknown to which species it belongs. The variety ‘*rubronotatus*’ (Pic 1896: 180) from Dodecanese Islands is treated as a separate species by Telnov (2022).

Correction. The figure of a paralectotype of *M. rubriceps* in Telnov (2022 fig. 47C) refers to a male and not a female specimen as is mistyped in the paper.

Etymology. Patronymic. Named for Marco Berra (Cremona, Italy), one of the collectors of the type series.

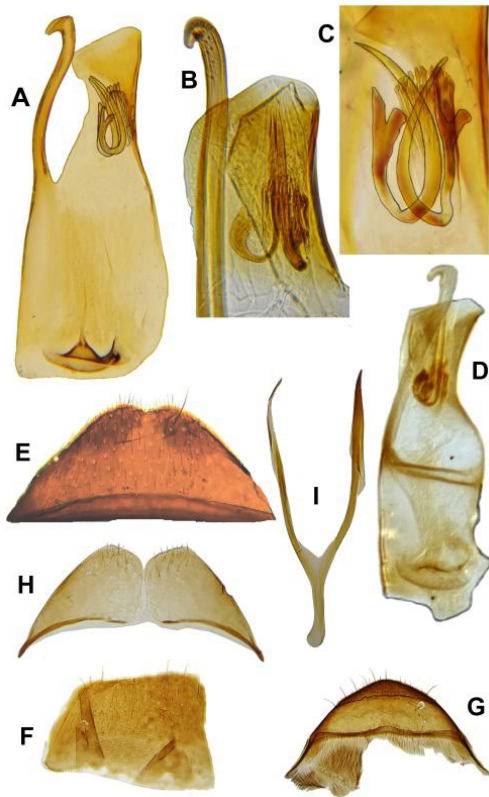


Figure 2. *Microhoria basithorax* (Pic, 1941), male genitalia and terminalia. A – ♂ from Omalos Plateau, Crete, aedeagus, lateral view; B – ditto, ♂ from ‘Chersonissos’, Crete, apical portion, magnified; C – ♂ from Omalos Plateau, Crete, aedeagus, endophallic armature; D – Holotype ♂ *Microhoria cerrutii* Bucciarelli, 1976, aedeagus, lateral view; E – ♂ from Omalos Plateau, Crete, morphological sternite VII, ventral view; F – ditto, tergite VII, dorsal view; G – ditto, tergite VIII, dorsal view; H – ditto, morphological sternite VIII, ventral view; I – ditto, morphological sternite IX [not to scale]. Images: A. Degiovanni & D. Telnov.

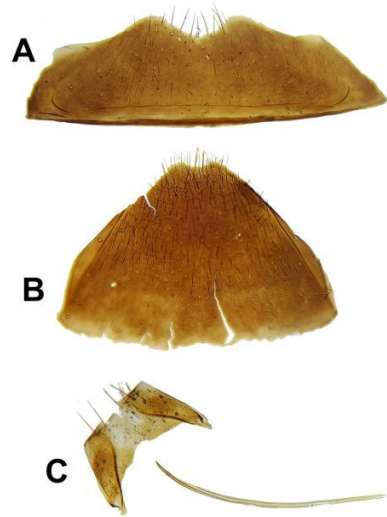


Figure 3. *Microhoria basithorax* (Pic, 1941), specimen from Matala surroundings, Crete, female terminalia. A – Morphological sternite VII, central view; B – Tergite VII, dorsal view; C – Morphological sternite IX [not to scale]. Images: A. Degiovanni & D. Telnov.

Description. Holotype male, total body length 2.55 mm. Head 0.6 mm long, across compound eyes 0.5 mm wide, pronotum 0.45 mm long, maximum width 0.45 mm, elytra 1.5 mm long, maximum combined width 0.9 mm. Paratype from Vrysaes 2.2 mm long. Head and pronotum pale rufous, head slightly darker, elytra black-brown. Mouthparts, antenna, and legs yellow to pale rufous, antennomeres 9–11 somewhat darkened. Venter black-brown, mesosternum pale rufous. Head slightly longer than wide, head base and posterior temporal angle rounded. Compound eye large, strongly protruding from lateral outline of head, much longer than short, rounded tempus. Head dorsum moderately glossy, moderately densely and deeply punctate. Intervening spaces smooth, about as wide as to 3× as wide as punctures. Dorsal cranial setae yellowish, moderately long and dense, not fully appressed. Antenna hardly enlarged in apical third, extending slightly beyond humeral area of elytra. Antennomere three slightly longer

than antennomere two. Antennomeres 5–10 shorten gradually. Penultimate antennomere slightly longer than wide. Terminal antennomere elongate, apically rounded, twice as long as penultimate antennomere, shorter than combined length of antennomeres 9–10. Terminal maxillary palpomere securiform. Pronotum as long as wide, narrower than head across eyes, broadly rounded to medially subtruncate at anterior margin, broadly rounded at anterolateral angles. Pronotal disc moderately glossy, flattened in dorsal aspect. Lateral margins of pronotum converge in posterior half. Latero-basal pronotal fovea broad and deep. Pronotal punctures about as large and coarse as those on head dorsum. Intervening spaces slightly wider than punctures, smooth. Dorsal pronotal setation similar to that on head. Scutellar shield small, apically broadly rounded, minutely punctate. Elytra about 1.6× as long as wide, laterally subparallel to very broadly rounded, rounded at apex, dorsally flattened. Humerus distinct, broadly rounded. Apex of elytron modified, with short, acutely angulate denticle-like process at gland channel opening (Fig. 5A). Elytral surface moderately glossy, punctures slightly larger and less regular than those on forebody, variable shaped. Intervening spaces variable, generally twice to 3× as wide as punctures. Elytral setae pale yellowish, moderately long and dense, subdecumbent, directed posteriorly. Metathoracic wings fully developed (functional). Legs without modifications, tibial terminal spurs paired. Basal metatarsomere about as long as combined length of remaining metatarsomeres. Tergite VII truncate at posterior margin. Morphological sternite VII broad, rather deeply emarginate medially at posterior margin, with a long seta each side of emargination (Fig. 5C). Tergite VIII rounded at posterior margin and with numerous short setae (Fig. 5D). Morphological sternite IX Y-shaped, lateral arms long (Fig. 5D). Aedeagus (Fig. 5B) short-cylindrical, tegmen apex short, slightly curved; endophallic armature of a

single long hook-like spine.

Sexual dimorphism. Female was not available for study.

Intraspecific variability. The ♂ paratype from Vrysaes is entirely black-brown except for pale yellowish brown antennomeres 1–5 and brown legs.

Differential diagnosis. *Microhoria berrai* sp. nov. belongs to the *M. terminata* species group as defined by Kejval & Chandler (2020). In the general appearance and colouration, it strongly resembles several similarly coloured congeners from the eastern Mediterranean (for instance, *M. emaciata* (Pic, 1896), *M. rubriceps* (Pic, 1896), *M. rubronotata* (Pic, 1896), and some specimens of *M. terminata* (W.L.E. Schmidt, 1842)) but is peculiar in the shape of the aedeagus, the more broadly rounded elytral apex (the elytra narrower apically in *M. emaciata* and *M. rubriceps*), the presence of the acute apical denticle-like process on the elytral apex (the gland channel opening not denticulate in *M. emaciata*), the less distinctly bicoloured antenna (the antenna pale yellow with four terminal antennomeres contrastingly darker in *M. emaciata* and three – in *M. rubronotata*), and the medially emarginate posterior margin of the male morphological sternite VII (not emarginate in *M. emaciata*, *M. rubriceps*, *M. rubronotata*, *M. terminata*); the similarly but shallower emarginate morphological sternite VII present in *M. basithorax* (see redescription above), but this species is almost entirely dark coloured (except in some specimens, see above) and the aedeagus is different.

Ecology. Occurs at 1000 m. Some paratypes sampled from *Pyrus* sp.

Distribution. Greece: Crete.

Chorotype. E-Mediterranean (3.03 EME).

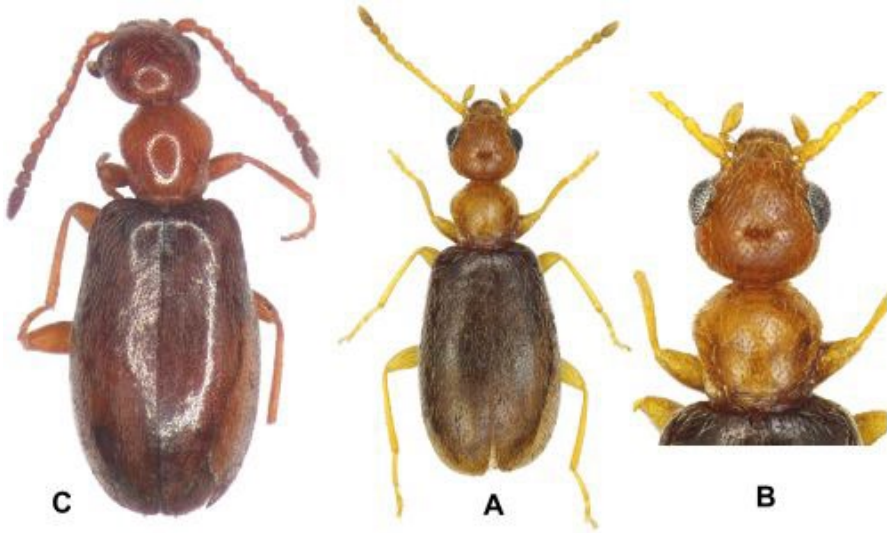


Figure 4. *Microhoria berrai* sp. nov. A – Holotype ♂ *M. berrai* sp. nov., habitus, dorsal view; B – ditto, forebody, dorsal view; C – Paralectotype ♂ *M. rubriceps* (Pic, 1896), habitus, dorsal view; [not to scale]. Images: A. Degiovanni & D. Telnov.

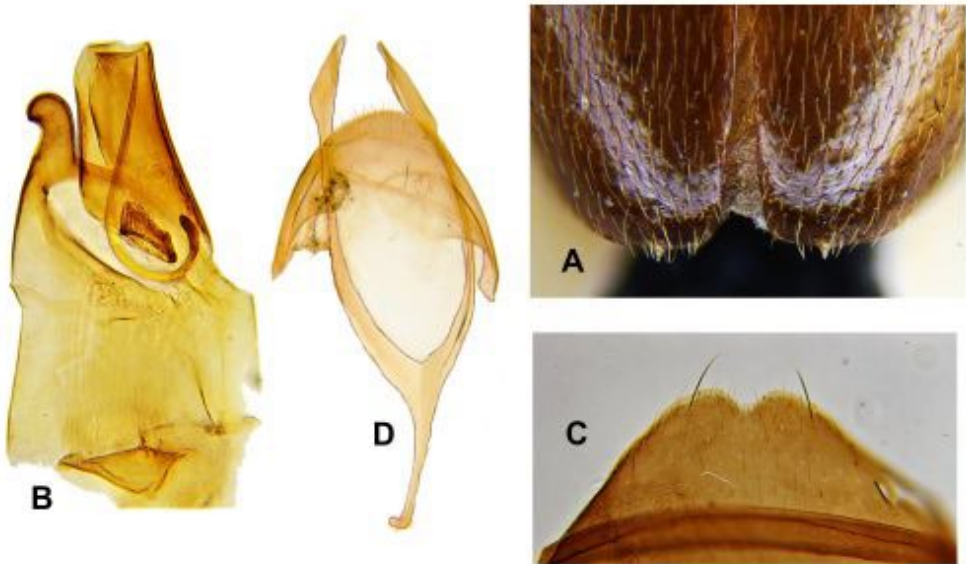


Figure 5. *Microhoria berrai* sp. nov., ♂ paratype from Altopiano Di Omalos, Crete. A – Apex of elytra; B – Aedeagus, lateral view; C – Morphological sternite VII, ventral view; D – Tergite VIII & morphological sternite IX, dorsal view [not to scale]. Images: A. Degiovanni & D. Telnov.

***Microhoria caliginosa caliginosa* (La Ferté-Sénéctère, 1849)**

See Telnov (2022).

New material examined. 1♂ HMC: GR/Kreta/Rethimno Phaistos 29.5.2003 leg. H. Mühle [printed].**Distribution.** Albania, Bulgaria, Bosnia-Herzegovina, Croatia, Greece (mainland, Crete), Italy, Slovenia. First record from Crete. There is an unconfirmed record exists from Turkey without exact locality information (Chandler et al. 2008).**Chorotype.** E-Mediterranean (3.03 EME).**Note.** *Microhoria caliginosa epidaurosa* (Pic, 1936) from Epidaurus (Greece, Peloponnese Peninsula) is only known from the type series which was not available for this study. Not unlikely it is conspecific with the nominal form.***Microhoria corallicolis* (Reitter, 1889)**

See Telnov (2022) for references and taxonomy.

New material examined. 1♂ MNHN: Syra Kykladen A.Schatzmayr [printed]; 1♂ DTC: Syra A.Schatzmayr Coll.O.Leonard [printed] // ♀ [printed] // *syrensis* [handwritten] det. v.Krekich [printed] // 1912.374 [handwritten]; 1♂ DTC: Syra Schatzm. [handwritten] // ♀ [printed] // *syrensis* [handwritten] det. v.Krekich [printed] // *syrensis* Pic [handwritten] // 1912.374 [handwritten].**Distribution.** Greece (Cyclades Islands (Karpathos, Kea, Syra), Dodecanese Islands). The records from Israel (Chikatunov et al. 2004; Uhmman et al. 2005) are based on misidentified material (see Telnov 2022)**Chorotype.** E-Mediterranean (3.03 EME).***Microhoria decolorata* (Pic, 1897)**

See Kejval & Chandler (2020) for references and taxonomy.

New material examined. 1♀ DTC: Greece, Mte. Deka, Corfu [printed]; 1♀ DTC: GRAECIA-PELOP. ARKADIA, TAYGET. KALAMATA 250m Leg. WACHTEL 5.99

[printed].

Distribution. Greece: mainland, Aegean islands (Samos), Ionian Islands (Cephalonia, Corfu).**Chorotype.** E-Mediterranean (3.03 EME).***Microhoria emgei* (Pic, 1897) stat. restit.** (Figs. 6–8)*'Anthicus ruficollis ? var. Emgei'* – Pic 1897: 296 (description: 'Sporades: Skiathos').*Anthicus Emgei* – Pic 1901a: 254 (change in rank, checklist, '? v. de ruficollis').*'Anthicus terminatus ? v. Emgei'* – Pic 1901c: 150 (checklist, record: 'Sporades').*Anthicus nectarinus* var. *Emgei* – Pic 1911: 62 (change in rank and a new synonym, checklist); Krekich-Strassoldo 1911: 76 (checklist, distribution: 'Sporadi' [Sporades]). *Microhoria (Platyhoria [sic!]) terminata* var. *Emgei* – Bonadona 1955: 117 (informal new combination, key).*Microhoria terminata* var. *emgei* – Uhmman 1985: 201 (change in rank, record: North Macedonia, see note in Distribution below); Uhmman 1992: 167–168, figs 333–334 (illustrations).*Anthicus ruficollis* var. *Emgei* – Bonadona 1990: 383 (synonym of *M. (Platyhoria) terminata*); Bonadona 1991: 147 (synonym of *M. (Platyhoria) terminata*); Bonadona 2013: 94 (synonym of *M. (Platyhoria) terminata*).*Microhoria emgei* – Chandler et al. 2008: 443 (checklist, synonym of *M. terminata*); Telnov 2020a: 613 (checklist, synonym of *M. terminata*); Telnov 2022: 291 (synonym of *M. terminata*).**Type material studied.** 1 syntype [not sexed] MNHN, labels not transcribed.**New material examined.** 17♂ ADC (Fig. 6A, C): GRECIA: Alli Meria, Volos, 10.VI.2015, M. Malvasi leg. [printed]; 16♂♀ DTC: GREECE, Sporades Islands, Skiathos Is., Achladia, 23–30.vii.2022, leg. H.Brustel [printed]; 24♂♀ DTC: GREECE, Sporades Islands, Skiathos Is., Cap de Diamanti, 6–14.viii.2022, leg. H.Brustel [printed].**Taxonomic change.** This taxon is very peculiar in the shape of male terminalia and

genital organs and therefore is considered valid species and removed from synonymy with *M. terminata*.

Supplementary description. Belongs to the *M. terminata* species group. The male from Skiathos, Cap de Diamanti, total body length 2.7 mm. Head 0.6 mm long, across compound eyes 0.55 mm wide, pronotum 0.5 mm long, maximum width 0.5 mm, elytra 1.6 mm long, maximum combined width 1 mm. Forebody pale rufous to rufous, head darker than pronotum or not. Elytra yellow to yellowish rufous, darkened narrowly at base and apex and with external median dark spot touching lateral margin of elytron but broadly separated on disk. Mouthparts, antenna, and legs yellow to yellowish rufous, four terminal antennomeres more or less strongly darkened. Head nearly as wide as long, head base and posterior temporal angle rounded in one broad arc. Compound eye moderate, moderately protruding from lateral outline of head, nearly twice as long as tempus. Head dorsum slightly glossy, densely and moderately large punctate. Intervening spaces smooth, as wide as to (rarely) nearly twice as wide as punctures. Dorsal cranial setae yellowish, moderately long and dense. Antenna slightly enlarged in apical third. Antennomeres 8–10 subtrapezoidal, shortened compared to antennomeres 1–6. Penultimate antennomere distinctly longer than wide. Terminal antennomere elongate, apically rounded, about 1.5–1.6× as long as penultimate antennomere, about as long as combined length of two previous antennomeres. Terminal maxillary palpomere securiform. Pronotum as long as wide, slightly narrower than head across eyes, rounded to subtruncate at anterior margin, broadly rounded at anterolateral angles. Pronotal disc slightly glossy, flattened in dorsal aspect. Anterior portion of pronotum wider than posterior, lateral margins subparallel in posterior half. Latero-basal pronotal fovea broad and deep. Pronotal punctures and intervening spaces similar as those on head dorsum. Dorsal pronotal setation similar to that on head. Scutellar shield small, apically broadly rounded. Elytra about 1.4–1.6× as

long as wide, laterally slightly rounded, rounded at apex, dorsally flattened. Humerus distinct, broadly rounded. Apex of elytron modified, gland opening pore minute, with a small, denticle-like process. Elytral surface slightly glossy, comparatively smaller and sparser punctate than forebody. Intervening spaces variable, generally narrower than to as wide as punctures. Elytral setae pale yellowish, moderately long and dense, not fully appressed, directed posteriorly. Metathoracic wings fully developed (functional). Legs without modifications, tibial terminal spurs paired. Basal metatarsomere about as long as combined length of remaining metatarsomeres. Tergite VII subtruncate at posterior margin (Fig. 7D). Morphological sternite VII broadly triangular, deeply V-shapedly notched medially at posterior margin and with 3–4 long (apical) and several shorter spines along notch margins (Fig. 7E–F). Tergite VIII apically rounded and with scattered long setae, a long hair-like membranous lamina present. Morphological sternite IX Y-shaped, arms short (Fig. 7G). Aedeagus (Fig. 7A–C) with specific endophallic armature, tegmen apex shortly hoked.

Sexual dimorphism. Female (Fig. 6C) generally slightly more robust than male, elytral apex without modifications, tergite VII and morphological sternite VII apically rounded (Fig. 8A–B), tergite VIII and morphological sternite XIII as in fig. 8C, morphological sternite IX rod-like (Fig. 8C).

Note. This species appears very close to *M. pallidula* (Pic, 1892) sensu Bucciarelli (1980) in the shape and structure of the aedeagus, but the short, strongly sclerotized spine is not present in the endophallic armature (see note on *M. pallidula* sensu Bucciarelli (1980) below).

Ecology. Unknown.

Distribution. Greece: mainland (Thessaly), Sporades Archipelago (Skiathos). The record from Skopje (‘Üsküb’) by Uhmman (1985) considered dubious and likely based on misidentified specimens.

Chorotype. E-Mediterranean (3.03 EME).

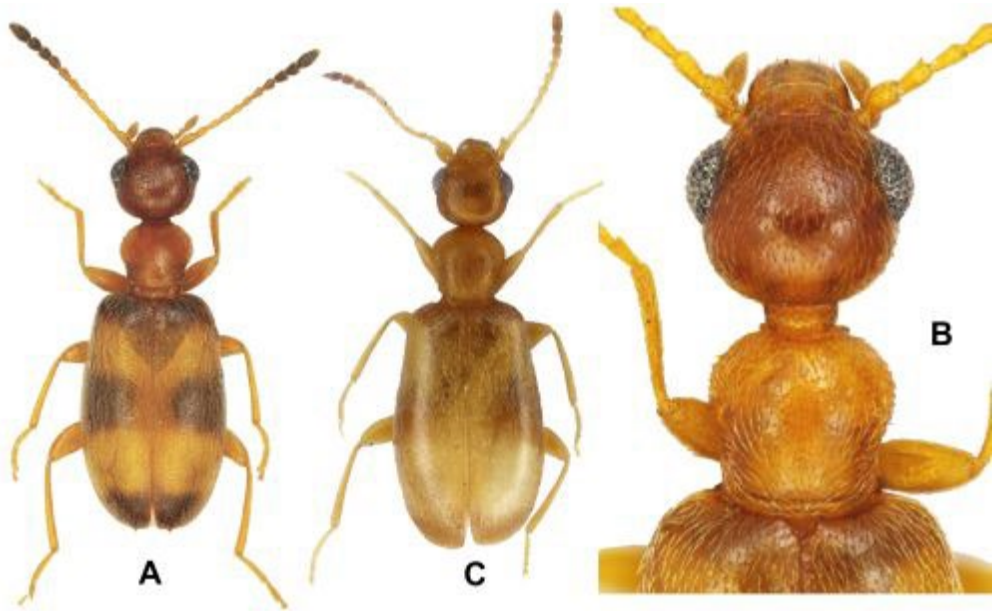


Figure 6. *Microhoria emgei* (Pic, 1897) *statt. restit.* A – ♂ from Skiathos, Greece, habitus, dorsal view; B – ditto, dorsal forebody; C – ♀ from Volos, Alli Meria, Greece, habitus, dorsal view [not to scale]. Images: A. Degiovanni & D. Telnov.

***Microhoria fasciata fasciata* (Chevrolat, 1834)** (Figs. 9–11)

= *Microhoria caliginosa pannonica* (Kaszab, 1956a & b) **syn. nov.**

Only selected references containing Greek records and those with *M. caliginosa pannonica* are listed. Also see a note in Telnov (2022: 201) on *M. fasciata helvetica* (Krekich-Strassoldo, 1929) and a new synonym below.

Anthicus fasciatus – Kiesenwetter 1861: 247 (record: Creta).

Microhoria fasciata – Uhmann 1989: 389 (record: ‘Hellas’).

Anthicus caliginosus pannonicus – Kaszab 1956a: 337 (description: ‘Hungaria occ., Siófok’ [Hungary]); Kaszab 1956b: 168 (repetitive description).

Microhoria caliginosa pannonica – Nardi 2003: 59 (taxonomy, new combination); Chandler et al. (2008: 439 (checklist; distribution: Hungary); Telnov 2020a: 608 (checklist; distribution: Hungary).

Type material examined, *M. caliginosa pannonica*: Holotype ♀ HNHM (Fig. 10B): Siófok Lichtneckert [printed] // Holotypus [printed in red] 1956 *Anthicus caliginosus pannonicus* Kaszab [handwritten] [label red framed] // Photo ID: HNHM_COL_764 [printed]; Paratype 1♀ HNHM (Fig. 10A): Siófok Lichtneckert [printed] // Para - [handwritten] typus [printed in red] 1956 *Anthicus caliginosus pannonicus* Kaszab [handwritten] [label red framed].

New material examined. 1♂ ADC: GRECIA: Messina, Giavola, 1.-2.V.2013 leg. F. Izzillo [printed]; 1♂ ADC: GRECIA: Ilia, Kaifa 17.IV.2013 Leg. Izzillo [printed]; 2♂ ADC: GRECIA: Amaia, Kalogria, 11.V.2014, leg. F. Izzillo [printed].

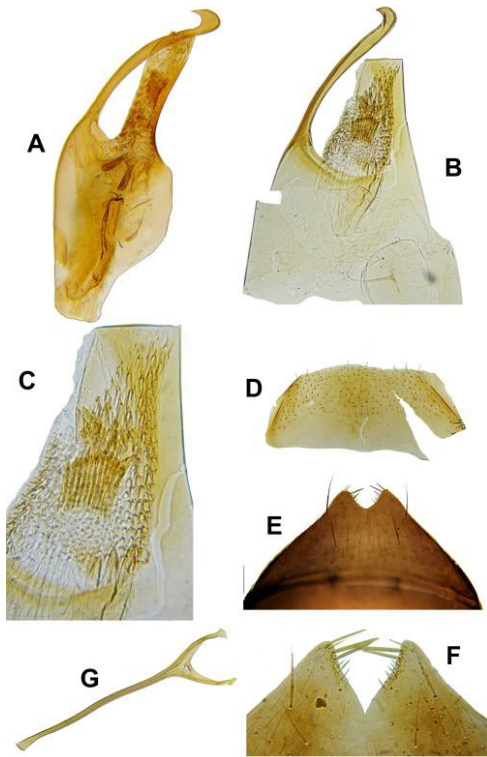


Figure 7. *Microhoria emgei* (Pic, 1897) *statt. restit.*, male genitalia and terminalia. A – ♂ from Alli Meria, Volos, Greece, aedeagus, lateral view; B – ♂ from Skiathos, Greece, aedeagus, lateral view; C – ditto, apical portion magnified; D – ditto, tergite VII, dorsal view; E – ditto, morphological sternite VII, ventral view; F – ditto, median part of posterior margin magnified; G – ditto, morphological sternite IX [not to scale]. Images: A. Degiovanni & D. Telnov.

Synonym. The studied types of *M. caliginosa pannonica* does not exhibit any morphological differences from similarly coloured Italian specimens of *M. fasciata fasciata* (Fig. 10C). Since the type series of *ssp. pannonica* is represented by females only (Kaszab 1956a),

comparison of male terminalia and genitalia was not possible, but they considered to be within the known variation range of *M. fasciata fasciata* (Figs. 9–10).

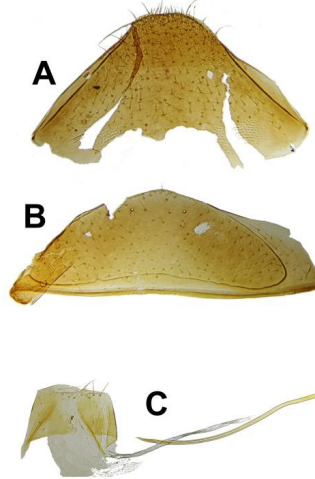


Figure 8. *Microhoria emgei* (Pic, 1897) *statt. restit.*, ♀ from Skiathos, Greece, terminalia. A – Tergite VII, dorsal view; B – Morphological sternite VII, ventral view; C – Tergite VIII, morphological sternites VIII and IX [not to scale]. Images: A. Degiovanni & D. Telnov.

Supplementary description. We provide photographic images of male terminalia and genitalia of this taxon for the first time (Fig. 11).

Distribution. Albania, Croatia, France, Germany, Greece, Hungary, Italy, Serbia, Slovenia, eastern Spain, Switzerland. In Greece reliably known only from Peloponnese, the record from Crete by Kiesenwetter (1861) requires further confirmation. The W Turkish record is based on a misidentification (see Telnov 2022).

Chorotype. Europeo-Mediterranean (1.12 EUM).

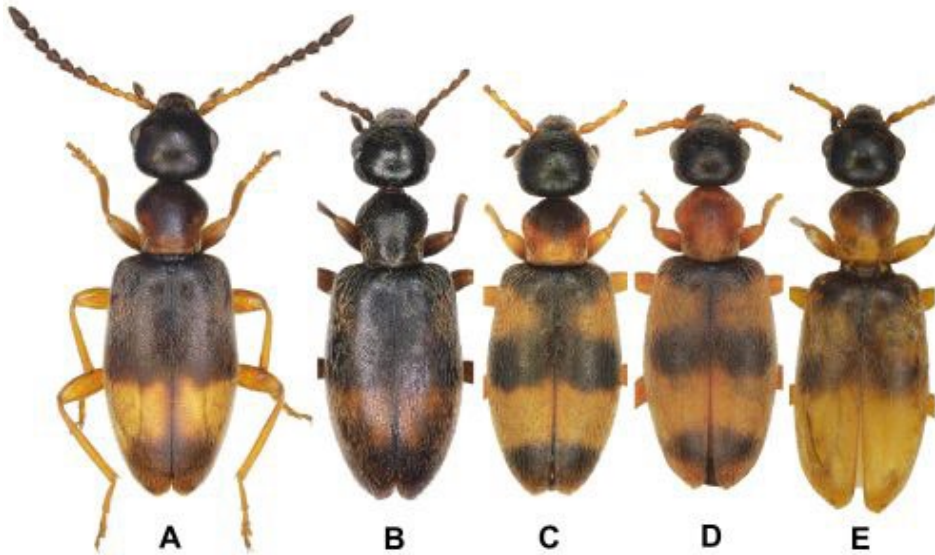


Figure 9. *Microhoria fasciata fasciata* (Chevrolat, 1834), habitus, dorsal view. A – ♂ from Paludi del Conte, Puglia, Italy; B – ♂ from Cilento e Vallo di Diano National park, Cilento, Campania, Italy; C – ♂ from Lago Matese, Gregorio Matese S env., Basilicata, Italy; D – ♂ from Pianoro, Val di Zena, Emilia, Italy; E – ♂ from bosco Pianelle, Martina, Puglia, Italy [not to scale]. Images: A. Degiovanni & D. Telnov.

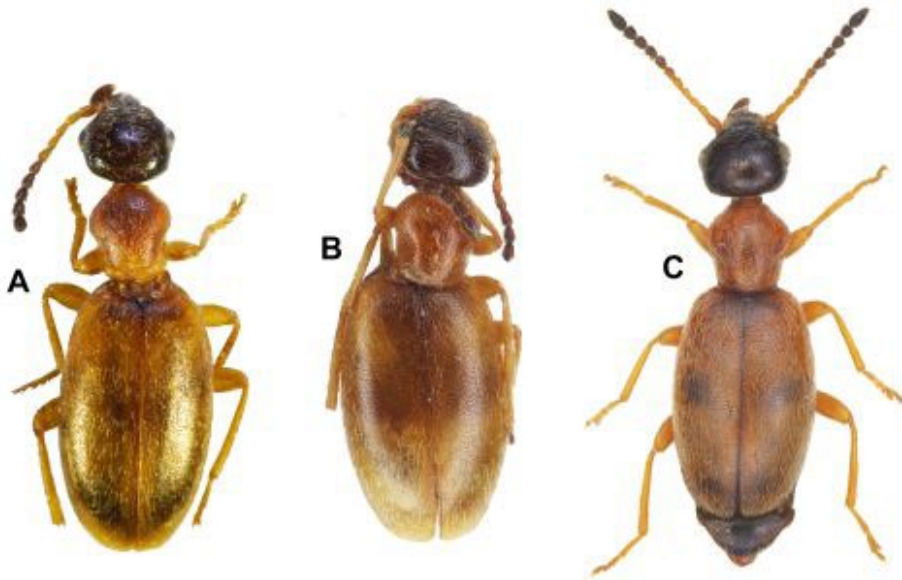


Figure 10. *Microhoria fasciata fasciata* (Chevrolat, 1834), ♀♀, habitus, dorsal view. A – Holotype *M. caliginosa pannonica* (Kaszab, 1956a & b); B – Paratype *M. caliginosa pannonica* (Kaszab, 1956); C – Specimen from Sila, Lago di Cecita, Calabria, Italy [not to scale]. Images: A-B - György Makranczy (HNHM), C - A. Degiovanni.

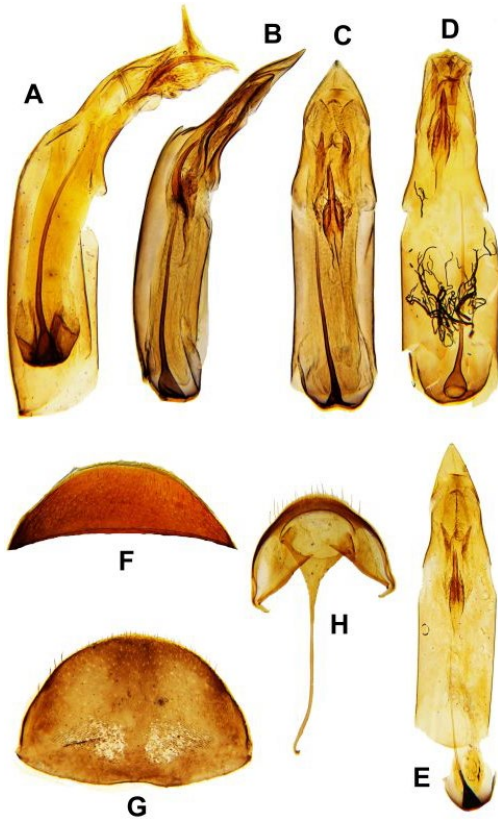


Figure 11. *Microhoria fasciata fasciata* (Chevrolat, 1834), male genitalia and terminalia and variability of aedeagus. A – Specimen from Messina, Greece, aedeagus, lateral view; B – Specimen from Pianoro, Val di Zena, Emilia, Italy, aedeagus, lateral view; C – ditto, ventral view; D – Specimen from Kaifas, Iliia, Greece, aedeagus, ventral view; E – Specimen from Kalogria, Amaia, Greece, aedeagus, ventral view; F – Specimen from Pianoro, Val di Zena, Emilia, Italy, tergite VII, dorsal view; G – ditto, morphological sternite VII, ventral view; H – ditto, tergite VIII and morphological sternite IX, dorsal view [not to scale]. Images: A. Degiovanni & D. Telnov.

***Microhoria funeraria* (Marseul, 1879)** (Fig. 12)

'Anthicus funerarius (Laf.)' – Marseul 1879: 225 (description: no locus typicus specified).

Anthicus funerarius – Marseul 1887: 353 (checklist; distribution: 'G.' likely referring to

Greece); Pic 1894: 52 (checklist; distribution: '? Grèce'); Pic 1901b: 177 (record: 'Cyclades'); Pic 1902: 41 (key, diagnosis; no note on distribution); Pic 1911: 50 (checklist; distribution: 'Griechenland' (Greece)); Winkler 1927: 849 (checklist; distribution: 'Gr.' referring to Greece).

Microhoria funeraria – Uhmann 1989: 389 (informal new combination, record: 'Cypern, Athna...') (see note below); Angelini et al. 1995: 23 & 28 (record: 'Lombardia (BG), Predore, Lago d'Iseo', see note in Distribution below); Chandler et al. 2008: 440 (checklist; distribution: Cyprus, Greece, Italy); Telnov 2020a: 609 (checklist; distribution: Cyprus, Greece, Italy).

Type material examined. ♂ lectotype [designated herewith] MNHN: ... Funerarius ... [handwritten, in part illegible, label pink] // Funerarius (nob) N. A. Kiesenw? [handwritten].

Two male syntypes were allocated at the MNHN. The lectotype agrees with the original description (e.g., basal antennomeres, cranial 'neck' and base of pronotum pale, elytra elliptical ('ovales'), rounded laterally). The second syntype (labels were not transcribed), also a male (a female mentioned in the original description was not allocated), represents another Greek species, *Microhoria corallicolis* (Reitter, 1889), with strongly different aedeagus (see Telnov 2022: 224 fig. 14), not fully agrees with the original description (Marseul 1879) and is morphologically different from the lectotype *M. funeraria* in the shape of head, the width of pronotum, the proportions and shape of elytra and the shape of the modifications of the elytral apex. The lectotype designation is made to maintain nomenclatural stability considering the fact that the type series is represented by at least two different species.

New material examined. 2♂ NHMW (Fig. 12): Attica Kiesenwet. // ♂ // ovatus det. v.Krekich [printed]; 1♀ NHMW: Attica Kiesenwet. // ♀ // ovatus det. v.Krekich [printed].

Supplementary description. Lectotype ♂. Dorsum and venter dark brown, basal pronotal fovea yellowish brown. Antennomeres 1–5 yellowish brown, remaining antennomeres dark. Tibiae and tarsi yellowish brown, femora darker. Compound eye large, strongly protruding from lateral outline of head, about 1.3× as long as converging tempus. Head base broadly rounded, posterior temporal angle rounded. Head dorsal punctures moderately deep and dense. Pronotum about 0.8× as wide as head, broadly rounded at anterior margin, medially subtruncate. Lateral margins rather strongly constricted towards base in posterior half of pronotum. Pronotal dorsal punctures similar to those on head. Elytra elongate, about 1.5–1.6× as long as medially wide, laterally broadly rounded. Humerus obsolete (brachypterous or apterous?). Elytral sutural angle rounded. Elytral apex subtruncate, modified, channel of gland forming inconspicuous, wide, denticle-like process at gland channel opening. Elytral setae moderately dense, curved, subdecumbent.

Tergite VII subtruncate at apical margin. Morphological sternite VII rounded at posterior margin (Fig.12C). Morphological sternite VIII of two subtriangular, disconnected sclerites (Fig. 12D). Morphological sternite IX Y-shaped, arms moderately long (Fig. 12D). Aedeagus as in fig. 12A–B, similar to that of *M. corallicolis* (Reitter, 1889) and *M. ionica* (Pic, 1901) in the presence of a conspicuous paired, somewhat canine-shaped spines.

Ecology. Unknown.

Distribution. Greece. No type locality information is mentioned in the original description nor on the syntypes' labels. A reference to the Greek origin of this species first appears in Marseul (1887) followed by Pic (1901b, 1894) and others. Occurrence in Greece is first confirmed herein (see New material examined). Records from Cyprus (Uhmann 1989) and Italy (Angelini et al. 1995) are dubious and require confirmation.

Chorotype. E-Mediterranean (3.03 EME).

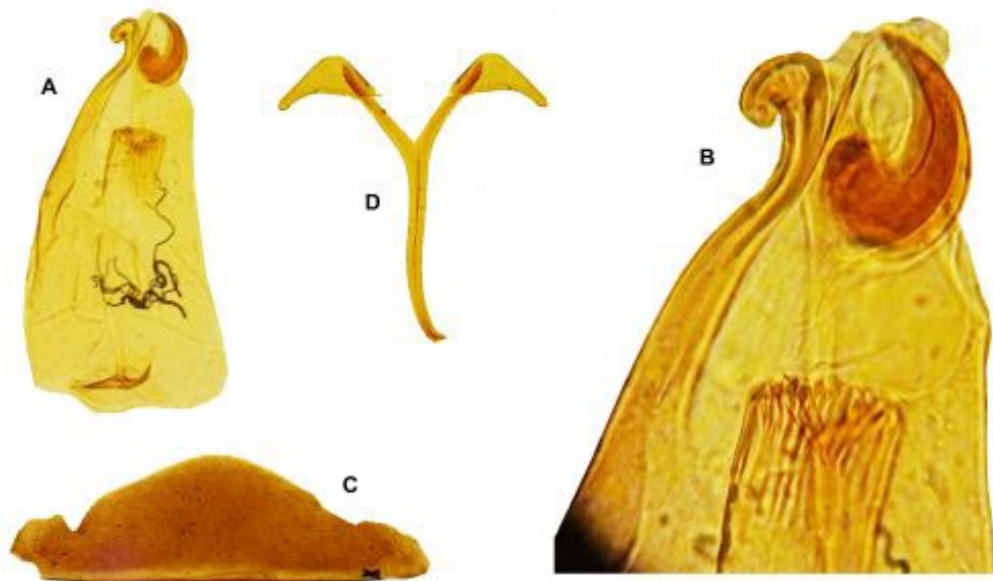


Figure 12. *Microhoria funeraria* (Marseul, 1879), ♂ from Attica, Greece, genitalia and terminalia (compared with those of the lectotype). A – Aedeagus, lateral view; B – ditto, apical portion magnified; C – Morphological sternite VII, ventral view; D – Morphological sternite IX [not to scale]. Images: A. Degiovanni & D. Telnov.

***Microhoria heracleana* Kejval in Kejval & Chandler, 2020** (Figs. 13–14)

Microhoria heracleana – Kejval in Kejval & Chandler 2020: 138–139 & 149, figs 105–107 & 154 (description: Crete).

New material examined. 1♀ DTC: GREECE, Crete Iraklio, Amudara // 1999.6VI.30–VII.6. *Ech. spinosissimus* leg.: Szalóki D.

Supplementary description. We provide photographic images of male terminalia and genitalia of this taxon for the first time

(Fig. 14).

Ecology. The studied specimen was sampled from a flowering *Echinops spinosissimus* (Asteraceae). Therefore, the species is to be considered at least facultatively anthophilous with imagoes feeding from pollen.

Distribution. Greece: Crete. First record since the original description. It is likely that the records of *M. nectarina* (Panzer, 1794) from Crete by Uhmman (1985) are referring to this species; occurrence of *M. nectarina* in Crete is dubious.

Chorotype. E-Mediterranean (3.03 EME).



Figure 13. *Microhoria heracleana* Kejval in Kejval & Chandler, 2020. A – Paratype ♂ from Crete, Vai, habitus, dorsal view; B – ditto, dorsal forebody; C – Paratype ♀ from Crete, Vai, habitus, dorsal view [not to scale]. Images: A. Degiovanni & D. Telnov.

***Microhoria mammuthus* sp. nov.** (Figs. 15–17) urn:lsid:zoobank.org:act:4B79538E-6EF5-4435-A862-279E6EC32983

Type material designated. Holotype ♂ NME: Kreta, M.V.87 Chersonissos [sic!] leg. R. Frieser [printed] // *Microhoria ionica* (Pic) det. G. Uhmman 1992 [printed]. Correct name of the type locality is Hersonissos.

Paratypes 78 specimens. 5♂ NME, 3♂ (Fig. 15A) & 1♀ DTC: same labels as holotype; 1 specimen HHM: GREECE, Crete, Prov.

Iraklio, Amoudara, 9.V.1993, leg. I. Rozner [printed] // *Microhoria angulapex* (Koch) det. D. Telnov, 2002 [printed]; 2 specimens HHM: GREECE, Crete, Prov. Iraklio, Vourvoulitis, 13.V.1993, I. Rozner [printed] // *Microhoria angulapex* (Koch) det. D. Telnov, 2002 [printed]; 6 specimens HHM & 2 DTC: GREECE, Crete, Prov. Iraklio, Magarikari, 13.V.1993, I. Rozner [printed] // *Microhoria angulapex* (Koch) det. D. Telnov, 2002 [printed]; 2 specimens NME & 1 DTC: CRETE, Ierapetra 20kmN, Koutsourgas,

N, 2 km, 23.04.2000 leg. A. Kopetz 50 m NN [printed] // *Microhoria angulapex* (Koch) det. D. Telnov, 2002 [printed]; 20♂♀ [4 ADC, 3 BMNH, 5 DTC, 4 JVC & 4 NME]: GREECE, CRETE N, Hersonissos, 35°18'36.3"N 25°23'53.9"E, 15.v.2024, *Pistacia*, *Ceratonia*, *Prunus*, *Vitis vinifera*, *Olea* – beating, Větrovec J. leg. [printed]; 2♂ & 1♀ DTC: GREECE, CRETE N, Malia env., 35°17'26.1"N 25°29'22.8"E, 15-20.v.2024, from flowers and *Pistacia*, *Ceratonia*, *Olea* – beating, Větrovec J. leg. [printed]; 18♂♀ [2 ADC, 3 BMNH, 3 DTC, 2 DUBC, 3 NME, 1 NMP & 4 ZKC]: GREECE, CRETE N, Malia env., 35°16'29.0"N 25°28'22.3"E, 15-20.v.2024, *Pistacia*, *Ceratonia*, *Carduus* – beating, Větrovec J. leg. [printed]; 15♂♀ [3 BMNH, 2 DTC, 3 NME & 7 NMP]: GREECE, CRETE N, Aposelemi Dam env., 35°14'30.3"N 25°24'16.0"E, 15-20.v.2024, *Quercus*, *Olea*, *Ceratonia* and various flowers – beating, sweeping, Větrovec J. leg. [printed].

Etymology. Named after *Mammuthus* Brookes, 1828, the extinct genus of enigmatic elephantids of the late Miocene – Holocene, since a paired spine of endophallic armature in this new species somewhat resembles mammoth tusk. Noun in the nominative case, standing in apposition.

Description. Holotype male, total body length 2.6 mm. Head 0.65 mm long, across compound eyes 0.55 mm wide, pronotum 0.45 mm long, maximum width 0.5 mm, elytra 1.5 mm long, maximum combined width 1.1 mm. Selected male paratypes 2.1–2.8 mm, selected female paratypes 2.4–2.6 mm long. Body uniformly black to black-brown, mouthparts, tibiae, tarsi and antennomeres 2–5 yellowish brown to brown. Head longer than wide, posterior temporal angle rounded. Head base broadly rounded. Compound eye moderate, moderately protruding from lateral outline of head, about as long as converging tempus. Head dorsum moderately glossy, moderately densely and deeply punctate.

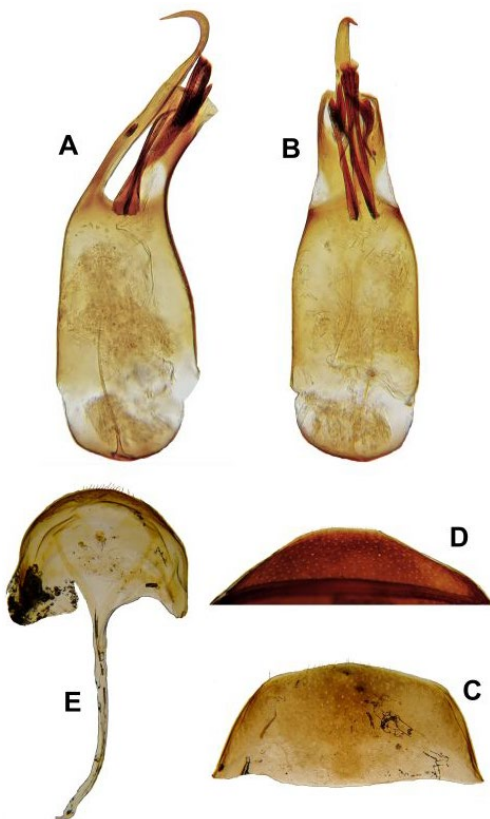


Figure 14. *Microhoria heracleana* Kejval in Kejval & Chandler, 2020, paratype ♂ from Crete, Vai, genitalia and terminalia. A – Aedeagus, lateral view; B – ditto, ventral view; C – Tergite VII, dorsal view; D – Morphological sternite VII, ventral view; E – Tergite VIII, morphological sternites VIII & IX [not to scale]. Images: A. Degiovanni & D. Telnov.

Intervening spaces smooth, about as wide as to twice as wide as punctures. Dorsal cranial setae whitish to yellowish, moderately long and dense, not fully appressed. Antenna hardly enlarged in apical third, extending slightly beyond humeral area of elytra. Antennomere three subequal in length to antennomere two. Antennomeres 8–10 slightly widened distally. Antennomere nine slightly longer than wide. Penultimate antennomere about as long as wide. Terminal antennomere elongate, apically rounded, about twice as long as

penultimate antennomere, slightly shorter than combined length of antennomeres 9–10. Terminal maxillary palpomere securiform. Pronotum hardly transverse, slightly narrower than head across eyes, broadly rounded at anterior margin (subtruncate medially), broadly rounded at anterolateral angles. Pronotal disc moderately glossy, flattened in dorsal aspect. Lateral pronotal margins slightly converge in posterior half. Latero-basal pronotal fovea moderately broad and deep. Pronotal punctures similar to those on head dorsum but larger. Intervening spaces as wide as to twice as wide as punctures, smooth. Dorsal pronotal setation whitish to yellowish, as those on head dorsum. Scutellar shield small, apically broadly rounded. Elytra about 1.3–1.4× as long as wide, laterally widened in posterior half, rounded at apex, dorsally flattened. Humerus distinct, broadly rounded. Apex of elytron modified, with short, acutely angulate denticle-like process at gland channel opening. Elytral surface moderately glossy, punctures dense but shallower than those on dorsal forebody. Intervening spaces smooth, generally as wide as to somewhat wider than punctures. Elytral setae whitish to yellowish, moderately long and dense, subdecumbent, directed posteriorly. Metathoracic wings fully developed (functional). Legs without modifications, tibial terminal spurs paired. Basal metatarsomere shorter than combined length of remaining metatarsomeres. Tergite VII subtruncate at posterior margin (Fig. 16E). Morphological sternite VII broad and short, rounded medially at posterior margin (Fig. 16D). Tergite VIII rounded at posterior margin and with some moderately long setae and with a membranous lamina (Fig. 16F). Morphological sternite VIII two membranous subtriangular sclerites interconnected by thin membrane (Fig. 16G). Morphological sternite IX Y-shaped, lateral arms long and stout (Fig. 16H). Aedeagus (Fig. 16A–C) short-cylindrical, tegmen apex short, hooked; endophallic armature of a slender, paired, equally long, basally strongly curved, tusk-like spine. **Sexual dimorphism.** Female (Fig. 15C) externally similar to male, elytral apex without

modifications, tergite VII broadly emarginate at posterior margin (Fig. 17B), morphological sternite VII with a deep apical emargination (Fig. 17A). Morphological sternite VIII rod-like (Fig. 17C).

Intraspecific variability. This species varies considerably in the body length. In some paratypes, mouthparts, antenna and legs are nearly entirely brown, in other – distinctly paler, yellowish brown. Intervening spaces on dorsal head slightly microreticulate around punctures in some paratypes, head appears slightly less glossy.

Differential diagnosis. *Microhoria mammothus* sp. nov. belongs to the *M. terminata* species group as defined by Kejval & Chandler (2020). In the general appearance and colouration, it strongly resembles several uniformly black-coloured congeners from the eastern Mediterranean with developed elytral humeri. The new species is specific primarily in the shape and structure of the aedeagus with the relatively short and strongly curved tegmen apex and the paired, basally curved spine of the endophallic armature. The similar endophallic armature appear, for instance, in *M. angulapex* (C. Koch, 1935) (Greece (Dodecanese Islands: Rhodes), W Turkey), *M. basithorax* (Greece: Crete), *M. berrai* sp. nov. (Greece: Crete), *M. melecisi* sp. nov. (Greece: Crete). In *M. angulapex*, the tegmen is apically hooked at both edges (in lateral view) and one of the hooks is significantly stronger, in *M. basithorax* the spines of the endophallic armature are C-like curved and basally bifurcate, in *M. berrai* sp. nov., there is only single long, basally strongly curved spine present, and in *M. melecisi* sp. nov., the both spines are considerably thicker and distinctly subequally long. Also the female tergite and morphological sternite VII are different in shape from those in females of similar species. **Ecology.** Some specimens sampled in numbers from flowering bushes (*Carduus*, *Cerantonia*, *Olea*, *Pistacia*, *Prunus*, *Quercus*, *Vitis vinifera*) and other plants at 10–250 m. **Distribution.** Greece (Crete). Possibly occurs sympatrically with *M. basithorax* (see the localities above).

Chorotype. E-Mediterranean (3.03 EME).

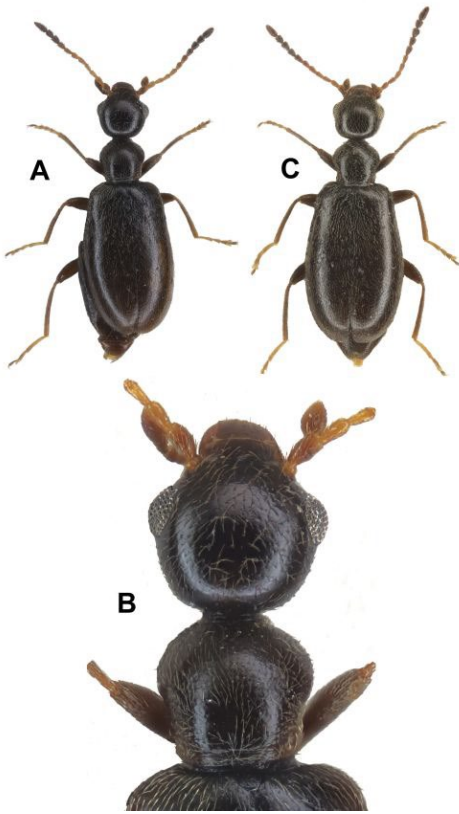


Figure 15. *Microhoria mammuthus* sp. nov. A – Paratype ♂, habitus, dorsal view; B – ditto, dorsal forebody; C – Paratype ♀ from 'Chersonissos', Crete, habitus, dorsal view [not to scale]. Images: A. Degiovanni & D. Telnov.

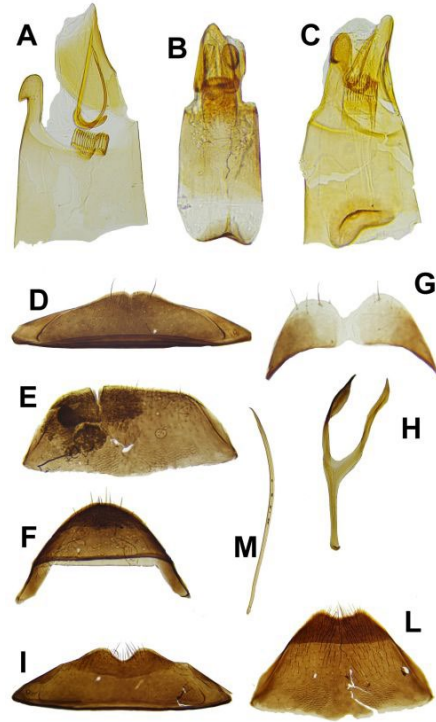


Figure 16. *Microhoria mammuthus* sp. nov., male genitalia and terminalia. A – Paratype, aedeagus, lateral view; B – ditto, another paratype, ventral view; C – ditto, another paratype, lateral view; D – Morphological paratype, sternite VII, ventral view; E – Tergite VII, dorsal view; F – Tergite VIII; G – Morphological sternite VIII, ventral view; H – Morphological sternite IX [not to scale]. Images: A. Degiovanni & D. Telnov.

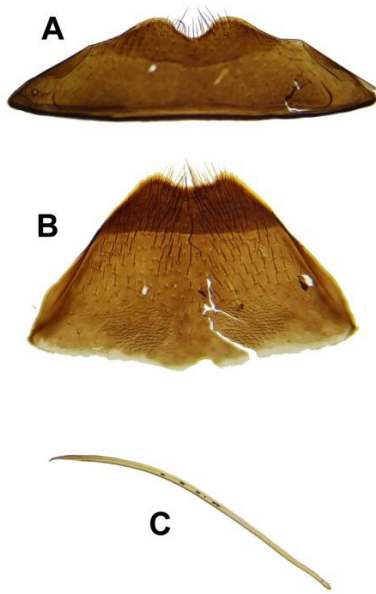


Figure 17. *Microhoria mammuthus* sp. nov., paratype ♀, terminalia. A – Morphological sternite VII, ventral view; B – Tergite VII, dorsal view; C – Morphological sternite IX [not to scale]. Images: A. Degiovanni & D. Telnov.

***Microhoria melecisi* sp. nov.** (Fig. 18–20)
urn:lsid:zoobank.org:act:AB76A1C5-0751-45FF-90D0-355223D0F65B

Type material designated. Holotype ♂ ADC (Fig. 18A–B): KRITI – nom. Chanion, Omalos, 20.V.1984, leg. F & M. Berra [printed].

Paratypes 5 specimens. 1♂ BMNH: Suda Bay [printed] // 3 [handwritten] // ? coralicollis Reitt. sp Pic [handwritten] // G.C.Champion Coll. B.M. 1927–409. [printed] [this specimen is strongly damaged, one elytron is missing]; 2♂ BMNH: Suda Bay [printed] // G.C.Champion Coll. B.M. 1927–409. [printed]; 1♀ ADC (Fig. 18C): CRETE, 5.6.1981 Lefka Ori Mts. Samari Gorge Nat Park, Sv.Bílý leg [printed]; 1♀ BMNH: CRETE: Khania Khora Sfakion 24.iv.1982

M.I.Russell [printed] // Brit. Mus. 198 [printed] 2-325 [handwritten].

The three paratypes from ‘Suda Bay’ misinterpreted as *M. emaciata* (Pic) by Telnov (2022: 230).

Etymology. Patronymic. Named for Prof. Viesturs Melecis (University of Latvia, Rīga) for his life-time investment into entomology, insect ecology, and nature conservation.

Description. Holotype male, total body length 2.7 mm. Head 0.7 mm long, across compound eyes 0.6 mm wide, pronotum 0.5 mm long, maximum width 0.5 mm, elytra 1.5 mm long, maximum combined width 0.9 mm. Female paratype 2.5 mm long. Head and elytra black to black-brown, pronotum rufous. Mouthparts, antenna, and legs yellowish, terminal maxillary palpomere, antennomeres 7–11 and femora yellowish brown (in the paratypes from ‘Suda Bay’, also the basal antennomere is partially darkened). Venter uniformly black-brown. Head slightly longer than wide, head base and posterior temporal angle rounded. Compound eye moderate, moderately protruding from lateral outline of head, about as long as subparallel, posteriorly rounded tempus. Head dorsum moderately glossy, moderately dense and deep punctate. Intervening spaces smooth, about as wide as to 3× as wide as punctures. Dorsal cranial setae yellowish, moderately long and dense, not fully appressed. Antenna hardly enlarged in apical third, extending slightly beyond humeral area of elytra. Antennomere three slightly longer than antennomere two. Antennomeres 8–10 shortened. Antennomere 9 slightly longer than wide. Penultimate antennomere transverse. Terminal antennomere elongate, slightly asymmetrical, apically rounded, about 2.2× as long as penultimate antennomere, about as long as combined length of antennomeres 9–10. Terminal maxillary palpomere securiform. Pronotum as long as wide, slightly narrower than head across eyes, broadly rounded to medially subtruncate at anterior margin, broadly rounded at anterolateral angles. Pronotal disc moderately glossy, flattened in dorsal aspect. Lateral pronotal margins

moderately converge in posterior half. Laterobasal pronotal fovea broad and deep. Pronotal punctures about as large and coarse as those on head dorsum. Intervening spaces slightly wider than punctures, smooth. Dorsal pronotal setation somewhat shorter than that on head. Scutellar shield small, apically broadly rounded, minutely punctate. Elytra about $1.65\times$ as long as wide, laterally subparallel, subtruncate at apex, dorsally flattened. Humerus distinct, broadly rounded. Apex of elytron modified, with short, acutely angulate denticle-like process at gland channel opening. Elytral surface moderately glossy, punctures generally larger and less regular than those on forebody, variable in shape. Intervening spaces variable, generally as wide as to $3\times$ as wide as punctures. Elytral setae pale yellowish, moderately long and dense, subdecumbent, directed posteriorly. Metathoracic wings fully developed (functional). Legs without modifications, tibial terminal spurs paired. Basal metatarsomere about as long as combined length of remaining metatarsomeres. Tergite VII subtruncate at posterior margin. Morphological sternite VII broad, broadly rounded at posterior margin (Fig. 19F). Tergite VIII rounded at posterior margin and with numerous moderately long setae (Fig. 19G). Morphological sternite VIII of two membranous subtriangular sclerites interconnected by thin membrane (Fig. 19H). Morphological sternite IX Y-shaped, lateral arms short (Fig. 19H). Aedeagus (Fig. 19A–E) shortly cylindrical, tegmen apex short, hooked (the hook is poorly visible on the fig. 19A, C, D due to the suboptimal position of the tegmen apex), the apically narrowed part of tegmen also shortly hooked at apex; endophallic armature of a strong, paired, basally C-like curved spine, one distinctly shorter than another.

Sexual dimorphism. Female (Fig. 18C) elytra comparatively stronger widened laterally in posterior half, elytral apex rounded, without modifications. Tergite VII and morphological sternite VII broadly rounded at posterior margin (Fig. 20).

Differential diagnosis. *Microhoria melecisi* sp. nov. belongs to the *M. terminata* species group as defined by Kejval & Chandler (2020). In the general appearance and colouration, it strongly resembles several similarly coloured congeners from the eastern Mediterranean with pronotum paler than rest of body and bicoloured antennae. The new species is specific primarily in the shape and structure of the aedeagus. Additionally, in *M. coralicollis* (Reitter, 1889) (Greece) the humerus is obsolete, in *M. emaciata* (Pic, 1896) (Greece) the male elytral apex appears non-denticulate, in *M. kaifensis* (Pic, 1896) (Jordan, Levant, S Turkey) the forebody is more regularly, comparatively stronger punctate, the femora are rufous, in *M. lafertei* (Truqui, 1855) (Cyprus; unconfirmed records from Greece, Levant, Mesopotamia, Turkey) the head is somewhat paler than the elytra, the humerus is obsolete and the penultimate antennomere at most as wide as long, not transverse, in *M. leuthneri* (Pic, 1897) (Levant, S Turkey) the general colouration is paler brownish and the pronotum is not contrastingly paler than the rest of the body, in *M. rubronotata* (Pic, 1896) (Greece, European Turkey) the head is paler than the elytra, in the highly variable *M. terminata* (widespread in S and SE Europe, southern European Russia, Turkey, recorded also from N Africa) the female elytron apex is deflected. The aedeagus of *M. melecisi* sp. nov. is rather similar to that of *M. emaciata* (Pic, 1896) (Greece: Crete) and *M. raveli* (Pic, 1899) (Bulgaria, Greece, Italy, Turkey (the latter record requires additional confirmation)). In *M. emaciata*, the paired spine of the endophallic armature is distinctly shorter, the hook of the tegmen apex is robust and strongly rounded apically, the aedeagus generally shorter cylindrical. In *M. raveli*, there is only a single, thickened, curved spine in the endophallic armature.

Ecology. Unknown.

Distribution. Greece: Crete. Possibly occurs sympatrically with *M. emaciata* around the Souda Bay (the type locality of the latter).

Chorotype. E-Mediterranean (3.03 EME).

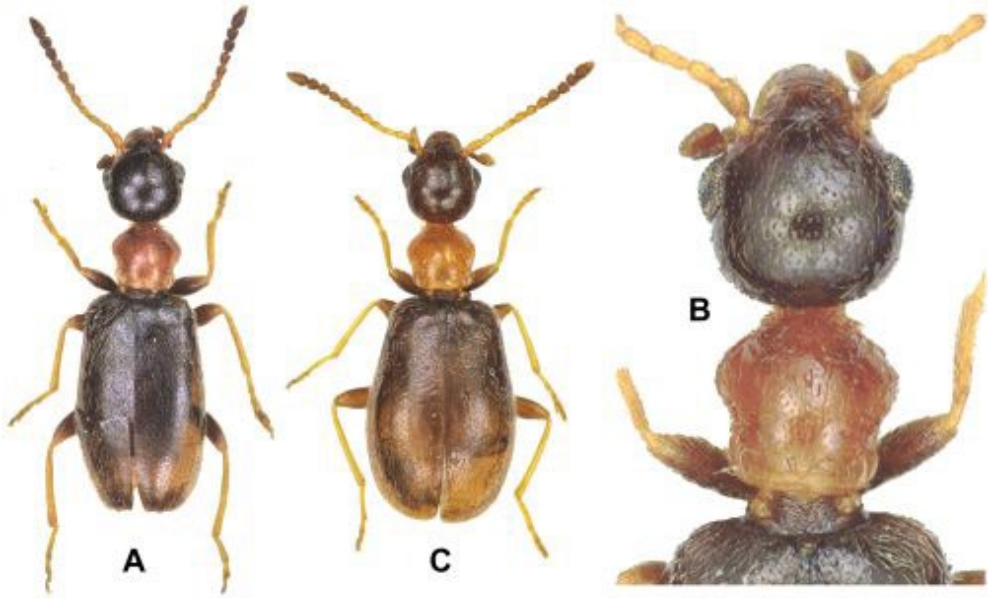


Figure 18. *Microhoria melecisi* sp. nov., dorsal view A – Holotype ♂, habitus; B – ditto, dorsal forebody; C – Paratype ♀ from Lefka, Crete, habitus [not to scale]. Images: A. Degiovanni & D. Telnov.

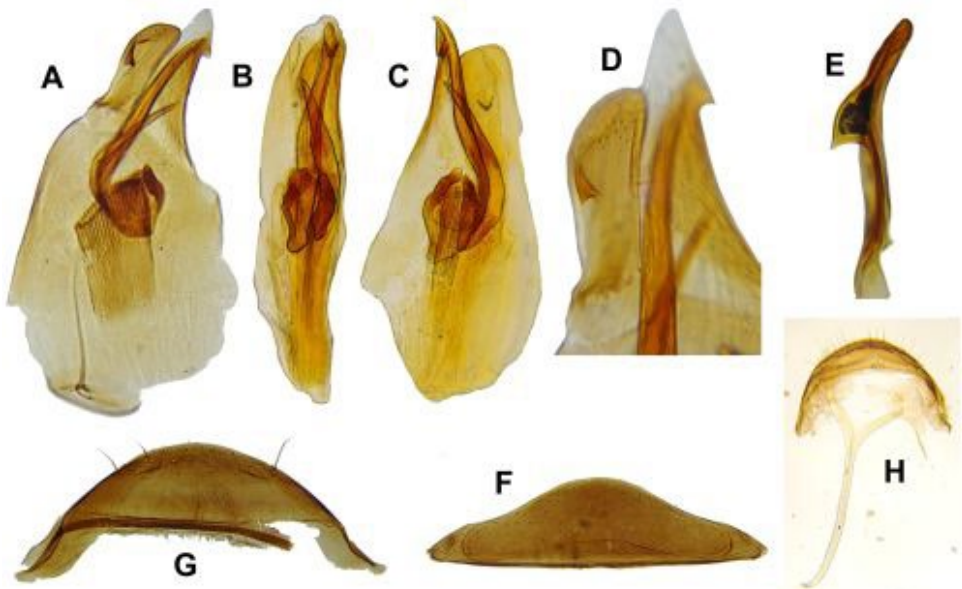


Figure 19. *Microhoria melecisi* sp. nov., male genitalia and terminalia. A – Holotype ♂, aedeagus, lateral view; B – ditto, ventral view; C – ditto, second lateral view; D – Paratype ♂ from ‘Suda Bay’, Crete, aedeagus, apical portion; E – ditto, apical portion of tegmen; F – ditto, morphological sternite VII, ventral view; G – ditto, tergite VIII, dorsal view; H – Holotype ♂, tergite VIII and morphological sternites VIII and IX, dorsal view [not to scale]. Images: A. Degiovanni & D. Telnov.

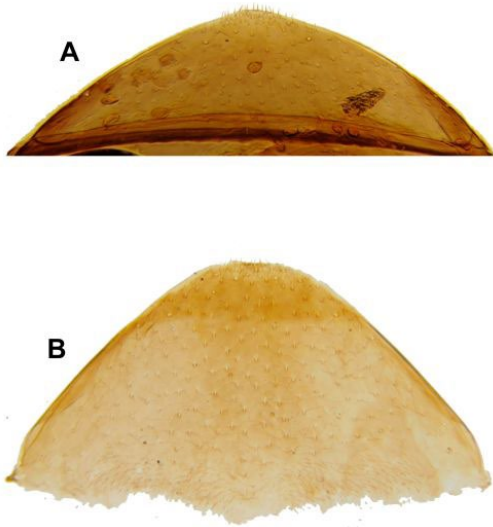


Figure 20. *Microhoria melecisi* sp. nov., female terminalia. A – Paratype, morphological sternite VII, ventral view; B – ditto, tergite VII, dorsal view [not to scale]. Images: A. Degiovanni & D. Telnov.

Microhoria oertzeni oertzeni (Pic, 1901) sensu Bucciarelli (1978) (Figs. 21–22)
= *Microhoria oertzeni sporadensis* (Pic, 1901)

‘*Anthicus Oertzeni*’ – Pic 1901b: 181 (description: Samos).

‘variété *sporadensis*’ – Pic 1901b: 181 (description: Samos).

Microhoria (Platyhoria) oertzeni – Bucciarelli 1978: 162 (informal new combination, taxonomy (new subspecies from Italy, *M. oertzeni sicula*), record: ‘Macedonia M. Athos’, Greece).

Microhoria oertzeni – Bucciarelli 1980: 217 (comparative diagnosis, type material); Uhmman 1985: 201 (records: Albania, Bulgaria); Uhmman & Guèourgiev 2000 (checklist for Bulgaria).

Microhoria oertzeni oertzeni – Chandler et al. 2008: 441 (new synonym of *M. oertzeni* var. *sporadensis*, checklist, distribution: Albania, Bulgaria, Greece, North Macedonia); Telnov 2020a: 611 (checklist, distribution: Albania, Bulgaria, Greece, North Macedonia).

Type material examined, *M. oertzeni oertzeni*. Syntype 1♂ MNHN (Fig. 21B): Samos, Marathokampos [printed] // type [handwritten] // TYPE [printed, label red] // Oertzeni Pic [handwritten]. Bucciarelli (1978: 217) reports a male holotype which should be read syntype, since *M. oertzeni* was described from unspecified number of specimens (Pic 1901b).

Type material examined, *M. oertzeni sporadensis*. Holotype [monotypy] ♀ MNHN: Samos, Marathokampos v. Oertzen [printed] // coll. Reitter [handwritten] // type [handwritten] // v. *sporadensis* Pic [handwritten].

Additional material examined. 1♂ MSNM (Fig. 21A): ATHOS [handwritten] // Prop. microscop. No. [printed] 1062 [handwritten] [label blue] // A. Oertzeni Pic [handwritten] [label pale blue] [this specimen discussed and figured by Bucciarelli (1978, 1980)].

Taxonomy. A male syntype of *M. oertzeni oertzeni* discussed herein was inspected by Bucciarelli (1980: 217). However, his concept of *M. oertzeni* is possibly incorrect. The studied syntype at the MNHN is remounted (glued on a rectangular paper card different from those used by Pic) and dissected, but the aedeagus was not available for the present study (moved or lost). The holotype of var. *sporadensis* (conspecific with *M. oertzeni oertzeni*) is a female. Therefore, the comparison of male genitalia of the typical *M. oertzeni* from Samos (Aegean islands) with the drawing of aedeagus of the specimen from Mount Athos (mainland Greece) presented by Bucciarelli (1980) was not possible in our study. It also remains unclear why Bucciarelli (1978) did not figure aedeagus of the syntype but that of the specimen from Mt. Athos (maybe the cause was the lost-during-dissection aedeagus of the syntype). Additionally, we noted the following differences of significant importance between the studied syntype and holotype and the specimens of *M. oertzeni* sensu Bucciarelli (1978) from Mt. Athos: tempora somewhat converging posteriorly, rounded in one arc with head base (syntype *M. oertzeni*) / tempora subparallel posterior to eyes, converging

posteriorly at rounded temporal angles, head base subtruncate or comparatively broader rounded (specimen from Mt. Athos); dorsal forebody glossy, punctures moderately large and dense (syntype *M. oertzeni*) / subopaque, punctures comparatively larger and denser (specimen from Mt. Athos); pronotum slightly longer than wide, slenderer (syntype *M. oertzeni* and holotype 'var. *sporadensis*') / slightly transverse, shorter and wider (specimen from Mt. Athos); apical sutural angle of elytron rounded (syntype *M. oertzeni* and holotype 'var. *sporadensis*') / nearly obtusely angulate (specimen from Mt. Athos). Unfortunately, we only possess images of the type specimens of *M. oertzeni* and its synonym var. *sporadensis* in insufficient quality. The concept of *M. oertzeni* sensu Bucciarelli (1978) requires further confirmation with remains impossible until the missing aedeagus of the syntype *M. oertzeni* is found or topotypic specimens from Samos become available for study.

Supplementary description. We present photographic images of the Greek specimen from Mount Athos (MSNM; det. I. Bucciarelli) of *M. oertzeni oertzeni* sensu Bucciarelli (1978) and the male aedeagus of this species for the first time (Fig. 22A). Additionally, we studied the ♂ holotype of *M. oertzeni sicula* Bucciarelli, 1978 at MSNM: Colla 920 F. Vitale [handwritten, black frame] // Prep. microscop. No. [printed] 526 [handwritten] [label blue] // HOLOTYPUS [printed] *Microhoria* (*Platyhoria*) *oertzeni sicula* n. subsp. [handwritten] Det. Bucciarelli I. [printed] 1977 [handwritten] [label red], and provide an image of the aedeagus of this taxon (Fig. 22B).

Ecology. Unknown.

Distribution. Albania, Bulgaria, Greece (mainland, Aegean islands: Samos). The record from North Macedonia in Chandler et al. (2008) which was consequently followed by Telnov (2020a) is erroneous and based on misinterpretation of Bucciarelli's (1978: 168) 'Macedonia, M. Athos' in Athos Peninsula in a Greek geographic region of Macedonia and

not in the country of North Macedonia. The record from Sporades Islands (Pic 1901b) is based on Pic's misinterpretation of the geographic position of Samos Island which Pic possibly considered to be a part of the Sporades but which in fact belongs to the eastern Aegean islands. Occurrence of this species in W Turkey is very likely. Subspecies *sicula* Bucciarelli, 1978 is considered endemic to Sicily.

Chorotype. E-Mediterranean (3.03 EME).

***Microhoria pallidula* (Pic, 1892)**

= *Microhoria terminata* (La Ferté-Sénéctère, 1849a) [homonym]

= *Microhoria terminata* (La Ferté-Sénéctère, 1849b) [homonym]

= *Microhoria mutata* (Pic, 1892) [homonym]

= *Microhoria notata* (Pic, 1901) [replacement name]

There are several misconceptions and confusions with this taxon, earlier authors confused it, among others, with *M. piciceps* (Desbrochers, 1875); these sources are not listed herein.

Anthicus terminatus – La Ferté-Sénéctère, 1849a: 144 (description: Greece); La Ferté-Sénéctère, 1849b: 243 (duplicate description: Greece).

Anthicus mutatus – Pic 1892: 43 footnote (replacement name).

Anthicus terminatus Laf. var. *pallidulus* – Pic 1892: 43 (description, no type locality given).

Anthicus notatus – Pic 1901c: 131 (replacement name).

Microhoria (*Platyhoria*) *notata* – Bucciarelli 1980: 196, 211 (informal new combination, key, supplementary description, illustration).

Microhoria pallidula – Chandler et al. 2008: 442 (checklist; Greece mentioned in the distribution); Telnov 2020a: 612 (checklist; Greece mentioned in the distribution).



Figure 21. *Microhoria oertzeni oertzeni* (Pic, 1901) ♂♂, habitus, dorsal view. A – Specimen from Mt. Athos, Greece (det. Bucciarelli); B – Syntype from Samos, Greece [not to scale]. Images: A. Degiovanni & D. Telnov.

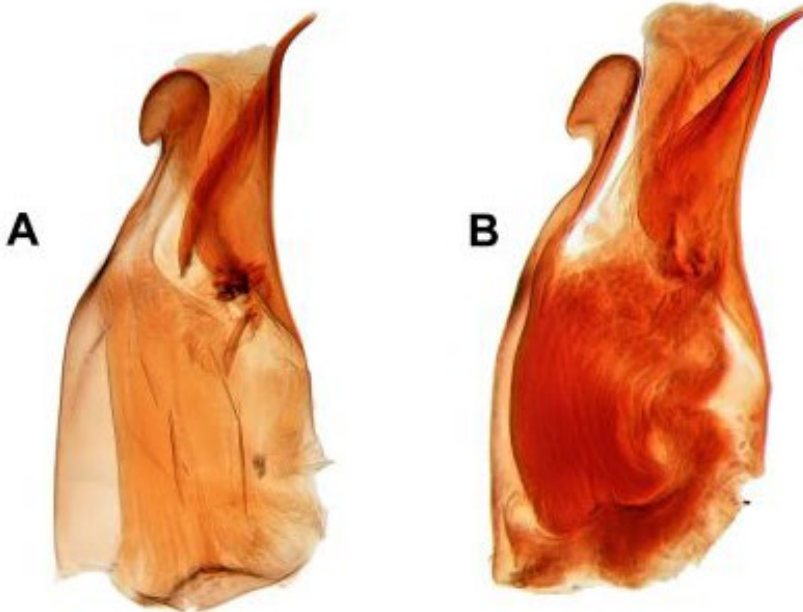


Figure 22. *Microhoria oertzeni* (Pic, 1901), aedeagus, lateral view. A – *M. oertzeni oertzeni* (Pic, 1901) from Mt. Athos, Greece (det. Bucciarelli); B – *M. oertzeni sicula* Bucciarelli, 1980 holotype [not to scale]. Images: A. Degiovanni & D. Telnov.

Type material examined. Not allocated (see below).

Taxonomy. La Ferté-Sénéctère (1849a, b) twice described *Anthicus terminatus* from Greece. This name became homonym since it was preoccupied by W.L.E. Schmidt (1842) who already described a species from Corfu Island named *A. terminatus* (now *Microhoria terminata*). A new name *Anthicus mutatus* was proposed by Pic (1892) for La Ferté-Sénéctère's species, but also this name appeared homonym since it was preoccupied by *A. mutatus* of Gemminger (1870). In the same paper (Pic 1892), a name *pallidulus* was established for a colour variety of *A. terminatus* La Ferté-Sénéctère which became a valid replacement name for it. Therefore, another replacement name, *A. notatus*, proposed later by Pic (1901c) is invalid and unnecessary.

The type material of *A. terminatus* La Ferté-Sénéctère was not allocated at the MNHN in La Ferté-Sénéctère's collection (teste D. Telnov) and is likely not properly labelled as a type, moved to different drawer or lost.

Distribution. Greece. The records from Bulgaria, China (Tibet), Croatia, NW Kazakhstan, Morocco, Poland, Romania, southern part of the European Russia, Russian W Siberia, Syria, and Turkey are dubious and require further confirmation.

***Microhoria pinicola* (Reitter, 1889)** (Figs. 23–24)

= *Microhoria terminata* var. *latebrunnea* (Pic, 1901) **syn. nov.**

= *Microhoria testacea* (Pic, 1941)

= *Microhoria feroni* Bonadona, 1960

Anthicus pinicola – Reitter 1889: 258 (description: 'Aegina ... Morea ... Attica', all Greece); Pic 1894: 55 (checklist; general distribution: 'Morée' (continental Greece)); Pic 1911: 67 (checklist; general distribution: Greece); Uhmman 1985: 196 (record: 'Phalerum Bay', continental Greece).

'*Anthicus (Eonius) pinicola*' – Heyden et al. 1891: 267 (checklist; general distribution: Greece).

Microhoria pinicola – Telnov 1998: 170 (informal new combination, record: 'Hellas, Lakonia, 7 km SW Monemvasia'); Chandler et al. 2008: 442 (checklist; general distribution: Greece); Telnov 2020a: 612 (checklist; general distribution: Greece).

'*Anthicus terminatus* v. *latebrunneus*' – Pic 1901c: 150–151 (description: Greece).

Anthicus nectarinus var. *latebrunneus* – Krekich-Strassoldo 1911: 76 (checklist, distribution: 'Graecia').

'*Anthicus nectarinus* v. n. *testaceus*' – Pic 1941b: 5 (description: '? Brésil' [apparently not a Brazilian taxon]).

Microhoria testacea – Chandler et al. 2008: 441 (informal new combination, checklist, as synonym of *M. nectarina* (Panzer, 1794)); Telnov 2020a: 612 (checklist, as synonym of *M. pinicola*); Telnov 2020b: 15 (synonymy).

'*Microhoria (Platyhoria) feroni*' – Bonadona 1960: (description: 'Île d'Eubée, à Roviès', Euboea / Evia Island, Greece).

Microhoria feroni – Chandler et al. 2008: 440 (checklist; distribution: Greece); Telnov 2020a: 612 (checklist, as synonym of *M. pinicola*); Telnov 2020b: 15 (synonymy). See Telnov (2022: 291) for references of 'var. *latebrunneus*'.

Type material examined *M. testacea*. 1♀ syntype BMNH: Piraeus [handwritten] // *A. testaceus* Pic nsp. [handwritten].

New material examined. 8♂♀ BMNH: Phalerum Bay. 8- '02. M, C. [printed] // G.C.Champion Coll. B.M. 1927–409. [printed]; 1 specimen MZH: Pendeli pr. Athen 29.7.1939 P.H.Lindberg [printed]; 2♂ ADC: GREECE Etolia Astakos wine trap 22.6-6.7.2001 Leg. A. Sette [printed]; 1♂ ADC: GRECIA TESSAGLIA TRIKALA: PILI 20.06.08 FANCELLO [printed]; 9♂ ADC: CORFÚ: Pelekitó, 21.VI.2010 Leg. M. Pavasi [printed]; 8♂ ADC (Fig. 23): GRECIA: Eubea centro Or. Pili, 100m, wine trapp. 20.VI-16.VII.2016 A. Sette leg. [printed]; 1 specimen MEC: GR,SO-Peloponnes Monemvasia, Ag. Mamma 29.6.2018 leg. Manfred Egger [printed]; 2 specimens MEC:

GR,SO-Peloponnes Monemvasia Umgebung, 30.6.2018 leg. Manfred Egger [printed]; 12 specimens MEC & DTC: GR,SO-Peloponnes Monemvasia LF, 1.7.2018 leg. Manfred Egger [printed]; 20 specimens MEC & DTC: GR,SO-Peloponnes Monemvasia LF, 2.7.2018 leg. Manfred Egger [printed]; 1♂ MZH: Finland Ab: Naantali, Ruotsalainen Ykj: 670710: 321249 Euref: 21244: 67042914. 8. 2020 Karl & Timo Nupponen leg. [printed].

Synonym. See Telnov (2022: 291) for the taxonomic history and morphology of ‘var. *latebrunneus*’. *Anthicus terminatus* var. *latebrunneus*, hitherto considered a junior synonym of *Microhoria terminata*, differs from the latter as explained by Telnov (2022: 293–294). Additionally, the elytron apex is broadly rounded in the studied female syntype of var. *latebrunneus* but dorsally impressed and somewhat produced posteriorly (subangulate), deflected in females of *M. terminata*. The studied syntype, however, displays evident similarities in morphological appearance with *M. pinicola* such as the shape of the head, pronotum, and elytra, the punctures of dorsal forebody and elytra, the density and shape of the elytral vestiture, the shape of the female elytral apex, and, finally, the uniformly pale rufous body. We herewith consider *Anthicus terminatus* var. *latebrunneus* conspecific with *M. pinicola*, a species widespread and not uncommon in the continental parts of Greece, and a new synonym is introduced. To confirm the proposed taxonomic change male terminalia

and genitalia to be compared, but no male syntypes were allocated for var. *latebrunneus* (see Telnov 2022).

Supplementary description. Shape and proportions of head and pronotum and density of dorsal punctures on forebody vary in this species. Aedeagus elongate, variable in shape, tegmen with an obtuse lateral denticle and apical hook (Fig. 24).

Ecology. Some specimens sampled in wine traps and attracted to light (active flyer, nocturnal?). The yet only known North European specimen of *M. pinicola* has been collected in a flight interception trap installed in a mixed forest (hollow oaks, pine trees, etc.) next to a field (S. Malmberg, pers. comm. 20.05.2024) and this kind of habitat is also characteristic for some other *Microhoria*, for instance, in Turkey (Telnov 2022: 302).

Distribution. Greek mainland including the Peloponnese Peninsula but excluding the north, Saronic (Aegina) and Ionian islands (Corfu) (Reitter 1889, Bonadona 1960, Uhmman 1985; Telnov 1998). The surprising record from Finland (see above), clearly outside the species’ range, can be explained if not by an occasional import than by the effect of aerial plankton, when small organisms including insects travel large distances with air currents. For anthicids three similar cases are documented in Europe which can (with some doubt) be referred to the same effect (Semionenkov & Semjonov 2016, Drumont & Garcia Carrillo 2018, Telnov 2018). The status of *M. pinicola* in Finland remains unclear.

Chorotype. E-Mediterranean (3.03 EME).



Figure 23. *Microhoria pinicola* (Reitter, 1889), ♂ from Pili, Eubea centro Or., Greece, habitus, dorsal view. A – Habitus; B – Dorsal forebody [not to scale]. Images: A. Degiovanni & D. Telnov.



Figure 24. *Microhoria pinicola* (Reitter, 1889), aedeagus and its variability. A – ♂ from Etolia, Adtakos, Greece; B – ♂ from Pili, Eubea centro Or., Greece; C – ♂ from Trikala: Pili, Tessaglia, Greece; D – ♂ from Pelekitó, Corfu, Greece [not to scale]. Images: A. Degiovanni & D. Telnov.

***Microhoria raveli* (Pic, 1899)** (Figs. 25–26)

Only selected sources containing Greek records are listed

Anthicus Raveli – Koch 1933: 156 (taxon rank changed to species).

Microhoria raveli – Uhmman 1985: 201 (record: ‘Kreta, Antr. Iovis, Mt. Ida’); Uhmman 1989: 389 (record: Corfu); Uhmman & Guéourgiev 2000: 37 (note on morphology, taxonomy, records: Crete, Rhodes); Nardi 2003: 65 (taxonomy, faunistics (Italy), distribution: Italy, Greece (Corfu, Crete, Peloponneses Peninsula), ‘records from other countries ... need to be confirmed’).

Note. The concept of this species as presented by Telnov (2022) is erroneous and is based on misidentified specimens of another, presumably undescribed, *Microhoria*. Here we present images of the dorsal habitus (Fig.

25) and aedeagus and terminalia (Fig. 26) of an Italian specimen. The Greek record of *M. raveli* in Telnov (2022: 282) refers to *Microhoria* sp. and in Telnov (1998: 170) – to *M. unicolor* (see below). However, this species is confirmed for Greece and Crete herein (see below).

New material examined. 1♂ ADC: GRECIA-CRETA: RETHIMNO IDEON ANDRON m 1500 G. SAMA LEG. [printed] 22/VI.89 [handwritten]; 1♂ DTC: KRETA, Ag. Nikolaos, Lato, 3 km N Kritsa 300m NN 08.04. leg. Kopetz 1998 [printed] // *Microhoria raveli* Pic det. G.Uhmman 19 [printed] 99 [handwritten].

Distribution. Bulgaria, Greece (mainland, Crete, Ionian Islands), Italy. The occurrence in Turkey was questioned by Telnov (2022). The record from Rhodes Island (Uhmman 2000) requires further confirmation.

Chorotype. E-Mediterranean (3.03 EME).

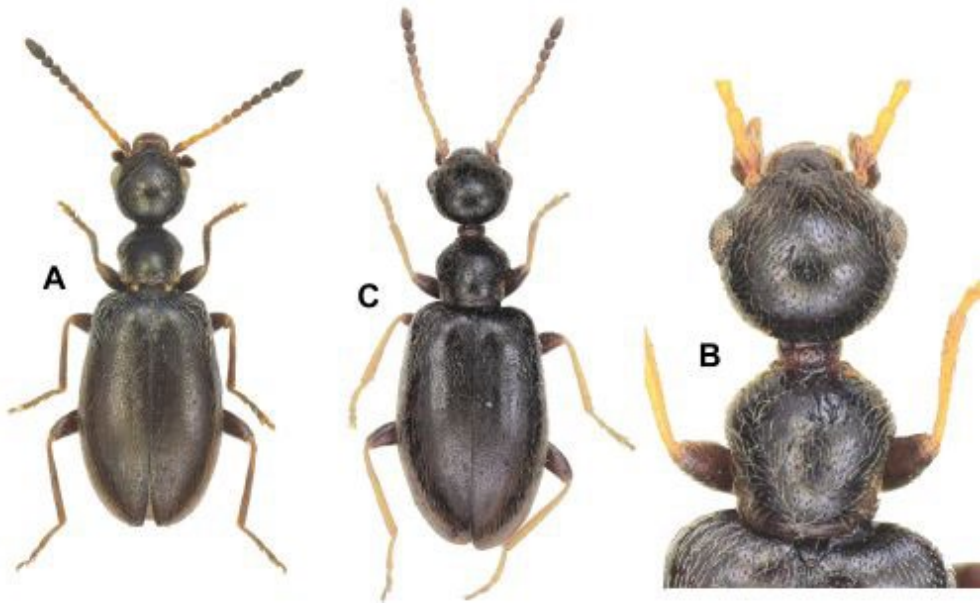


Figure 25. *Microhoria raveli* (Pic, 1899), habitus, dorsal view. A – ♂ from Basilicata, Muro Lucano, Italy; B – ditto, dorsal forebody, C – ♀ from Basilicata, Senise, Italy [not to scale]. Images: A. Degiovanni & D. Telnov.

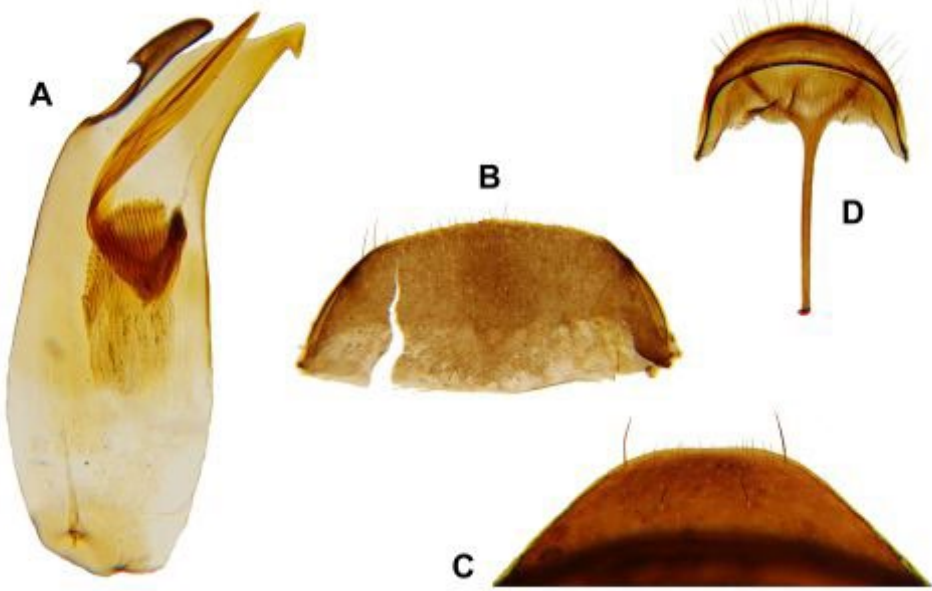


Figure 26. *Microhoria raveli* (Pic, 1899), ♂ from Basilicata, Muro Lucano, Italy. A – Aedeagus, lateral view; B – Tergite VII, dorsal view; C – Morphological sternite VII, ventral view; D – Tergite VIII & morphological sternite IX, dorsal view [not to scale]. Images: A. Degiovanni & D. Telnov.

***Microhoria sabellai* sp. nov.** (Figs. 27–28)
urn:lsid:zoobank.org:act:F6BDE7FF-3F2D-4EA4-914C-53B1E4319208

Type material designated. Holotype ♂ ADC (Figs. 27–28): GRECIA: Laconia, str. Vassaras-Sparti, Vassaras, 11.III.95, Leg. Sabella [printed]. The left antennomeres 2–11, left middle and posterior leg, and the terminal right mesotarsomere are missing.

Etymology. Patronymic. Named for Prof. Giorgio Sabella (Catania, Italy) – well-known coleopterist and specialist on Pselaphinae, the collector of the holotype.

Description. Holotype male, total body length 2.7 mm. Head 0.6 mm long, across compound eyes 0.5 mm wide, pronotum 0.5 mm long, maximum width 0.5 mm, elytra 1.6 mm long, maximum combined width 0.9 mm. Head black, anterior part rufous black. Pronotum, elytra, ventral pterothorax and abdomen rufous to yellowish brown, lateral area of elytron black to black-brown in posterior two thirds, the dark colouration is not touching

lateral margin of elytron. Mouthparts, antenna, and legs pale rufous. Head slightly longer than wide, head base and posterior temporal angle rounded. Compound eye moderate, moderately protruding from lateral outline of head, hardly shorter than converging-rounded tempus. Head dorsum moderately glossy, sparsely and rather large punctate. Intervening spaces smooth, about 2–3× as wide as punctures. Dorsal cranial setae yellowish, long, moderately dense, not fully appressed. Antenna hardly enlarged in apical third, extending slightly beyond humeral area of elytra. Antennomere three slightly longer than antennomere two. Antennomeres 8–10 somewhat shortened and stronger cylindrical compared to antennomeres 2–6. Penultimate antennomere longer than wide. Terminal antennomere elongate, apically rounded, about twice as long as penultimate antennomere and about as long as combined length of antennomeres 9–10. Terminal maxillary palpomere securiform. Pronotum longer than wide, narrower than head across

eyes, broadly rounded to medially subtruncate at anterior margin, broadly rounded at anterolateral angles. Pronotal disc moderately glossy, flattened in dorsal aspect. Lateral pronotal margins converge in posterior half. Latero-basal pronotal fovea broad and deep. Pronotal punctures distinctly larger and coarser than those on head dorsum, dense (especially on posterior lobe). Intervening spaces on pronotum slightly wider than punctures, smooth. Dorsal pronotal setation similar to that on head, stronger subdecumbent. Scutellar shield small, apically broadly rounded, minutely punctate. Elytra about 1.7× as long as wide, laterally broadly rounded, rounded at apex, dorsally flattened. Humerus nearly obsolete. Apex of elytron modified, apical sutural angle produced into moderately broad, slightly upwards-curved denticle (Fig. 28A). Elytral surface slightly glossy, similarly punctate as on posterior pronotal lobe, punctures large and deep, circular to elliptical. Intervening spaces variable, generally as wide as punctures. Elytral setae yellowish, moderately long and dense, subdecumbent, directed posteriorly. Metathoracic wings at least partially developed as is visible from under the elytra (functional or nearly functional). Legs without modifications, tibial terminal spurs paired. Basal metatarsomere slightly shorter than combined length of remaining metatarsomeres. Tergite VII truncate at posterior margin (Fig. 28D). Morphological sternite VII broad, subtruncate medially at posterior margin (Fig. 28E). Tergite VIII rounded at posterior margin and with scattered long setae (Fig. 28F). Morphological sternite IX Y-shaped, lateral arms short (Fig. 28G). Aedeagus (Fig. 28B–C) elongate cylindrical, slightly sinuous laterally, apex rounded;

endophallic armature with pair of long, rather thick, apically acutely pointed spines, slightly curved outwards and basally interconnected by a membrane of tegmen and with lateral paired row of densely spaced robust spines; basal spines much shorter and pointed apically or slightly obliquely inwardly, subapical spines long and (some) strongly curved outwards; a group of small, apically rounded median spinules between two long spines.

Sexual dimorphism. Female is unknown.

Differential diagnosis. *Microhoria sabellai* sp. nov. belongs to the *M. longiceps* species group as defined by Kejval & Chandler (2020). It strongly resembles *M. decolorata* (Pic, 1897) (Greece including Corfu and Samos) and the aedeagus is similar but somewhat produced apically in *M. decolorata* without the median spinules and with the comparatively shorter, not outwardly curved paired lateral spines of the endophallic armature. *Microhoria globipennis* (Pic, 1897) (Syria, S Turkey) is somewhat similarly coloured but the aedeagus is different (sinuous in lateral view, slender), the head is pale and the dorsal forebody distinctly denser and coarser punctured. *Microhoria truncata* (Pic, 1895) (S Turkey) possess distinct humeri and the aedeagus is slenderer with different endophallic armature. The aedeagus of *M. sabellai* sp. nov. is also very similar to that of *M. antalya* Kejval in Kejval & Chandler, 2020 (S Turkey), but the apex is strongly produced and the lateral spines of the endophallic armature – comparatively less strongly developed and not curved in *M. antalya*; no median spinules present in the endophallic armature.

Ecology. Unknown.

Chorotype. E-Mediterranean (3.03 EME).

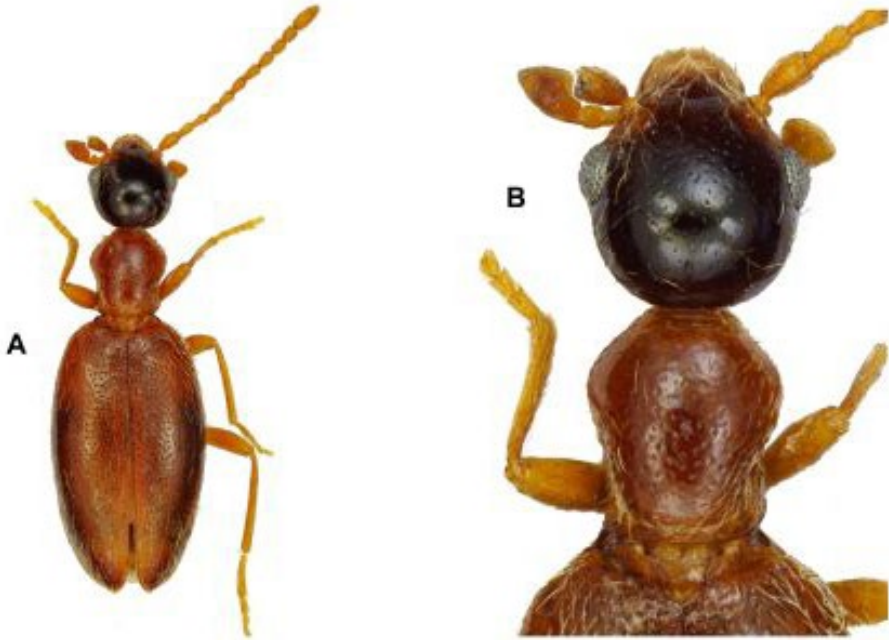


Figure 27. *Microhoria sabellai* sp. nov., holotype ♂, dorsal view. A – Habitus; B – Dorsal forebody [not to scale]. Images: A. Degiovanni & D. Telnov.

***Microhoria syrensis* (Pic, 1902)**

Anthicus syrensis – Pic 1902: 41 (description: ‘Cyclades: Syra’); Pic 1907: 125 (mentioned in a taxonomic discussion); Pic 1910: 38 (comment on an incorrect synonymy with *Anthicus* (now *Microhoria*) *corallicollis* (Reitter, 1889), distribution: ‘Cyclades’); Pic 1911: 76 (checklist; distribution: ‘Cycladen, Syra’); Winkler 1927: 849 (checklist; distribution: ‘Cyclad. Syra’).

‘*Anthicus syriensis* [sic!] (near)’ – Georghiou 1977: 35 (record: Cyprus).

Microhoria syrensis – Uhmans 1985: 201 (informal new combination, records: ‘Cap Sunion, Athen’, ‘Boulegmene, Atiki’, ‘Kykladen, Syra’, ‘Syra’); Uhmans 1989: 389 (record: ‘Paros, Cykladerna’); Telnov 1998: 170 (record: ‘Tessehin’, country unknown); Hemp & Dettner 2001: 236 (ecology: listed among canthariphilous anthicids); Chandler et al. 2008: 443 (checklist; distribution: Cyprus, Greece); Telnov 2010: 12 (lectotype designation); Telnov 2020a: 613 (checklist; distribution: Cyprus, Greece).

Type material examined. See Telnov (2010).

Taxonomy. The male lectotype has not been dissected and the shape and structure of aedeagus of this species remains unknown.

Supplementary description. This is an entirely black, dorsally glossy species with paler tibiae and tarsi. Head base subtruncate, tempora subparallel. Male terminal antennomere elongated, as long as combined length of three preceding antennomeres. Elytral apex truncate, gland channel opening with a small and slender denticle-like process.

Distribution. Greece: Cyclades Islands (Paros, Syra / Syros). The records from mainland Greece (Uhmans 1985, 1989) and Cyprus (Georghiou 1977; the species name also appears in an unpublished manuscript by Bryant (circa 1955) on the Cypriot fauna of coleopterous insects) require confirmation. The specimen from ‘Tessehin’ (possibly Hungary) (Telnov 1998) is a female of *M. syrensis*, possibly mislabelled.

Chorotype. E-Mediterranean (3.03 EME).

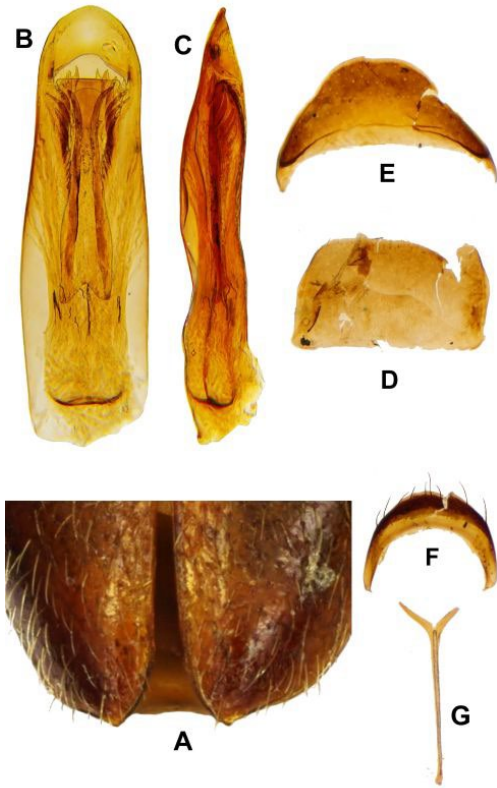


Figure 28. *Microhoria sabellai* sp. nov., holotype ♂. A – Elytral apices, magnified; B – Aedeagus, ventral view; C – ditto, lateral view; D – Tergite VII, dorsal view; E – Morphological sternite VII, ventral view; F – Tergite VIII; G – Morphological sternite IX [not to scale]. Images: A. Degiovanni & D. Telnov.

***Microhoria terminata* (W.L.E. Schmidt, 1842)**

See Telnov (2022) for synonyms.

Anthicus terminatus – W.L.E. Schmidt 1842: 128 (description: Corfu); Kreckich-Strassoldo 1911: 77 (checklist, distribution: ‘Europa meridionale, Corfù’ [southern Europe, Corfu]).

Anthicus (Immicrohoria) terminatus – Pic 1901b: 180 (records: ‘Peleka, Prodromos, Argostoli’).

Microhoria terminata – Uhmann 1985: 201 (records: ‘Attica’, Corfu, ‘Kephallenia’, ‘Zante’).

New material examined. 1 specimen BMNH: 44765 [handwritten] // Heldreich [handwritten] // Grecia [handwritten] // Fry Coll. 1905.100. [printed]; 1♂ BMNH: Greece Merlin Coll. 96–275. [printed] // *sanguinicollis* Laf. [handwritten] // Received with this name from Merlin, C.O.W. [printed]; 1♂ BMNH: Greece Merlin Coll. 96–275. [printed]; 2♀ BMNH: Grecia Pira Wnoli [handwritten] // *Anthicus ruficollis* [handwritten] // Ital. mer. A. Fiori [handwritten] // G.C.Champion Coll. B.M. 1927–409. [printed] [since these specimens bear two locality labels – Greece and Italy – it remains unclear where exactly they came from]; 1♂ BMNH: Corfu [handwritten] // *Anthicus sanguinicollis* var. [handwritten] det. V.Kreckich [printed] // G.Bryant Coll. 1919–147 [printed]; 1♂ ADC: Grecia Ahaia str. Mega, Spileo, Kala urita, mt.600 21.VI.01 leg. I. Zappi Coll.A. Degiovanni [printed]; 11♂ & 2♀ ADC: GR SE PELOPONNESO PR. CH. AG. DIMITRIOS M PARNONAS (KOSMAS) 800 m PYRUS 28 LUG 2004 M. BERRA [printed]; 1♂ ADC: CORFÚ: Pelekitó 21.VI.2010 Leg. M.Pavesi [printed]; 1♀ ADC: GRECIA – Trikala prov. Meteore, Kastraki, 340 m 39°43'25"N 21°37'21"E 21. VII. 2010 leg. I. Zappi [printed]; 1♂ ADC: GRECIA, 2013 Chalkidiki W of Varvara 15.-19.6. Snížek [printed].

Ecology. As in Telnov (2022). One specimen collected from *Pyrus* sp.

Distribution. Albania, Algeria, Bosnia and Herzegovina, Bulgaria, Croatia, European part of Russia (steppe zone), France (southern part), Great Britain (not established), Greece (including the Ionian Islands), Iran, Italy, Montenegro, North Macedonia, Portugal, Serbia, Slovakia, Slovenia, Spain, Tunisia, Turkey (both European and Asian), Turkmenistan (record dubious, see Telnov (2022)), Ukraine.

Chorotype. Turano-European-Mediterranean (1.09 TEM).

***Microhoria unicolor* (W.L.E. Schmidt, 1842)** (Fig. 29)

= *Anthicus patagiatus* Kiesenwetter, 1861

= *Microhoria sydowi sydowi* (Pic, 1936) **syn. nov.**

= *Microhoria sydowi reductor* (Pic, 1936) **syn. nov.**

= *Microhoria sydowi olympiae* (Pic, 1941) **syn. nov.**

= *Microhoria unicolor calliger* (Marseul, 1879) **syn. nov.**

= *Microhoria validicornis* (La Ferté-Sénéctère, 1849)

Anthicus calliger – Pic 1894: 50 (checklist; distribution: ‘France, Grèce’); Winkler 1927: 848 (checklist; distribution: ‘Ga.m.Gr.’ [Gallia meridionalis, Greece]).

‘*Anthicus Sydowi*’ – Pic 1936: 21 (description: ‘Grèce: Olympia’).

‘*Anthicus Sydowi* v. *reductor*’ – Pic 1936: 21 (description: ‘Grèce: Olympia’).

‘*Anthicus Sydowi* v. n. *Olympiae*’ – Pic 1941b (description: ‘Olympia en Morée’).

Microhoria sydowi – Kejval & Chandler 2020: 131 (assigned to the *M. terminata* species-group).

Microhoria sydowi olympiae – Nardi 2003: 64 (taxonomy, new status & combination); Chandler et al. 2008: 443 (checklist; general distribution: Greece); Telnov 2020a: 613 (checklist; general distribution: Greece).

Microhoria sydowi reductor – Nardi 2003: 64 (taxonomy, new status & combination); Chandler et al. 2008: 443 (checklist; general distribution: Greece); Telnov 2020a: 613 (checklist; general distribution: Greece).

Microhoria sydowi sydowi – Nardi 2003: 64 (taxonomy, new combination); Chandler et al. 2008: 443 (checklist; general distribution: Greece); Telnov 2020a: 613 (checklist; general distribution: Greece).

Anthicus patagiatus – Kiesenwetter 1861: 247 (description; ‘Nauplia’); Gemminger & Harold 1870: 2098 (checklist; distribution: ‘Nauplia’); Winkler 1927: 848 (checklist; distribution: ‘Gr.’ referring to Greece).

Anthicus (Immicrohoria) patagiatus – Pic

1901b: 180 (records: ‘Athènes’, ‘près du Mont-Hymettos’); Pic 1911: 66 (checklist; distribution: ‘Griechenland’ [Greece]).

Microhoria patagiata – Telnov 2006: 62 (new combination & new synonym).

Anthicus unicolor – Marseul 1857: 128 (checklist; distribution: ‘F G A I’ referring to France, Greece, Austria, Italy); Schaum 1859: 74 (checklist); Stein 1868: 89 (checklist).

Microhoria unicolor – Uhmman 1985: 201 (records: ‘Creta, Antr. Iovis, Mt. Ida’, ‘Creta, Amari’, ‘Creta, Heraklion’, ‘Griechenland, Monemvasia, Peloponnese’, ‘Griechenland, Zante’, ‘Griechenland, Athen’).

Anthicus validicornis – Schaum 1859: 75 (checklist); Kiesenwetter 1861: 247 (records: ‘Zante’ (Zakynthos Island), ‘Athen’); Stein 1868: 89 (checklist); Marseul 1879: 192 (record: ‘G’ referring to Greece), 226 (redescription, record: ‘Grèce, Zante’); Pic 1901b: 176 (record: ‘Corfou’ [Corfu]); Bucciarelli 1978: 162 (new synonym).

Anthicus (Immicrohoria) validicornis – Pic 1901b: 180 (records: ‘Corinthe, Olympia, Zante et Cephalonia’); Pic 1911: 78 (checklist; distribution: ‘Griechenland, Türkei’ [Greece, Turkey]).

Microhoria validicornis – Uhmman 1985: 202 (records: ‘Athen’, ‘Graecia, Attica’, ‘Graecia, Athen; Cap Sunion’, ‘Cephalonia’, ‘Corfu, Vido’, ‘Corfu, Potamos’); Uhmman 1990: 592 (record: ‘Graecia’); Uhmman 1996: 35 (record: ‘Misra bei Sparta’).

Type material examined *M. sydowi sydowi*. syntype 1♂ MNHN: Griechenland Olympia 16.5.1908. [printed, label light blue, black frame] // TYPE [printed, label red]; 6 syntypes MNHN: Griechenland Olympia 16.5.1908. [printed, label light blue, black frame]; 1 syntype MNHN: Griechenland Olympia 16.5.1908. [printed, label light blue, black frame].

Type material examined *M. sydowi reductor*. Syntype 1♂ MNHN: Griechenland Olympia 16.5.1908. [printed, label light blue, black frame] // *Sydowi* Pic var [handwritten] // v. *reductor* mihi [handwritten] // ♂ ... Coll Sydow le ♂ a ... [handwritten, in part

illegible].

Type material examined *M. sydowi olympiae*. Syntype 1♀[?] MNHN: Olympia 16 Mai [handwritten] // Sydowi Olympiae mihi [handwritten].

New material examined. 3 specimens ZMC & 1 DTC: GREECE: Pelopónnisos, Taïyetos Mts, 950-1800 m, 15-19.v.1990 Zool. Mus. Copenh. Exp. [printed] [this record erroneously published in Telnov (1998) for *M. raveli*].

Synonym, *M. unicolor calliger*. Based on the original descriptions and comparative material. Schmidt (1842) described ‘*Anthicus unicolor*’ from unspecified number of specimens from southern Austria, Hungary, and France (‘...Steyermark und Ungarn..., Frankreich’). Marseul (1879) described ‘*Anthicus calliger*’ also from unspecified number of specimens from southern France and continental Greece (‘France méridionale, Hyères; Grèce, Parnasse’). Two pages beyond, Marseul (1879) also listed ‘*Anthicus unicolor* Schmidt’ with related references, provided a short diagnosis for it, compared this taxon with *Anthicus caliginosus* La Ferté-Sénéctère, 1849 (now *Microhoria caliginosa caliginosa*), and listed ‘Allemagne; Autriche, Dalniate, Hongrie, Gènes; France méridionale, Marseille’ as known records for it with an additional comment ‘very rare’ (from French). Marseul (1879) placed both taxa to the ‘XVIII^e Groupe. — *Bifossicolles*’ of *Anthicus*, now a synonym of *Microhoria*. In the key provided in the same monograph (Marseul 1879: 192) the author attributed *calliger* to a group of species with ‘testaceous legs’ and *unicolor* to a group with ‘testaceous legs and black antennae’ (from French). Both *calliger* and *unicolor* were treated as separate species by earlier authors (e.g., Heyden 1891; Pic 1894, 1901b, 1911 (in the latter both are considered members of *Immichoria* Pic, 1894, at that time a subgenus of *Anthicus*, now a synonym of *Microhoria*)) until Bonadona (1955) in his review of the French *Microhoria* listed and redescribed only ‘*M. (Platyoria* [sic!]) *calliger*’ and, for unstated reason and without further explanations did not mention *unicolor*,

the taxon originally described from France (see references above). Subsequently, Bucciarelli (1976) discussed on the morphology of *Microhoria (Platyhoria) calliger* from Corfu, Ionian Islands and referred to the same localities and specimens as Bonadona (1955). He also mentioned specimens from Austria and what is now North Macedonia and stated, that the Austrian specimens are different from the Greek ones in the external morphology, but aedeagus is found to be substantially identical (Bucciarelli 1976: 134–138). In the same paper, Bucciarelli (1976) also highlighted the ‘rarity’ of this taxon and found its distribution fragmented and localities distant from each other with obvious gaps in the distribution. Interestingly, the epithet of *M. unicolor* is not mentioned by this author in the context. In fact, the differences between the Austrian and Greek specimens as was summarized by Bucciarelli (1976) can be attributed to *M. unicolor* and *M. calliger* as follows (from Italian, adapted by the authors):

- i. Total body length: 2.3–2.4 mm (*unicolor*) / 2.4–3 mm (*calliger*);
- ii. Colouration of tibiae and tarsi: pale brown (*unicolor*) / dark brown (*calliger*);
- iii. Shape of pronotum: transverse (*unicolor*) / about as wide as long (*calliger*);
- iv. Elytral humerus: obsolete to hardly indicated (*unicolor*) / distinct, broadly rounded (*calliger*);
- v. Elytral apex in male: broadly rounded, gland channel opening with a small denticle-like process visible in dorsal view (*unicolor*) / subtruncate, apical denticle-like process not visible in dorsal view (*calliger*);
- vi.i. Sculpture of dorsum: forebody shiny, elytra subopaque due to the presence of a minute microsculpture (*unicolor*) / not reported (*calliger*);
- vi.ii. Punctures of dorsum, male: very delicate and barely perceptible on head, even finer on pronotum, very delicate and perceptible only at humerus on elytra (*unicolor*) / elytral punctures delicate on humeral and apical part, coarser on elytral disc (*calliger*);

vi.iii. Punctures of elytra, female: sparse and delicate, as those on pronotum (*unicolor*) / very delicate and indistinct (*calliger*);

vii. Dorsal vestiture: short, whitish in both sexes (*unicolor*) / not reported (*calliger*).

Bucciarelli (1978) discussed the morphology of *calliger*, highlighted some misinterpretations of this taxon by previous authors and considered records of *calliger* by '(De Marseul, 1879, p. 225) *partim*; Bonadona, 1955, p. 116, *partim*; Bucciarelli, 1976, p. 136, *partim*' referring to *unicolor*. But Bucciarelli (1978) did not propose a new synonym and clearly considered *calliger* a valid subspecies of *unicolor*: 'subsp. *calliger* (De Marseul 1879, p. 225) *partim*; Bonadona, 1955, p. 116, *partim*; Bucciarelli, 1976, p. 136, *partim*'. Later, Bucciarelli (1980) highlighted the following differences between the two taxa (from Italian, adapted): short and robust pronotum, head wide, with smooth and shiny integuments among indistinct dorsal punctures, elytra oval [likely to be read elliptical] with a maximum width posterior to midlength, in male elytral apex denticulate (*unicolor*) / pronotum elongate, humerus more prominent, dorsal punctures more distinct (*calliger*).

Uhmman (1985) provided additional faunistic records of both *M. calliger* and *M. unicolor* including those from Greece and Crete for the latter (the record from Crete is doubtful and requires further confirmation). Uhmman (1989, 1990) provided more faunistic records for *M. unicolor*, including those from Greece. Telnov (2022) suggested that *M. unicolor* and *M. calliger* are likely conspecific based on the examined material from Greece (see Telnov 2022). During the present study we (re)examined several dozens of specimens from SE Europe including large series from Corfu (Telnov 2022) and Puglia, Italy (coll. ADC). We confirm that both morphological forms (as of Bucciarelli 1976) may occur sympatrically at the same localities. The external features as discussed above considered of low evolutionary value, appear randomly in specimens from the same localities and herewith considered unsuitable

for splitting the two taxa. Therefore, a new synonymy is introduced.

Synonym. *M. sydowi* and subspecies. Based on the type material and the original descriptions. All three taxa apparently described from the same material collected likely the same date range and place (see Type material examined above). The varieties, not recollected since their original descriptions, were treated as subspecies by Chandler et al. (2008) in accordance with article 45.6.4 of the ICZN (1999) and subsequently followed by Telnov (2020a). The type material of *M. sydowi* and its two subspecies is apparently conspecific with some minor morphological differences in the shape and comparative width of the head and pronotum, the width and length of the elytra, the presence / absence of the elytral humeri (winged / brachypterous / apterous forms), and the punctures of the dorsum. The aedeagus of the nominal form agrees with that of *M. unicolor* which is known to be variable in external morphology to the same extent as explained above (see the previous paragraph) and explained by Bucciarelli (1976, 1980) and Bonadona (1990, 1991, 2013). Specimens with obsolete and available humeri can be observed at the same locality (e.g., some of the Greek localities in Telnov (2022)). Therefore, the 'distinctive' features of *M. sydowi* **syn. nov.**, ssp. *olympiae* **syn. nov.** and ssp. *reductor* **syn. nov.** are within the morphological variability of *M. unicolor* (Fig. 29), and a new synonymy is introduced.

Ecology. Kiesenwetter (1861) reported this species 'in large numbers in various flowers' (from German). Pic (1901) reports the species from flowering umbellifers.

Distribution. Albania, Austria, Bulgaria, Croatia, Czech Republic, France, Greece (incl. Zakynthos Island and Ionian Islands - Corfu), Hungary, Italy, North Macedonia, Poland, Slovakia, Turkey (also see Telnov 2022). The records from Crete (Uhmman 1985) require further confirmation and are likely based on misidentified specimens.

Chorotype. S-European (2.04 SEU), restricted to southern and some parts of central Europe and western Turkey (Telnov 2022).

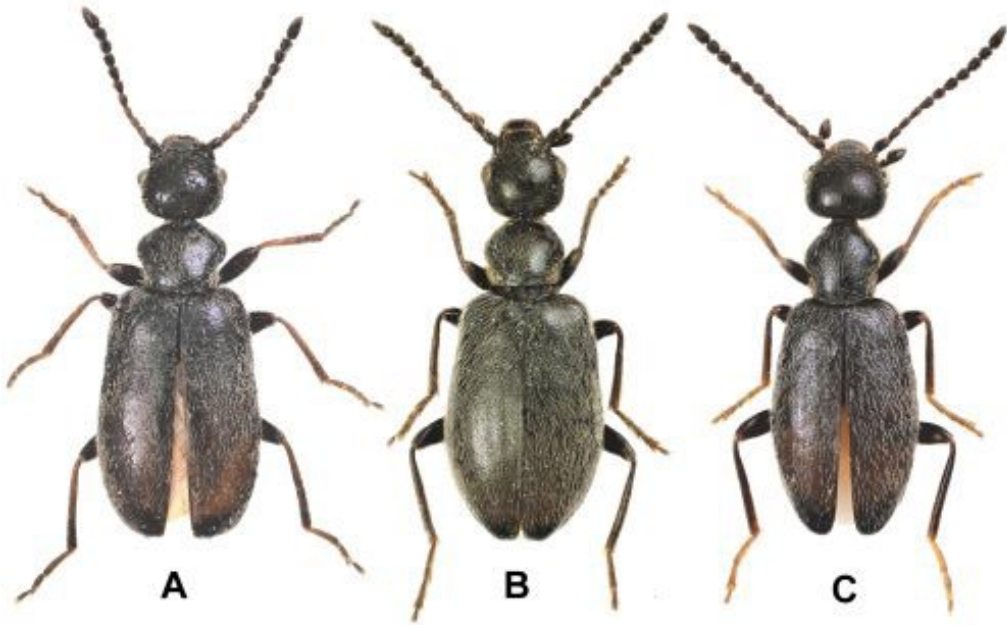


Figure 29. *Microhoria unicolor* (W.L.E. Schmidt, 1842), ♂♂, habitus, dorsal view. A – Breclav, Moravia mer., Czechia; B – Volos, Greece; C – Otranto, Puglia, Italy [not to scale]. Images: A. Degiovanni & D. Telnov.

***Microhoria vetroveci* sp. nov.** (Figs. 30–31)
urn:lsid:zoobank.org:act:15ACCE80-90A4-430B-9669-C12C07B8B84E

Type material designated. Holotype ♂ NMP (Fig. 30): GR – CRETE ANO KERA env. Quercus, Ceratonia beating 35°13'19.4"N 25°27'44.0"E Větrovec leg. 26.10.2023 [printed]. The two right terminal metatarsomeres are missing.

Paratypes 8 males (2 BMNH, 1 DTC, 3 JVC, 2 ZKC): same label as holotype.

Etymology. Patronymic. Named for Jaroslav Větrovec (Hradec Králové, Czech Republic) – well-known coleopterist and specialist on Coccinellidae, the collector of the type series.

Description. Holotype male, total body length 2.9 mm. Head 0.6 mm long, across compound eyes 0.6 mm wide, pronotum 0.55 mm long, maximum width 0.5 mm, elytra 1.8 mm long, maximum combined width 1 mm. Selected paratypes 2.8–3.7 mm long. Dorsum and venter brown, base of pronotum, humeral area and irregularly shaped spots in median and

apical portion of elytron rufous brown. Mouthparts and antenna rufous brown, terminal antennomere somewhat darkened. Femora brown to rufous brown, tibiae and tarsi yellowish brown. Head about as wide as long, head base and posterior temporal angle rounded. Compound eye moderate, moderately protruding from lateral outline of head, about 1.6–1.8× as long as converging tempus. Head dorsum slightly glossy, densely and rather large punctate. Intervening spaces smooth, narrower than to (along head midline) twice as wide as punctures. Dorsal cranial setae dirty yellowish, moderately long, rather dense, subdecumbent. Antenna hardly enlarged in apical third. Antennomeres 8–10 subtrapezoidal, shortened compared to antennomeres 1–6. Penultimate antennomere distinctly longer than wide. Terminal antennomere elongate, apically rounded, about 1.9× as long as penultimate antennomere. Terminal maxillary palpomere securiform. Pronotum hardly longer than wide, slightly narrower than head across eyes,

subtruncate medially at anterior margin, broadly rounded at anterolateral angles. Pronotal disc slightly glossy, flattened in dorsal aspect. Anterior portion of pronotum much wider than posterior, lateral margins strongly converge in posterior half. Latero-basal pronotal fovea broad and deep. Pronotal punctures larger and coarser than those on head dorsum, dense, variably shaped. Intervening spaces narrower to much narrower than punctures, in part flat in part subsulcate. Dorsal pronotal setation similar to that on head. Scutellar shield small, apically broadly rounded, minutely punctate. Elytra about 1.8× as long as wide, laterally broadly rounded, rounded at apex, dorsally flattened. Humerus distinct, broadly rounded. Apex of elytron modified, apical sutural angle produced into apically rounded denticle-like process and inconspicuously emarginate ahead of it (Fig. 30C). Elytral surface slightly glossy, smaller and sparser punctate than forebody. Intervening spaces variable, generally equally wide as to twice as wide as punctures. Elytral setae pale yellowish, moderately long and dense, not fully appressed, directed posteriorly. Metathoracic wings fully developed (functional). Legs without modifications, tibial terminal spurs paired. Basal metatarsomere as long as to slightly longer than combined length of remaining metatarsomeres. Tergite VII subtruncate at posterior margin (Fig. 31D). Morphological sternite VII broad, broadly rounded at posterior margin (Fig. 31C). Tergite VIII narrow, rounded at posterior margin, with a membranous lamina (Fig. 31E). Morphological sternite VIII of two membranous subtriangular sclerites interconnected by thin membrane (Fig. 31F). Morphological sternite IX Y-shaped, lateral arms short (Fig. 31G). Aedeagus (Fig. 31A–B) broadly cylindrical, apically acutely-pointed; endophallic armature with a pair of long, slightly sinuous, sword-like median spines and paired lateral group of densely arranged, shorter, apically rounded spines which are pointing inwardly except at apex of tegmen, where spines becoming apically acute and are pointing laterally and anterolaterally.

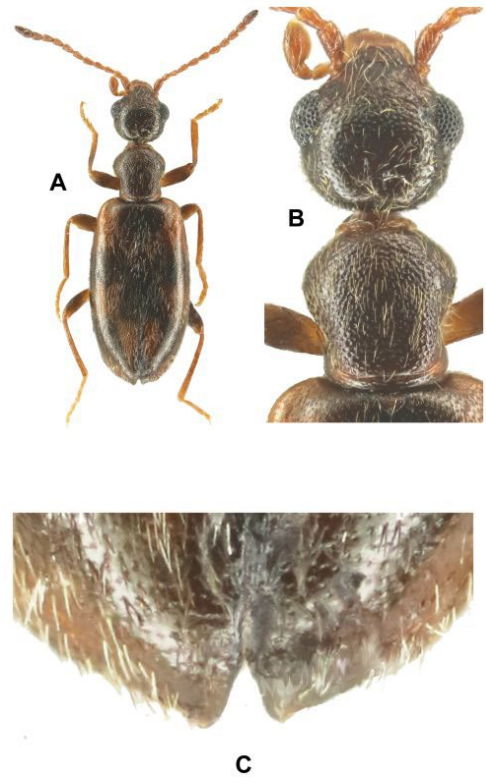


Figure 30. *Microhoria vetroveci* sp. nov., holotype ♂, dorsal view. A – Habitus; B – Dorsal forebody [not to scale]. Images: A. Degiovanni & D. Telnov.

Sexual dimorphism. Female is unknown.

Differential diagnosis. *Microhoria vetroveci* sp. nov. belongs to the *M. longiceps* species group as defined by Kejval & Chandler (2020). This species is peculiar among all known congeners in the dorsal body colouration in the combination with the shape of male modified elytral apex and the specific shape of the aedeagus. The dorsal punctures and general appearance similar to that of *M. angulapex* (C. Koch, 1935) (Greece (Dodecanese Islands), W Turkey) but the head base is truncate, the head dorsum is much denser punctured, the elytral humerus obsolete.

Ecology. Specimens were beaten from the foliage of a large *Ceratonia* sp. (Fabaceae) tree at the edge of a *Ceratonia* grove, under very dry conditions (J. Větrovec pers. comm. 2024).

Distribution. Greece: Crete.

Chorotype. E-Mediterranean (3.03 EME).

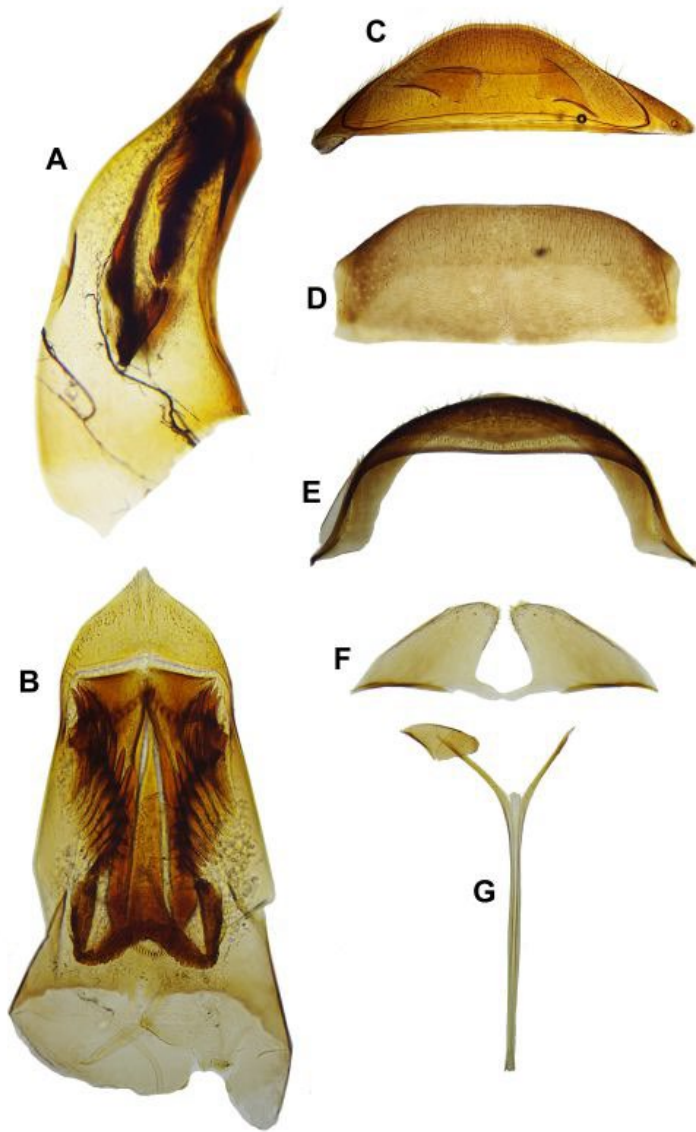


Figure 31. *Microhoria vetroveci* sp. nov., paratype ♂, genitalia and terminalia. A – Aedeagus, lateral view; B – ditto, ventral view; C – Morphological sternite VII, ventral view; D – Tergite VII, dorsal view; E – Tergite VIII; F – Morphological sternite VIII, ventral view G – Morphological sternite IX [not to scale]. Images: A. Degiovanni & D. Telnov.

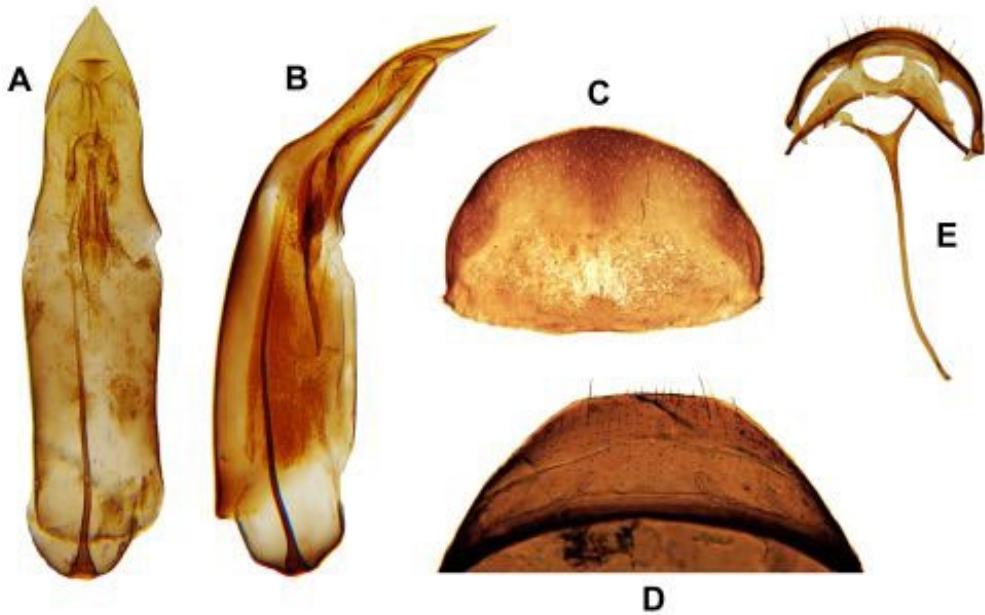


Figure 32. *Microhoria akbesiana* (Pic, 1896), male aedeagus and terminalia, specimen from Alta Val di Susa, Piemonte, Italy. A – Aedeagus, ventral view; B – ditto, lateral view; C – Tergite VII; D – Morphological sternite VII; E – Tergite VIII, morphological sternites VIII and IX, dorsal view [not to scale]. Images: A. Degiovanni & D. Telnov.

Non-Greek species: new nomenclatural act

Microhoria akbesiana (Pic, 1896) (Fig. 32)
= *Microhoria fasciata helvetica*

(Krekich-Strassoldo, 1929) **syn. nov.**

See Telnov (2022) for the references and

redescription of *M. akbesiana*.

Anthicus fasciatus helveticus – Krekich-Strassoldo 1929: 153 (key), 169 (description: ‘Schweiz: Ober-Engadin’ (Switzerland)); Pic 1930: 15 (taxonomic & faunistic notes). *Microhoria fasciata helvetica* – Bucciarelli 1980: 197 (figure, differential diagnosis from *M. fasciata fasciata*).

Microhoria (Immicrohoria) fasciata Helvetica – Bonadonna 1990: 366 (key), 370 (references, morphology, distribution); Bonadonna 1991: 130 (key), 134 (references, morphology, distribution); Bonadonna 2013: 83 (key), 86 (references, morphology, distribution).

Microhoria fasciata helvetica – Chandler et al. 2008: 440 (checklist; distribution:

Switzerland); Telnov 2020a: 609 (checklist; distribution: Switzerland).

Type material *M. akbesiana*. See Telnov (2022).

Type material *M. fasciata helvetica*. Not examined.

New material examined. 1♂ ADC: I – BUSSOLENO (TO); loc. Foresto 550 m; 29.05.1998 G. B. Delmastro leg.; 1♂ ADC: I – ACCEGLIO (CN) 1 km a SE di Chiappera 1700 m; 14.06.1998 G. B. Delmastro leg.; 1♂ ADC: Piemonte, Alta Val Susa, str., per il Col del Moncenisio, 19.VII.06 leg. L. Diotti; 1♂ ADC: PIEMONTE: Colle di Sestrière, Valledel Chisone (TO) 30.VI.2010 leg. Diotti; 1♂ ADC: Piemonte (TO) Chiomonte – Fraissin m 1500 3.VI.2017 leg. G. Franzini; 6♂ ADC: PIEMONTE: Sestrière (TO), 17.VII.2023 C.de Queros leg.

Synonym. Based on the studied lectotype and additional material of *M. akbesiana*, the original description and additional material of *M. fasciata helvetica*. Krekich-Strassoldo

(1929) described *Anthicus fasciatus helveticus* from unspecified number of males and females providing figure of male aedeagus and morphological sternite VII. Telnov (2022: 201) pointed on the fact that this taxon is likely conspecific with *M. akbesiana* but did not introduce a formal new synonym. During the present research (see New material examined above) we came to the conclusion that aedeagus of *M. fasciata helvetica* (referring to the specimens figured by Krekich-Strassoldo (1929) and Bucciarelli (1980), and fig. 32 as presented herein), is identical with that of the lectotype *M. akbesiana*, the male terminalia appear similarly shaped in both taxa, and the external morphology is pretty similar, including the dorsally densely punctured forebody. Therefore, a new synonym is introduced.

Distribution. Turkey / Syria (Akbes region), Ukraine (Crimean Peninsula) (Telnov 2022), Italy, Switzerland. The species is likely more widely distributed in Europe and likely present in Balkan countries but is apparently uncommon.

DISCUSSION

Microhoria is particularly species-rich across the Mediterranean and in the Central Asia (e.g., Krekich-Strassoldo, 1929; Bonadona 1955, 1990; Bucciarelli 1980; Uhmman 1992; Kejval & Chandler 2020; Telnov 2020a, 2022). By the reason of the considerable variability of morphological features in this group (e.g., figs. 2B–C, 9–10, 11A–E, 24, 29), identification of *Microhoria* is challenging and mostly only possible from male and female terminalia and male genital organs. Over decades this resulted in descriptions of numerous (infra)subspecific taxa, synonyms, misidentifications, and erroneous records (e.g., some of the taxa discussed herein, see also Kejval & Chandler 2020; Telnov 2020a, 2022). Type material of most south European and eastern Mediterranean species have been rediscovered and studied by various authors (e.g., Bonadona 1955, 1990; Bucciarelli 1980;

Telnov 2022 and others), while for several other taxa type material remains unstudied, and this fact delays further advances in taxonomy and faunistic of *Microhoria*.

Thirty-five species and subspecies of *Microhoria* were recorded from Greece prior to this study (Kejval & Chandler 2020; Telnov 2020a, 2022). Considering the five new descriptions, five new synonyms, and the rescued name discussed herein, the present number of the Greek *Microhoria* has increased to 36. However, as mentioned herein and by other authors (e.g., Telnov 2022), the Greek records of several *Microhoria* require further confirmation. On the other hand, this number can also be affected by further rediscovery and studies on type material of some obscure and poorly known taxa. Out of the 36 Greek *Microhoria* and considering the high number of misidentifications-based records of likely Greek-endemic species from other regions, at least 16 species and subspecies considered endemic to the country. Of them, six taxa appear endemic to Crete, three species – to other insular systems (Aegean, Cyclades, Dodecanese and Sporades islands), while other taxa are yet only known from mainland Greece.

It is not impossible that *Anthicus subtilis* Gistel, 1831 from the Ionian Islands, which is now treated as *nomen dubium* (Chandler et al. 2004: 140), is another member of *Microhoria* considering the ‘*fasciis duabis flavis*’ mentioned in the original description (Gistel 1831).

ACKNOWLEDGEMENTS

For providing access to the material used for the present study, the authors are highly indebted to Fernando Angelini (Francavilla Fontana, Italy, Italy), Marco Berra (Cremona, Italy), Marco Bologna and Enrico Ruzzier (both Università Roma Tre, Rome, Italy), Hervé Brustel (École de'Ingénieurs de Purpan, Toulouse, France), Manfred Egger (Wattens, Austria), Matthias Hartmann and Andreas Kopetz (both NME), Pol Limbourg (IRSNB),

Samps Malmberg (Finnish Forest Research Institute, Helsinki, Finland), Antoine Mantilleri and Azadeh Taghavian (both MNHN), Maurizio Mei (SMZR), Otto Merkl and György Makranczy (both HNHM), Maurizio Pavesi (Milan, Italy), Harald Schillhammer (NHMW), Giorgio Sabella (University of Catania, Catania, Italy), Jaroslav Větrovec (Hradec Králové, Czech Republic), and Iuri Zappi (Casalecchio di Reno, Italy). Thanks to two anonymous reviewers for their valuable comments.

REFERENCES

- Angelini F., Audisio P., Bologna M.A., De Biase A., Franciscolo M.E., Nardi G., Ratti E., Zampetti M.F. 1995. Coleoptera Polyp-haga XII (Heteromera escl. Lagriidae, Alleculidae, Tenebrionidae). In: Minelli A., Ruffo S., La Posta S. (eds.): *Checklist delle specie della fauna italiana*. Fascicolo 57. Calderini, Bologna, Pp. 30.
- Bonadona P. 1955. Les *Microhoria* de France [Col., Anthicidae]. *Revue Française d'Entomologie* 21: 101–118.
- Bonadona P. 1990. Les Anthicidae de la faune de France (huitième et dernière partie). *Bulletin Mensuel de la Société Linnéenne de Lyon* 59: 363–386.
- Bonadona P. 1991. *Les Anthicidae de la faune de France (Coleoptera)*. Société Linnéenne de Lyon, Lyon. Pp. 155.
- Bonadona P. 2013. Les Anthicidae de la faune de France (Coleoptera). *Mémoires de la Société Linnéenne de Lyon* 5: 1–126.
- Bucciarelli I. 1976. Su alcuni coleotteri anticidi raccolti da M. e T. Cerruti nelle Isole di Creta, Corfu e Thasos, con descrizione di una nuova specie di *Microhoria* (Coleoptera, Anthicidae). *Fragmenta entomologica* 12 (2): 133–142.
- Bucciarelli I. 1978. Anticidi nuovi, nuovi per l'Italia e sinonimie. *Bollettino della Società Entomologica Italiana* 110 (9): 154–163.
- Bucciarelli I. 1980. Fauna d'Italia XVII. Coleoptera, Anthicidae. Calderini, Bologna, Pp. viii + 240.
- Chandler D.S., Nardi G., Telnov D. 2004. Nomenclatural notes on the Palaearctic Anthicidae (Coleoptera). *Mitteilungen der Internationalen Entomologischen Vereins e. V.* 29: 109–173.
- Chandler D.S., Uhmann G., Nardi G., Telnov D. 2008. Family Anthicidae Latreille, 1819. In: Löbl I., Smetana A. (eds.): *Catalogue of Palaearctic Coleoptera*. Volume 5. Apollo Books, Stenstrup, Pp. 421–455.
- Chikatunov V., Pavlíček T., Nevo E. 2004. *Coleoptera of "Evolution Canyon", Lower Nahal Oren, Mount Carmel, Israel. Part II. Families: Dytiscidae, Leiodidae, Silphidae, Scydmaenidae, Staphylinidae, Histeridae, Ochodaeidae, Dryopidae, Heteroceridae, Lampyridae, Drilidae, Cantharidae, Elateridae, Throscidae, Dermestidae, Thorictidae, Lyctidae, Bostrichidae, Anobiidae, Ptinidae, Thanerocleridae, Cleridae, Melyridae, Malachiidae, Brachypteridae, Nitidulidae, Cucujidae, Cryptophagidae, Biphylidae, Erotylidae, Phalacridae, Byturidae, Coccinellidae, Lathridiidae, Mycetophagidae, Cisidae, Oedeemeridae, Mycteridae, Aderidae, Scraptiidae, Mordellidae, Anaspidae, Rhizophagidae, Rhipiphoridae, Anthicidae, Bruchidae*. Pensoft, Sofia & Moscow, Pp. 192.
- Drumont A., Garcia Carrillo J. 2018. First interception of the anthicid beetle *Anthelephila caeruleipennis* (La Ferté-Sénéctère, 1847) in Belgium (Coleoptera: Anthicidae: Anthicinae). *Bulletin de la Société royale belge d'Entomologie / Bulletin van de Koninklijke Belgische*

- Vereniging voor Entomologie* 154: 143–145.
- Gemminger M. 1870. Nachstehende Art- oder Gattungsnamen. *Coleopterologische Hefte* 6: 119–124.
- Gemminger M., de Harold B. 1870. *Catalogus Coleopterorum hucusque descriptorum synonymicus et systematicus. Tom. VII. Tenebrionidae, Nilionidae, Pythidae, Melandryidae, Lagriidae, Pedilidae, Anthicidae, Pyrochroidae, Mordellidae, Rhipidophoridae, Cantharidae, Oedemeridae*. Monachii, E.H. Gummi, Pp. 1801–2179 + 10 unnumbered pp.
- Georghiou G.P. 1977. *The insects and mites of Cyprus with emphasis on species of economic importance to agriculture, forestry, man and domestic animals*. Kiphissia, Athens, Pp. 347.
- Gistel J. 1831. Entomologische Fragmente. *Isis von Oken* 1831: 301–310.
- Hemp C., Dettner K. 2001. Compilation of canthariphilous insects. *Beiträge zur Entomologie* 51 (1): 231–245.
- Heyden L. von, Reitter E., Weise J. 1891. Anthicidae. In: Reitter E. (ed.): *Catalogus Coleopterorum Europae, Caucasi et Armenia rossicae*. Berlin, Mödling, Caen, Pp. 265–268.
- ICZN. 1999. *International Code of Zoological Nomenclature, 4th edition*. International Trust for Zoological Nomenclature, London, UK.
- Kaszab Z. 1956a. Neue Heteromera (Coleoptera) aus Ungarn. *Acta zoologica academiae scientiarum hungaricae* 2 (4): 333–338.
- Kaszab Z. 1956b. Neue Meloiden-, Alleculiden-, Serropalpiden-, Anthiciden- und Oedemeriden-Formen aus Ungarn und den angrenzenden Gebieten (Coleoptera). *Folia entomologica hungarica (Series Nova)* 9 (5): 141–172.
- Kejval Z., Chandler D.S. 2020. Generic revision of the Microhorini with new species and synonymies from the Palaearctic Region (Coleoptera: Anthicidae). *Acta entomologica musei nationalis pragrae* 60 (1): 95–154.
- Koch C. 1933. Risultati scientifici delle caccie entomologiche di S.A.S. il Principe Alessandro della Torre e Tasso in Italia. II. *Anthicus*. *Bollettino della Società entomologica italiana* 65 (7): 149–159.
- Krekich-Strassoldo H. von 1911. Gli Anticidi del Litorale e della Dalmazia. *Bollettino della Società Adriatica di Scienze Naturali in Trieste* 26 (2): 63–79.
- Krekich-Strassoldo H. von 1929. Revision der paläarktischen *Anthicus*-Arten der Gruppe ‘*Bifossicolles*’ (Gruppe XVIII in Marseuls Monographie). *Koleopterologische Rundschau* 15: 151–189.
- La Ferté-Sénéctère F.T. de. 1849a. *Anthicus* (Quatrième Division). Livraison 9, No. 30: 133–181, 1 pl. In: Guérin-Méneville F.-E. (ed.): *Species et iconographie générique des animaux articulés ou représentation des genres, avec leur description et celle de toutes les espèces de cette grande division du règne animal*. Première Partie: Insectes Coléoptères (1846–1847). De Fain et Thunot, Paris.
- La Ferté-Sénéctère F.T. de. 1849b. *Monographie des Anthicus et genres voisins, coléoptères hétéromères de la tribu des Trachélides*. De Sapia, Paris [1848], Pp. xxii + 340, Pls. 17–32.
- Marseul S.A. de 1857. *Catalogue des Coléoptères d’Europe*. Paris, Pp. xvi + 200.

- Marseul S.A. de 1879. Monographie des anthicides de l'Ancien-Monde. *L'Abeille, Journal d'Entomologie* 17: 1–268, pls 1–2.
- Marseul S.A. de 1887. Anthicidae: 348–353. In: Marseul S.A. de (ed.): *Catalogue synonymique et géographique des Coléoptères de l'Ancien Monde, Europe et contrées limitrophes en Afrique et en Asie. L'Abeille, Journal d'Entomologie* 24: 193–360.
- Nardi G. 2003. Notes on some Microhorini [sic!] (Coleoptera, Anthicidae). *Bollettino dell'Associazione Romana di Entomologia* 58 (1–4): 53–75.
- Pic M. 1892. Quelques mots sur les Anthicides. *L'Échange, Revue Linnéenne* 8 (88): 43–44.
- Pic M. 1894. Liste des anthicides décrits postérieurement au catalogue de MM. Gemminger et Harold (1870-1893). *Annales de la Société entomologique de Belgique* 38: 43–58.
- Pic M. 1896. Notes spéciales et locales. Examen des anthicides de la collection Reitter. *La Feuille des jeunes Naturalistes* 26: 178–181.
- Pic M. 1897. Descriptions de coléoptères. *Compte Rendu des Séances et des Excursions, Société d'Histoire Naturelle d'Autun* 10: 295–300.
- Pic M. 1901a. Deuxième supplément à ma liste des anthicides. *Annales de la Société entomologique de Belgique* 45: 248–257.
- Pic M. 1901b. Xylophilides et Anthicides capturés en Italie et Grèce, du 17 avril au 14 juin 1901. *Revue scientifique du Bourbonnais et du centre de la France* 14: 173–182.
- Pic M. 1901c. Note sur les *Anthicus terminatus* Schmt. et *terminatus* Laf. *Miscellanea entomologica* 9: 129–131.
- Pic M. 1902. Deux notes entomologiques avec synopsis. *L'Échange, Revue Linnéenne* 17 (211): 41–42.
- Pic M. 1907. Synonymies fantaisistes. *L'Échange, Revue Linnéenne* 23 (268): 123–125.
- Pic M. 1910. Coléoptères Malacodermes et Hétéromères en partie nouveaux. *Compte Rendu des Séances et des Excursions, Société d'Histoire naturelle d'Autun* 13: 37–39.
- Pic M. 1911. Anthicidae; Pars 36. In: Schenkling S. (ed.): *Coleopterorum Catalogus*. W. Junk, Berlin, Pp. 102.
- Pic M. 1930. Sur divers “*Anthicus* Payk.” paléarctiques. *L'Échange, Revue Linnéenne* 46: 15–16.
- Pic M. 1936. Notes diverses, nouveautés (Suite). *L'Échange, Revue Linnéenne* 52 (464): 21–23.
- Pic M. 1941a. Opuscula martialis. *L'Échange, Revue Linnéenne. Numero Special* 2: 1–16.
- Pic M. 1941b. Notes diverses, Nouveautés. *L'Échange, Revue Linnéenne* 57 (484): 5.
- Reitter E. 1889. Berichte über die von E. v. Oertzen in Jahre 1887 in Griechenland u. Klein-Asien gesammelten Coleopteren. ix. Neue Arten aus verschiedenen Familien. *Deutsche Entomologische Zeitschrift* 1889: 251–259.
- Reitter E. 1906. Anthicidae. In: Heyden L. von, Reitter E., Weise J. (eds.): *Catalogus coleopterorum Europae, Caucasi et Armeniae rossicae*. Editio secunda. Edidit Edmund Reitter. R. Friedländer & Sohn, Berlin, Edmund Reitter, Paskau (Moravie), *Revue d'Entomologie*, Caen: 439–445 [edition with two columns per page].

- Schaum H. 1859. *Catalogus Coleopterorum Europae*. In Verbindung mit Dr. G. Kraatz und H. v. Kiesenwetter. Nicolaische Verlagsbuchhandlung, Berlin, Pp. iv + 121.
- Schmidt W.L.E. 1842. Die europäischen Arten der Gattung *Anthicus* Fbr. (Fortsetzung.) II. *Anthicus*. Fbr. *Entomologische Zeitung* 3: 122–135.
- Semionenkov O.I., Semjonov V.B. 2016. 8.1. Fauna zestkokrilih nasekomih (Insecta, Coleoptera) Nacionaljnovo parka „Smolenskoe ozero“ (Fauna of coleopterous insects (Insecta, Coleoptera) of the national park “Smolenskoye Poozerye”). In: Anomymous (ed.): *Ljetopis prirodi. 10. Tema: monitoring sostojanja i metodi sohranjenjija prirodnih kompleksov nacionaljnovo parka. FGBU “Nacionalnij park “Smolenskoye Poozerye”*. Prjzevaljskoe, Pp. 150–161.
- Stein J.P.E.F. 1868. *Catalogus Coleopterorum Europae*. Friderici Nicolai, Berolini, Pp. iv + 149.
- Telnov D. 1998. Paläarktische Anthicidae des Zoologischen Museums Kopenhagen (Insecta: Coleoptera). *Mitteilungen des Internationalen Entomologischen Vereins e.V.* 22 (3–4): 165–171.
- Telnov D. 2006. Nomenclatural notes on Anthicidae and Pyrochroidae (Coleoptera). 1. *Latvijas Entomologs* 43: 33–38.
- Telnov D. 2010. Nomenclatural notes on Anthicidae and Pyrochroidae (Coleoptera). 3. *Latvijas Entomologs* 48: 8–16.
- Telnov D. 2019. *Neocrohoria* gen. nov., a new Anthicidae (Insecta: Coleoptera) genus from Chile. *Acta biologica universitatis daugavpiliensis* 19(1): 1–8.
- Telnov D. 2020a. Family Anthicidae Latreille, 1819. In: Iwan D., Löbl I. (eds.): *Catalogue of Palaearctic Coleoptera. Volume 5. Revised and Updated Second Edition. Tenebrionoidea*. Brill, Leiden & Boston, Pp. 575–625.
- Telnov D. 2020b. New nomenclatural and taxonomic acts, and comments. Anthicidae. In: Iwan D., Löbl I. (eds.): *Catalogue of Palaearctic Coleoptera. Volume 5. Revised and Updated Second Edition. Tenebrionoidea*. Brill, Leiden & Boston, Pp. 14–16.
- Telnov D. 2022. Revisional notes on the genus *Microhoria* Chevrolat, 1877 (Insecta: Coleoptera: Anthicidae) from the Eastern Mediterranean and Turkey, with new descriptions, an annotated catalogue, and a key. *Baltic Journal of Coleopterology* 22 (2): 195–312.
- Uff C., Jones N.P., Telnov D. 2018. *Microhoria terminata* (W.L.E. Schmidt, 1842) (Anthicidae: Anthicinae) new to the British Isles. *The Coleopterist* 27 (3): 119–122.
- Uhmann G. 1985. Paläarktische Anthiciden (Coleoptera) des Ungarischen Naturwissenschaftlichen Museums Budapest. *Folia entomologica hungarica* 46: 177–203.
- Uhmann G. 1989. Anthicidae des Zoologischen Museums in Lund. Zweiter Teil (Coleoptera, Anthicidae). *Entomofauna* 10 (25): 377–393.
- Uhmann G. 1990. Anthicidae aus dem Oberösterreichischen Landesmuseum in Linz (Coleoptera, Anthicidae). *Linzer biologische Beiträge* 22 (2): 577–595.
- Uhmann G. 1992. Die Anthicidae der Iberischen Halbinsel. *Mitteilungen der Münchener Entomologischen Gesellschaft* 82: 87–180.

- Uhmann G. 1996. Anthiciden aus dem Naturhistorischen Museum in Wien (Coleoptera, Anthicidae). *Entomologische Blätter* 92 (1–2): 19–36.
- Uhmann G., Chikatunov V., Pavlíček T. 2005. Catalogue of the beetles (Coleoptera) in Israel and adjacent areas: 4. Anthicidae. *Biocosme Mésogéen* 22 (1): 1–64.
- Uhmann G., Guèourgiev B. 2000. Review of Anthicidae (Coleoptera) from Bulgaria. *Historia naturalis bulgarica* 12: 33–39.
- Vigna Taglianti A., Audisio P.A., Biondi M., Bologna M.A., Carpaneto G.M., De Biase A., Fattorini S., Piattella E., Sindaco R., Venchi A., Zapparoli M. 1999. A proposal for a chorotype classification of the Near East fauna, in the framework of the Western Palearctic Region. *Biogeographia, Lavori della Società italiana di Biogeografia (n.s.)* 20: 31–59.
- Winkler A. 1927. Anthicidae. In: Winkler A. (ed.): *Catalogus Coleopterorum regionis palaearticae*. Pars. 7. Albert Winkler, Wien [1927–1932], Pp. 833–851 [edition with two columns per page].

Received: 11.07.2024

Accepted: 08.08.2024