

REMARKS ON SOME EUROPEAN ALEOCHARINAE, WITH DESCRIPTION OF A NEW *RHOPALETES* SPECIES FROM CROATIA (COLEOPTERA: STAPHYLINIDAE)

LÁSZLÓ ÁDÁM

Abstract. Based on an examination of type and non-type material, ten species-group names are synonymised: *Atheta mediterranea* G. Benick, 1941, *Aloconota carpathica* Jeannel et Jarrige, 1949 and *Atheta carpatensis* Tichomirova, 1973 with *Aloconota mihoki* (Bernhauer, 1913); *Amischa jugorum* Scheerpeltz, 1956 with *Amischa analis* (Gravenhorst, 1802); *Amischa strupii* Scheerpeltz, 1967 with *Amischa bifoveolata* (Mannerheim, 1830); *Atheta tricholomatobia* V. B. Semenov, 2002 with *Atheta boehmei* Linke, 1934; *Atheta palatina* G. Benick, 1974 and *Atheta palatina* G. Benick, 1975 with *Atheta dilaticornis* (Kraatz, 1856); *Atheta degenerata* G. Benick, 1974 and *Atheta degenerata* G. Benick, 1975 with *Atheta testaceipes* (Heer, 1839). A new name, *Atheta velebitica* nom. nov. is proposed for *Atheta serotina* Ádám, 2008, a junior primary homonym of *Atheta serotina* Blackwelder, 1944. A revised key for the Central European species of the *Aloconota sulcifrons* group is provided. Comments on the separation of the males of *Amischa bifoveolata* and *A. analis* are given. A key for the identification of *Amischa* species occurring in Hungary and its close surroundings is presented. Remarks are presented about the relationships of *Alevonota* Thomson, 1858 and *Enalodroma* Thomson, 1859. The taxonomic status of *Oxypodera* Bernhauer, 1915 and *Mycetota* Ádám, 1987 is discussed. The specific status of *Pella hampei* (Kraatz, 1862) is debated. Remarks are presented about the relationships of *Alevonota* Thomson, 1858, as well as *Mycetota* Ádám, 1987, *Oxypodera* Bernhauer, 1915 and *Rhopaletes* Cameron, 1939. The publication date of several *Atheta* species described by G. Benick is discussed. *Aloconota mihoki*, *Amischa forcipata*, *A. filum* and *Atheta boehmei* are reported from Hungary, Croatia and Romania, respectively, for the first time. A new species, *Rhopaletes slavoniae* sp. n. is described from Croatia.

Résumé. Se basant sur un examen du matériel de types et de non-types, dix noms d'espèces-groupe sont synonymisés: *Atheta mediterranea* G. Benick, 1941, *Aloconota carpathica* Jeannel et Jarrige, 1949 et *Atheta carpatensis* Tichomirova, 1973 avec *Aloconota mihoki* (Bernhauer, 1913); *Amischa jugorum* Scheerpeltz, 1956 avec *Amischa analis* (Gravenhorst, 1802); *Amischa strupii* Scheerpeltz, 1967 avec *Amischa bifoveolata* (Mannerheim, 1830); *Atheta tricholomatobia* V. B. Semenov, 2002 avec *Atheta boehmei* Linke, 1934; *Atheta palatina* G. Benick, 1974 et *Atheta palatina* G. Benick, 1975 avec *Atheta dilaticornis* (Kraatz, 1856); *Atheta degenerata* G. Benick, 1974 et *Atheta degenerata* G. Benick, 1975 avec *Atheta testaceipes* (Heer, 1839). Un nouveau nom, *Atheta velebitica* nom. nov. est proposé pour *Atheta serotina* Ádám, 2008, un homonyme primaire junior d'*Atheta serotina* Blackwelder, 1944. Une clé révisée pour les espèces de l'Europe Centrale du groupe *Aloconota sulcifrons* est offerte. Les commentaires de la séparation des mâles de *Amischa bifoveolata* et *A. analis* sont donnés. Une clé pour l'identification des espèces d'*Amischa* qui existent en Hongrie et ses environs est présentée. Des remarques sont présentées sur les rapports entre *Alevonota* Thomson, 1858 et *Enalodroma* Thomson, 1859. Le statut taxonomique de *Oxypodera* Bernhauer, 1915 et *Mycetota* Ádám, 1987 est discuté. Le statut spécifique de *Pella hampei* (Kraatz, 1862) est discuté. Des remarques sont présentées sur les rapports d'*Alevonota* Thomson, 1858, aussi bien que de *Mycetota* Ádám, 1987, *Oxypodera* Bernhauer, 1915 et *Rhopaletes* Cameron, 1939. La date de parution de plusieurs espèces d'*Atheta* décrites par G. Benick est discutée. *Aloconota mihoki*, *Amischa forcipata*, *A. filum* et *Atheta boehmei* sont annoncés de la Hongrie, la Croatie et la Roumanie, respectivement, pour la première fois. Une nouvelle espèce, *Rhopaletes slavoniae* sp. n. est décrite de la Croatie.

Key words: Coleoptera, Staphylinidae, Aleocharinae; new species, new synonymies, new records, key to species, systematics.

INTRODUCTION

Our current knowledge of the staphylinid fauna of Hungary and its close surroundings has not yet reached completion. This can be inferred from various recent taxonomic studies, which have led to the discovery of several new species (e.g. Ádám, 2008), and it is also shown by numerous new records only in the past years.

In order to clarify some of the remaining taxonomic problems, various types and additional material were examined, resulting in several new synonyms, new records, etc. and the discovery of the new species.

MATERIAL AND METHOD

Types and additional material deposited in the following public collections were examined: Hungarian Natural History Museum, Budapest, Hungary (HNHM; Gy. Szél), Muséum d'Histoire Naturelle, Genève, Switzerland (MHNG; G. Cuccodoro), Muséum National d'Histoire Naturelle, Paris, France (MNHN; A. Taghavian), Naturhistorisches Museum, Wien, Austria (NHMW; H. Schillhammer).

Illustrations of the genitalia and terminalia were made on the basis of permanent preparations in Euparal mounting medium on plastic cards pinned with the specimens. For the line drawings, a Jenalab compound microscope (Carl Zeiss, Jena) with a drawing tube was used. The SEM images were taken of uncoated specimens with a Hitachi S-2600N scanning electron microscope.

RESULTS

*Synonymies and revised key**for the Central European species of the Aloconota sulcifrons group**Aloconota mihoki* (Bernhauer, 1913)

Atheta (Aloconota) mihoki Bernhauer, 1913: 133 (as "Mihoki")

Atheta (Aloconota) mediterranea G. Benick, 1941: 184, **syn. n.**

Aloconota carpathica Jeannel et Jarrige, 1949: 283, **syn. n.**

Atheta (incertae sedis) carpatensis Tichomirova, 1973: 164 (a new name for *Aloconota carpathica*), **syn. n.**

The description of *Atheta mihoki* (Bernhauer, 1913) was based on one specimen collected in "Biharer Komitat (Vallis Misid)". The type locality is located in the Bihar Mountains (Romania). Benick (1941) described *Atheta mediterranea* on the basis of several specimens from "Ragusa Dalmatien, Omblaquelle" and "Griechenland, Veluchi-Gebirge", mentioning specimens also from various localities in Europe and Asia Minor: "Dalmatien, Mazedonien, Thessalien, Bulgarien, Goek-Dagh (Klein-Asien), Jaila-Gebirge (Krim)". Jeannel & Jarrige (1949) based their description of *Aloconota carpathica* on one female specimen from "Roumanie. Carpathes méridionales. – Peșterea dela Gârla vacii, à Runcu, jud. Gorj" (Romania. Southern Carpathians. – Gârla Vacii Cave, near Runcu village, Gorj county). This species was subsequently transferred to the genus *Atheta* by Tichomirova (1973) who proposed a new name, *Atheta carpatensis*, to replace *Aloconota carpathica*, which in her interpretation was a junior secondary homonym of *Atheta carpathica* (Miller, 1868), originally described as *Homalota*.

The types, except for the holotype of *Aloconota carpathica* (MNHN), were not examined but I saw specimens of *Aloconota mihoki* and *A. mediterranea* from their type localities, from the Bihor Mountains and Dalmatia, respectively. My examination revealed some differences among the specimens in the external characters. It seems that these depend upon the geographical situation of the locality, a common phenomenon also in *Aloconota sulcifrons* (Stephens, 1832). The hind wings are ordinarily well developed and the body is often darkly coloured in case of the specimens from Asia Minor and Southern Europe (the Dinaric Mountains and the Southern Carpathians, etc.). *Aloconota mediterranea* and *A. carpathica* represent this form. (When describing the latter species, Jeannel & Jarrige compared it with *Aloconota currax* (Kraatz, 1856), and failed to realise that *A. carpathica*, in fact, belonged to the *sulcifrons* species group.) The specimens from the Eastern Carpathians, Central Europe, etc. are more or less short-winged and light-coloured, having most often smaller eyes. This form is known as *Aloconota mihoki*. Since convincing differences were found neither in the external characters nor in the shape of the genitalia, the above-mentioned dissimilarity is attributed to intraspecific variation. There is little doubt that *Atheta mihoki*, *A. mediterranea* and *Aloconota carpathica* are conspecific, so until further evidences become available and the group is studied on a wider scope all these names are considered synonyms.

While revising the material from Hungary and surrounding areas, attempts at identifying the species of the *A. sulcifrons* species group using the key by Benick (1954) and Benick & Lohse (1974) presented considerable difficulties. The species very closely resemble each other and require careful comparison for their determination. The morphology of the genitalia in this case is quite uniform, and at the same time subject to some variation, so that it must be regarded of secondary significance for the identification of the species in question. Unfortunately, due to the limited diagnostic value of external characters, such as size, puncturation, microreticulation, etc., as well as the considerable intraspecific variation and interspecific overlap, a reliable identification based on external characters alone is also difficult in most cases. Therefore, presenting an alternative key to further facilitate the recognition of these species was found desirable.

Key for the Aloconota sulcifrons species group

- 1 (6) Pronotal microsetae constitute a characteristic pattern in a narrow stripe in posterolateral portion on disc. Males: microsetae directed anteromedially and anterolaterally, respectively, approximately in two thirds of the total length of pronotum (Fig. 1 A) (see also in Hansen, 1954, fig. 138; Bruge 1999, fig. 8). Females: microsetae directed anterolaterally, approximately in one third of the total length of pronotum (Fig. 1 B). Males: posterior margin of abdominal tergite VIII with outer pair of denticles often a little more protruding than inner one, or outer pair on a level with inner one (see Hansen, 1954, fig. 134; Last, 1979, fig. 2).
- 2 (3) Puncturation and pubescence of abdominal tergites III–VI not particularly dense; pubescence mostly inconspicuous. Tergites III–VI, as a rule, with very weak silky shine; microreticulation very fine and dense. (Median lobe of aedeagus, though a little narrower in lateral view, like that of the following species. Spermathecal duct obviously longer than that of related

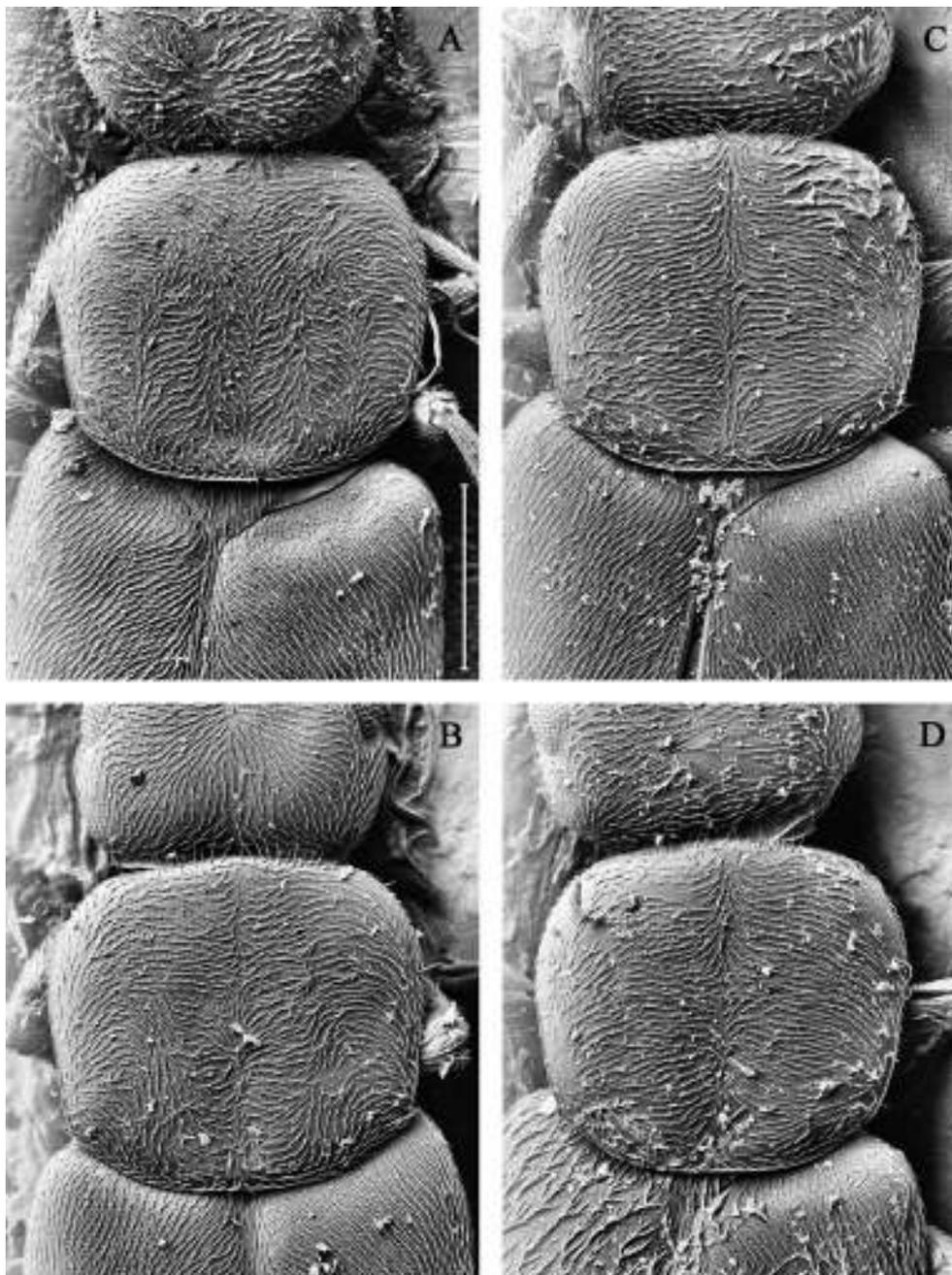


Fig. 1 - *Aloconota sulcifrons* (Stephens): A, forebody of male; B, forebody of female; *Aloconota mihoki* (Bernhauer): C, forebody of male; D, forebody of female (scanning electron micrographs, vacuum 25 Pa, voltage 25 kV, uncoated). Scale (in mm): A–D, 0.3.

species). For the illustrations of the genitalia, see Strand & Vik (1964). – Head and abdomen blackish brown or dark brown. Pronotum dark brown or dark reddish brown. Elytra lighter brown or reddish brown. Antennae dark brown or dark reddish brown. Legs brownish or yellowish red. Postocular region 1.3–1.5 times longer than eye. Antennomere X 1.4–1.6 times wider than long. Pronotum 1.06–1.12 times wider than long. Elytral suture (measured from apex of scutellum to inner apical angles) 0.90–0.98 times shorter than pronotum. Body length: 3.5–4.0 mm. – Distribution: North Europe (Scandinavia), West, Central and Southeast Europe, Asia Minor. In the study area (Hungary, the Carpathians and the Western Balkan regions), it is known only from the Bükk Mountains, Hungary.

Aloconota subgrandis (Brundin, 1954)

- 3 (2) Puncturation and pubescence of abdominal tergites III–VI fairly dense; pubescence fairly conspicuous in most cases. Tergites III–VI, as a rule, with weak silky shine; microreticulation extraordinarily fine and dense.
- 4 (5) Forebody more shining, with less pronounced microreticulation in most cases. Antennae and each antennomere, respectively, as well as legs, as a rule, a little longer. Beetles of larger size. Vertex and pronotum of males often with a weak impression along longitudinal medial line. Median lobe of aedeagus (in ventral view) seemingly widest in apical half. Spermatheca more markedly S-shaped, and duct longer. For the illustrations of the genitalia, see Strand & Vik (1964). – Head and abdomen brownish black or blackish brown. Pronotum blackish brown or dark brown. Elytra darker or lighter brown. Antennae blackish brown or dark brown. Legs light brownish red or brownish yellow. Postocular region 1.1–1.3 times longer than eye. Antennomere X 1.2–1.5 times wider than long. Pronotum 1.06–1.12 times wider than long. Elytral suture 0.91–1.00 times shorter than, or as long as pronotum. Body length: 3.8–4.5 mm. – Distribution: Europe and West Siberia. In the study area, it is a generally distributed and quite frequent species.

Aloconota insecta (Thomson, 1856)

- 5 (4) Forebody less shining, with more pronounced microreticulation in most cases. Antennae and each antennomere, respectively, as well as legs, as a rule, a little shorter. Beetles of smaller size. Vertex and pronotum of males often with a very weak impression along longitudinal medial line. Median lobe of aedeagus (in ventral view) seemingly widest about at the middle. Spermatheca less markedly S-shaped, and duct shorter. For the illustrations of the genitalia, see Strand & Vik (1964). – Head and abdomen blackish brown or dark brown. Pronotum dark brown or dark reddish brown. Elytra lighter brown or reddish brown. Antennae dark brown or dark reddish brown. Legs yellowish red or reddish yellow. Postocular region 1.0–1.6 times longer than, or as long as eye. Antennomere X 1.4–1.7 times wider than long. Pronotum 1.06–1.13 times wider than long. Elytral suture 0.81–0.93 times shorter than pronotum. Body length: 3.4–4.2 mm. – Distribution: Europe, Siberia, the Azores, the Canary Islands, the Madeira Archipelago, North Africa (Algeria, Morocco, Tunisia), the Near-East, Asia

Minor and Cyprus, East Asia (the Himalayas; China: Gansu; Korean peninsula), Central Asia (Kazakhstan); Southeast Asia, America, Africa, Australia and New Zealand. This is a cosmopolitan species, inhabiting the largest part of temperate zones, and occurring here and there also in the tropics. In the study area, it is a generally distributed and frequent species.

Aloconota sulcifrons (Stephens, 1832)

- 6 (1) Pronotal microsetae directed more or less laterally almost all over on the disc, and directed anterolaterally at posterior margin only (Fig. 1 C, D) (see also in Bruge, 1999, fig. 8). Males: posterior margin of abdominal tergite VIII with inner pair of denticles often a little more protruding than outer one (see Last, 1979, fig. 1). (Puncturation and pubescence of abdominal tergites III–VI not particularly dense; pubescence mostly inconspicuous. Tergites III–VI, as a rule, with very weak silky shine; microreticulation very fine and dense. Median lobe of aedeagus when viewed ventrally hardly broadened toward the middle. Spermatheca, though often more markedly S-shaped, and its umbilicus usually smaller, like that of the previous species.) For the illustrations of the genitalia, see Benick (1954). – Head and abdomen brownish black, blackish brown, dark brown or dark reddish brown. Pronotum blackish brown or dark brown, and darker or lighter reddish brown, respectively. Elytra blackish brown or brown, and lighter reddish brown or brownish red, respectively. Antennae blackish brown or dark brown, and reddish brown, respectively. Legs light brownish or yellowish red, and light brownish or reddish yellow, respectively. Postocular region 1.0–1.7 times longer than, or as long as eye. Antennomere X 1.3–1.7 times wider than long. Pronotum 1.04–1.13 times wider than long. Elytral suture 0.78–1.00 times shorter than, or as long as pronotum. Body length: 3.1–4.2 mm. – Distribution: West, Central and Southeast Europe, the Caucasus region (Crimean peninsula), Asia Minor. It is probably absent in Scandinavia. In the study area, it is known from Hungary (the Aggtelek, Börzsöny, Bükk and Kőszeg Mountains: Hung., Aggteleki N. P., Aggtelek, Ménes-völgy, Aegopodio-Alnetum subcarpaticum, parttaposás [treading of bank], 1988. IV. 26., leg. Ádám L.; Hung., Aggteleki N. P., Aggtelek, Vörös-tó, Juncetum effusi, Typha levélhüvelyéből [leaf-sheath], 1987. IX. 26., leg. Ádám L.; Hung., Aggteleki N. P., Szögliget, Ménes-völgy, Aegopodio-Alnetum subcarpaticum, egyelés [singling], 1987. VI. 15., leg. Merkl O.; Hung., Aggteleki N. P., Szögliget, Ménes-völgy, Aegopodio-Alnetum subcarpaticum, fűhálózás [sweep-netting], 1987. V. 11., leg. Merkl O.; Kemence, Királyháza, 1920. III. 25–29., leg. Dudich; Hung. Bükki N. P., Felsőtárkány, Hárs-kút, 500 m, Aegopodio-Alnetum, parttaposás, 1981. V. 8., leg. Ádám & Migály; Lillafüred [= Miskolc], tógazdaság [= Pisztrángkeltető Állomás], 1958. VIII. 26., Vásárhelyi I.; Bükk-hegys., Nagyvisnyó, Elzalak [= Nagy-völgy], 1956. VI. 5–12., ripicol [treading of bank], Exc. Kaszab & Székessy; Bükk-hegys., Nagyvisnyó, Elzalak [= Nagy-völgy], 1956. VI. 5–12., rostálva [sifted], Exc. Kaszab & Székessy; Hung. Bükki N. P., Parasznya, Soros-teber, 400 m, Anthyllido-Festucetum rubrae, fűhálózás, 1981. VI. 27., leg. Ádám & Hámori E.; Hu. Vas m., Velem: Borha-forrás, fűhálózás, 1979. VI. 2., leg. Ádám L.), Austria (Burgenland), Slovakia, Transylvania (Romania) and Croatia. *It is here recorded from Hungary for the first time.*

Aloconota mihoki (Bernhauer, 1913)

*Synonymies and revised key for the Amischa species of the Carpathians**Amischa analis* (Gravenhorst, 1802)*Aleochara analis* Gravenhorst, 1802: 76.*Amischa (Amischa) jugorum* Scheerpeltz, 1956: 528, **syn. n.**

Since its original description, which is based on a single female specimen from “Massives du Pelvoux in den Alpen der Dauphiné”, “Glacier de la Pilatte”, France, *Amischa jugorum* has not been recorded again. According to Scheerpeltz (1956), this species is characterised by the strongly transverse pronotum, short elytra and first of all by the indistinct puncturation of the forebody. In the description, however, there is no comparison with other species of the genus *Amischa* Thomson, 1858. Based on a study of the holotype (NHMW), there is no doubt that *Amischa jugorum* is conspecific with *Amischa analis*; external characters and the shape of the spermathecae are identical. Consequently, *Amischa jugorum* is here placed in the synonymy of the senior name *Aleochara analis*.

Amischa bifoveolata (Mannerheim, 1830)*Bolitochara bifoveolata* Mannerheim, 1830: 79.*Amischa strupii* Scheerpeltz, 1967: 13, **syn. n.**

The original description of *Amischa strupii* (Scheerpeltz, 1967) is based on an unspecified number of specimens (syntypes) collected in several localities in the Alps: “Col Lautaret in der Dauphiné”, “Oberstes Macugnagna-Tal des Monte-Rosa-Massives”, “oberstes Morteratsch-Tal des Bernina-Massives”, “Stilfser-Joch, Franzenshöhe, des Ortler-Massives” and “oberstes Feuchlbach-Tal der Kreuzeck-Gruppe in Osttirol”. A comparison of the types, all the specimens of *Amischa strupii* (NHMW) with specimens of *A. bifoveolata* did not produce any evidence that the former should represent a distinct species. The male and female sexual characters of *Amischa strupii* are in good agreement with those of *Amischa bifoveolata*. Therefore, I consider *Amischa strupii* to be a synonym of *Bolitochara bifoveolata*.

According to Muona (1990), the males of *Amischa analis* and *A. bifoveolata* can be separated by the breadth of abdominal sternite VIII. On the analogy of this, the largeness of the aedeagus seems to be an additional distinctive feature (for the illustrations of the genitalia, see Muona, 1990). The males of *Amischa bifoveolata* frequently have a larger aedeagus. The named characters, however, vary, especially in respect to proportions of the body. Consequently, the most reliable identification of *Amischa analis* and *A. bifoveolata* is possible only based on the female sexual characters.

The identity of the males of *Amischa bifoveolata* and *A. analis* is often debated. The males of *Amischa bifoveolata* with very short elytra and hind wings reduced in length – considering that there are no such specimens in case of *A. analis* – can be associated undoubtedly. As for the males of the latter species, I have studied large samples from the most arid parts of Hungary (e.g. from the Great Hungarian Plain) where no *Amischa bifoveolata* were found at all. Every female in these samples belongs to *Amischa analis*, consequently, it appears reasonable to regard the males as conspecific.

The following key is provided to the determination of the species occurring in Hungary and its surroundings. Due to the great external similarity, a reliable identification of *Amischa* species is possible only based on the primary and secondary sexual characters (for the illustrations, see Lohse, 1989 and Muona, 1990). These features are usually quite distinctive but subject to some variation at the same time, so that they are of little use for the identification in some cases. There are specimens, either males or females, which can not be identified safely. The sexes can be easily distinguished one another externally: vertex of males has microsetae directed anteriorly or anterolaterally at both sides, while microsetae are directed anteromedially in females.

1 (12) Males.

2 (7) Vertex slightly flattened in general, usually with a superficial foveola in the middle. Pronotal pubescence pattern most often of type IV: in anterior part of longitudinal medial line, microsetae directed posteriorly about in half of the full length (or in a little longer section occasionally), and directed anteriorly elsewhere. In some specimens (e.g. *Amischa decipiens*), pronotal pubescence pattern of type II, as in males of species enumerated below Lead 7. Posterior margin of abdominal sternite VIII ordinarily with 8–14, not quite evenly spaced macrosetae. Median lobe of aedeagus (in ventral view) with a fairly deep furrow in medial longitudinal line.

3 (4) Body darkly coloured in general: palpi, antennae and legs a little darker; abdomen almost uniformly dark-coloured, posterior margin of tergites and abdominal apex, respectively, hardly lighter. Microreticulation of abdominal tergites more strong, more dense, more discernible. Posterior margin of abdominal tergite VIII largely, deeply incised in the middle: deepness of median indentation substantially greater than length of antennomere III. Posterior margin of abdominal sternite VIII ordinarily with 12–14, not quite evenly spaced macrosetae; posterior margin nearly straight in the middle. Anterior crista of median lobe of aedeagus strongly developed. (Median lobe of aedeagus, in ventral view, about wedge-shaped; apex shortly tapered, terminate in a less sharp point.) – Head and abdomen black. Pronotum black or brownish black. Elytra black, brownish black, occasionally blackish brown. Antennae brown. Legs brownish yellow. Postocular region 1.2–1.4 times longer than eye. Antennomere X 1.4–1.8 times wider than long. Pronotum 1.19–1.26 times wider than long. Elytral suture 0.76–0.92 times shorter than pronotum. Body length: 1.9–2.3 mm. – Distribution: Southwest, West, Central and Southeast Europe, Asia Minor, North Africa (Tunisia). It is rare or absent in the northern parts of Central Europe. In the study area, it is known from Hungary, Transylvania (Romania) and Croatia (Ludbreg, leg. Apfelbeck). *It is here recorded from Croatia for the first time.*

Amischa forcipata Mulsant et Rey, 1873

4 (3) Body lightly coloured in general: palpi, antennae and legs a little lighter; abdomen not uniformly dark-coloured, posterior margin of tergites and abdominal apex, respectively, at least a little lighter. Microreticulation of

abdominal tergites less fine, less dense, less discernible. Posterior margin of abdominal tergite VIII largely, very weakly or weakly emarginate in the middle: deepness of median indentation at most as large as length of antennomere III. Posterior margin of abdominal sternite VIII ordinarily with 8–10, not quite evenly spaced macrosetae; posterior margin weakly rounded or very weakly emarginate in the middle. Anterior crista of median lobe of aedeagus weakly developed.

- 5 (6) Posterior margin of abdominal tergite VIII largely, very weakly or weakly emarginate in the middle: deepness of median indentation a little smaller than length of antennomere III. Posterior margin of abdominal sternite VIII weakly rounded. Median lobe of aedeagus (in ventral view) about wedge-shaped, with a pair of teeth at base; apex shortly tapered, terminate in a less sharp point. – Head and abdomen black or brownish black. Pronotum brownish black or blackish brown. Elytra blackish brown. Antennae yellowish brown. Legs brownish yellow. Postocular region 1.2–1.4 times longer than eye. Antennomere X 1.5–1.9 times wider than long. Pronotum 1.16–1.24 times wider than long. Elytral suture 0.83–0.96 times shorter than pronotum. Body length: 1.8–2.5 mm. – Distribution: West, Central and Southeast Europe, Asia Minor, the Canary Islands and the Madeira Archipelago, North Africa (Tunisia). In the study area, it is a generally distributed and frequent species.

Amischa decipiens (Sharp, 1869)

- 6 (5) Posterior margin of abdominal tergite VIII largely, weakly emarginate in the middle: deepness of median indentation about as large as length of antennomere III. Posterior margin of abdominal sternite VIII largely, very weakly emarginate in the middle (about half as deep as that of tergite VIII). Median lobe of aedeagus (in ventral view) spindle-shaped, without teeth at base; apex mutilated, and the anterior margin weakly emarginate in the middle. – Head and abdomen brownish black. Pronotum blackish brown or brown. Elytra brown. Antennae yellowish brown. Legs brownish yellow. Postocular region 1.2–1.4 times longer than eye. Antennomere X 1.6–2.0 times wider than long. Pronotum 1.15–1.20 times wider than long. Elytral suture 0.87–0.94 times shorter than pronotum. Body length: 1.8–2.3 mm. – Distribution: Central and Southeast Europe, Asia Minor. It is rare or absent in the northern parts of Central Europe. In the study area, it is known from Hungary, Burgenland, Slovakia and Croatia (the Velebit Mountains, Visočica, leg. Padewieth). *It is here recorded from Croatia for the first time*

Amischa filum (Mulsant et Rey, 1870)

- 7 (2) Vertex very weakly impressed in general. Pronotal pubescence pattern of type II: microsetae directed posteriorly along longitudinal medial line. Posterior margin of abdominal sternite VIII ordinarily either with a median group of 4–5 or with 8–13, unevenly spaced macrosetae. Median lobe of aedeagus (in ventral view) without a furrow.
- 8 (9) Posterior margin of abdominal tergite VIII ordinarily with a little wider emargination in the middle. Posterior margin of abdominal sternite VIII very

weakly emarginate in the middle (margin somewhat undulate there: a little produced in the middle), and ordinarily with a median group of 4–5 macrosetae. Median lobe of aedeagus (in ventral view) about wedge-shaped; apex less longer tapered, terminate in a sharp point, its sides without a cell-like area. – Head and abdomen black or brownish black. Pronotum black, brownish black or blackish brown. Elytra blackish brown or darker brown. Antennae yellowish brown. Legs brownish yellow. Postocular region 1.2–1.6 times longer than eye. Antennomere X 1.4–1.8 times wider than long. Pronotum 1.19–1.28 times wider than long. Elytral suture 0.84–0.96 times shorter than pronotum. Body length: 2.0–2.5 mm. – Distribution: North, West, Central and Southeast Europe, Asia Minor, the Madeira Archipelago, North Africa (Algeria, Tunisia). In the study area, it is a generally distributed and frequent species

Amischa nigrofusca (Stephens, 1832)

9 (8) Posterior margin of abdominal tergite VIII ordinarily with a little narrower emargination in the middle. Posterior margin of abdominal sternite VIII nearly straight or extraordinarily weakly emarginate in the middle (margin not at all undulate there), and ordinarily with 8–13, unevenly spaced macrosetae. Median lobe of aedeagus (in ventral view) about wedge-shaped; apex more longer tapered, terminate in a sharp point, its sides with a narrow, cell-like area.

10 (11) Abdominal sternite VIII and aedeagus, respectively, frequently a little larger and wider. – Head and abdomen black or brownish black. Pronotum black, brownish black or blackish brown. Elytra blackish brown or brown. Antennae brown or yellowish brown. Legs brownish yellow. Postocular region 1.3–2.0 times longer than eye. Antennomere X 1.6–2.0 times wider than long. Pronotum 1.18–1.28 times wider than long. Elytral suture 0.69–0.94 times shorter than pronotum. Body length: 1.7–2.2 mm. – Distribution: North, Southwest, West, Central, East and Southeast Europe, Asia Minor, Siberia, East Asia (Korean peninsula, the Far East). In the study area, it is probably a generally distributed but rare species (the short-winged form seems to be extremely rare)

Amischa bifoveolata (Mannerheim, 1830)

11 (10) Abdominal sternite VIII and aedeagus, respectively, frequently a little smaller and narrower. – Head and abdomen black or brownish black. Pronotum brownish black or blackish brown. Elytra blackish brown. Antennae yellowish brown. Legs brownish yellow. Postocular region 1.3–1.8 times longer than eye. Antennomere X 1.6–2.0 times wider than long. Pronotum 1.16–1.27 times wider than long. Elytral suture 0.81–0.92 times shorter than pronotum. Body length: 1.9–2.3 mm. – Distribution: Europe, Asia Minor, Iran, Siberia, the Azores and the Madeira Archipelago, North Africa (Algeria, Tunisia), Cyprus, East Asia (the Far East), Central Asia (Kazakhstan, Uzbekistan), North America. In the study area, it is a generally distributed and common species

Amischa analis (Gravenhorst, 1802)

12 (1) Females.

- 13 (18) Posterior margin of abdominal tergite VIII very weakly rounded or nearly straight, mostly with an extraordinarily weak emargination in the middle: width of median indentation smaller than length of antennomere III in this case. In other case, posterior margin with large, mostly very weak, occasionally weak emargination in the middle: median indentation wider in proportion to width of posterior margin. Spermatheca and spermathecal duct, respectively, a little shorter in most cases: anterior section of duct usually about as long as or a little longer than spermathecal head, diameter of coiled distal part a little greater than length of anterior section.
- 14 (15) Body darkly coloured in general: palpi, antennae and legs a little darker; abdomen almost uniformly dark-coloured, posterior margin of tergites and abdominal apex, respectively, hardly lighter. Microreticulation of abdominal tergites more strong, more dense, more discernible. Posterior margin of abdominal tergite VIII very weakly rounded or nearly straight, mostly with an extraordinarily weak emargination in the middle: width of median indentation (often substantially, occasionally a little) smaller than length of antennomere III. (Posterior margin of abdominal sternite VIII ordinarily rounded, however, in a short section, nearly straight in the middle.) Spermathecal head a little larger, wider, roundish, very weakly transverse, more distinctly separated from duct in most cases; embouchement of umbilicus ordinarily directed about straight ahead (toward to head of beetle) or a little obliquely toward to the left
Amischa forcipata Mulsant et Rey, 1873.
- 15 (14) Body lightly coloured in general: palpi, antennae and legs a little lighter; abdomen not uniformly dark-coloured, posterior margin of tergites and abdominal apex, respectively, at least a little lighter. Microreticulation of abdominal tergites less fine, less dense, less discernible. Either abdominal tergite VIII different or spermathecal characteristic distinct (see at Leads 16 and 17). (Posterior margin of abdominal sternite VIII ordinarily rounded.)
- 16 (17) Spermathecal head a little smaller, narrower, rounded rectangular, about quadrate, less distinctly separated from duct in most cases; embouchement of umbilicus ordinarily directed about straight ahead (toward to head of beetle), occasionally a little obliquely toward to the right. (Posterior margin of abdominal tergite VIII nearly straight, mostly with extraordinarily weak emargination in the middle: width of median indentation a little smaller than length of antennomere III in this case. In other case, posterior margin with large, mostly very weak, occasionally weak emargination in the middle: median indentation wider in proportion to width of posterior margin.)
Amischa decipiens (Sharp, 1869)
- 17 (16) Spermathecal head a little larger, wider, roundish, very weakly transverse, more distinctly separated from duct in most cases; embouchement of umbilicus ordinarily directed obliquely toward to the left. (Posterior margin

of abdominal tergite VIII with large, mostly very weak, occasionally weak emargination in the middle.)

Amischa filum Mulsant et Rey, 1870

18 (13) Posterior margin of abdominal tergite VIII with a large, weak emargination in the middle: median indentation narrower in proportion to width of posterior margin. Spermatheca and spermathecal duct, respectively, a little longer in most cases: anterior section of duct usually substantially longer than spermathecal head, diameter of coiled distal part a little smaller than length of anterior section.

19 (20) Posterior margin of abdominal tergite VIII ordinarily with a little wider emargination in the middle. Spermathecal head a little larger, wider, roundish, very weakly transverse, more distinctly separated from duct in most cases; embouchement of umbilicus ordinarily directed about straight ahead (toward to head of beetle) or obliquely toward to the right

Amischa nigrofusca (Stephens, 1832)

20 (19) Posterior margin of abdominal tergite VIII ordinarily with a little narrower emargination in the middle. Spermathecal head a little smaller, narrower, rounded rectangular, about quadrate, less distinctly separated from duct in most cases.

21 (22) Posterior margin of abdominal tergite VIII ordinarily with a little deeper emargination in the middle; median indentation delimited with more sharp angles at both sides. Embouchement of spermathecal umbilicus ordinarily directed obliquely toward to the left or about straight ahead (toward to head of beetle)

Amischa bifoveolata (Mannerheim, 1830)

22 (21) Posterior margin of abdominal tergite VIII ordinarily with a little shallower emargination in the middle; median indentation delimited with less sharp angles at both sides. Embouchement of spermathecal umbilicus ordinarily directed obliquely toward to the right

Amischa analis (Gravenhorst, 1802)

Notes on the genus Enalodroma

The genus *Enalodroma* was described by Thomson (1859, 1861) to include the new species *Enalodroma fucicola* Thomson, 1859 (= *Homalota hepatica* Erichson, 1839). Since its original description, *Enalodroma* has usually been regarded as a distinct taxonomic unit, either as a subgenus of the genus *Atheta* Thomson, 1858 (e.g. Benick & Lohse, 1974) or as a separate genus within the tribe Athetini (e.g. Smetana, 2004). Based on a study of the mouthparts and other morphological characters, Sawada (1984) synonymised it with *Aloconota* Thomson, 1858, however, his action did not obtain general acceptance. The genus *Aloconota* has certain specialised diagnostic features missing in *Enalodroma*, namely the slightly unequal claws, the long empodial seta, the narrowly elongate, often filiform copulatory piece, etc., and most likely this is why the subsequent authors maintained

the separate status of both taxa. Nevertheless, with regard to the similarities, *Enalodroma* and *Aloconota* would have to be considered as related groups. In addition, *Enalodroma* shares various characters with the species of *Alevonota* Thomson, 1858, *Callicerus* Gravenhorst, 1802, *Chinecallicerus* Assing, 2004, *Earota* Mulsant et Rey, 1874, *Geostiba* Thomson, 1858, *Homoiocalea* Bernhauer, 1943, *Pseudosemiris* Machulka, 1935, *Pseudothinoecia* Bernhauer, 1899, *Saphocallus* Sharp, 1888 and *Tropimenelytron* Pace, 1983. The hypothesis that these taxa are closely affiliated is supported by many similarities in the mouthparts, external characters and genital morphology.

Based on an examination of the type species of *Enalodroma* and several species of *Alevonota* – *A. egregia* (Rye, 1876), *A. elegantula* (Brisout de Barneville, 1863), *A. gracilentia* (Erichson, 1839), *A. kiesenwetteri* (Kraatz, 1856), *A. laeviceps* (Brisout de Barneville, 1863), *A. libanotica* (Fagel, 1965), *A. ocaloides* (Brisout de Barneville, 1863), *A. rufotestacea* (Kraatz, 1856) – no evidence was found suggesting that they should represent distinct genera. The following basic similarities were found in case of the named taxa: posteriorly more or less constricted head with weakly delimited neck; more or less reduced occipital carinae; moderately transverse antennomeres V–X, in general; labral characters of the same type; short and slender, apically bifid ligula; weakly transverse pronotum; pronotal pubescence pattern of the same type; male secondary sexual characters of the same type (e.g. elytra on either side of suture occasionally with longitudinal carina and with irregular puncturation, etc., as well as tergite VII with a pair of oblong tubercles near posterior margin, often rudimentary or completely reduced); aedeagus and spermatheca of the same type. Neither the external characters nor the general morphology of the genitalia seem to differ significantly enough, therefore, the question arises whether the rank of *Enalodroma* should be reduced to a subgenus or a group of species of *Alevonota*.

Assing & Wunderle (2008) divided *Alevonota* into two subgenera. These have essentially been distinguished by the length of occipital carinae and the structure of the genitalia, respectively. The representatives of the nominotypical subgenus have quite short occipital carinae, copulatory piece without long, filiform apical process and spermathecal duct not twisted. The subgenus *Liota* Mulsant et Rey, 1874 has been defined by the relatively long occipital carinae, the copulatory piece with long, filiform apical process and the twisted spermathecal duct, respectively. *Homalota hepatica* constitutes a third group, having fairly short occipital carinae, copulatory piece without long, filiform apical process and spermathecal duct twisted. Although a part of the known *Alevonota* species can be classified into one of these groups, species of ambiguous status can also be found. For example, most of the Canarian representatives of the genus is excluded from the grouping of species (see Assing & Wunderle, 2008). Evidently, the system of all the species within this phylogenetic neighbourhood is insufficiently known at the present time. The status of *Enalodroma* can be decided only based on a thorough revision and will have to be considered in future studies.

It should be noted that the genus *Geostiba* also very closely resembles *Alevonota*. The species of both genera share the following characteristics: posteriorly more or less constricted head with weakly delimited neck; moderately large to small, often reduced eyes; more or less reduced occipital carinae; moderately transverse antennomeres V–X, in general; short and slender, apically bifid ligula; weakly transverse pronotum, in most cases; pronotal pubescence pattern

of similar type (microsetae directed posteriorly in pronotal midline, rarely except for a short section at anterior margin); metatarsomeres I and II of subequal length, in most cases; aedeagus and spermatheca of similar type. It seems that the only reliable character distinguishing them is the pattern of the elytral pubescence. In case of *Alevonota* species, the microsetae directed more or less posterolaterally on the elytral disc, while in case of *Geostiba* species those directed posteriorly or (in males of certain species) slightly toward the suture. The classification of the genera *Alevonota* and *Geostiba* is difficult due to the great similarity of species and the paucity of distinctive features. Although, it is almost certain that both groups are phylogenetically separated, a complete review of the species is desired to find additional characters, which should provide an easy means of separation.

Discussion of the status of Oxypodera and Mycetota

Recently, Pace (2004) placed *Atheta kilimandjarensis* Bernhauer, 1915 and *Homalota fimorum* Brisout de Barneville, 1860 together in the subgenus *Oxypodera* Bernhauer, 1915, which he referred to the genus *Atheta*. The only common character indicated by Pace is the morphology of the spermatheca. *Atheta kilimandjarensis* is the type species of the subgenus *Oxypodera* Bernhauer, 1915, while *Homalota fimorum* belongs to the subgenus *Mycetota* Ádám, 1987. The systematic position and taxonomic status of *Oxypodera* and *Mycetota* are not clear at present. Both belong to the genus *Atheta*, both have a separate status, and share various characters with the species of *Acrotona* Thomson, 1859 and *Mocyta* Mulsant et Rey, 1874. The position and status of *Acrotona* and *Mocyta* are also not entirely clear. Both are treated as distinct genera by some authors or as subgenera of *Atheta* and *Acrotona*, respectively, by others.

From many genera of the tribe Athetini, *Oxypodera* and *Mycetota* are distinguished especially by the deflected pronotal hypomera (which are not visible in lateral aspect) and the characteristic shape of the spermatheca. A closer relationship to *Acrotona* and *Mocyta*, as presumed by some authors because of the similar diagnostic features, seems more or less likely. In addition, *Coprothassa* Thomson, 1859, *Hemitropia* Mulsant et Rey, 1874 and *Lypoglossa* Fenyés, 1918 are also similar to these groups, even share the morphology of pronotum, etc.

After a thorough examination of the type species and some other representatives of both taxa, there is at least some doubt that *Oxypodera* and *Mycetota* together should form a monophyletic group. Nevertheless, the hypothesis that they are phylogenetically closely affiliated is supported by numerous characters, for example, the pronotal pubescence pattern of the same type, the similar male secondary sexual characters on the abdominal tergite VIII (it may be subject to reduction) and the similar morphology of the genitalia. However, there are some significant characters distinguishing *Oxypodera* from *Mycetota*, especially the conspicuous medial macroseta on mesotibia, the short metatarsal segment I and the remarkably formed spermatheca. (In *Oxypodera*, the medial macroseta of mesotibia is 1.6–1.8 times longer than the tibial width and the metatarsal segment I is a little shorter than segment II. In *Mycetota*, the medial macroseta of mesotibia is about as long as the tibial width and the metatarsal segment I is about as long as segment II.) Consequently, it appears to be best to regard *Oxypodera* and *Mycetota* as closely allied but separate groups for the present.

The current knowledge of the diversity and distribution of *Oxyptodera* and *Mycetota* is far from complete. The number of species known from various zoogeographic regions is difficult to assess. Not only a recent synopsis is absent but, due to the morphological similarity of many athetine groups, the subgeneric affiliations of the species currently attributed to *Oxyptodera*, etc. require confirmation. This applies even more to the species described from the Afrotropical and the Oriental region and currently attributed to the subgenus *Xenota* Mulsant et Rey, 1874 (see, for example, Pace, 1995).

Today, *Oxyptodera* includes approximately 20 valid species occurring primarily in East Africa. They have, as a rule, relatively small eyes, short elytra and hind wings more or less reduced in length. Most of them can be assumed to be endemic to individual mountain ranges or mountain peaks but many of them have been recorded only once or very rarely, so that their areas of distribution are poorly known. It can be inferred from the descriptions that *Oxyptodera* is likely to represent a polyphyletic taxon. In view of the fact that most of the species have not been thoroughly examined, a change in the subgeneric assignments of the species currently attributed to *Oxyptodera* seems too precocious at present.

Mycetota has a worldwide distribution, with species occurring in the Palaearctic, Nearctic, Oriental, Afrotropical and Neotropical regions (e.g. Feldmann, 2007; Pace, 2006; Smetana, 2004). Currently, a few species have been placed in this group, two of them, namely *Atheta laticollis* (Stephens, 1832) and *A. fimorum* (Brisout de Barneville, 1860) confined to the Western Palaearctic and one (*Atheta grata* Cameron, 1933) to the Eastern Palaearctic subregion. Two species, *Atheta mucronata* (Kraatz, 1859) and *A. immucronata* Pace, 1999 have a cosmopolitan distribution, inhabiting predominantly the tropical and subtropical zones of the Old and New World, respectively (e.g. Feldmann, 2007; Pace, 2006). They are present jointly, the latter probably as an introduced species, in some Atlantic islands and in the coastal region of Europe with Atlantic-Mediterranean climate. *Atheta immucronata* even occurs in the Tristan da Cunha Archipelago (Klimaszewski et al., 2002; Pace, 2006). Several species currently attributed to other athetine subgenera, especially *Xenota*, probably also belong to *Mycetota*.

On the distinguishing of Pella laticollis and P. hampei

Pella laticollis (Märkel, 1845) and *P. hampei* (Kraatz, 1862) have usually been considered as very similar but distinct species (see, for example, Maruyama, 2006). However, my studies of a large material (more than 120 specimens) collected from various localities revealed that the names in question referred probably to the same species. I have seen a few of the paralectotypes of *Myrmedonia hampei* (HNHM), however, the type material of *M. laticollis* was not examined. The distinctive characters of the species in question (e.g. body colour, pronotal microreticulation) are very variable. It seems that they depend upon the geographical situation of the locality. Amongst the relative few North and Central European specimens, which I have seen, the body colour is normally dark, and the pronotum is more or less dull. However, in case of specimens from Hungary, Romania and especially from the Balkans, the colour is very variable, dark in some and light in others. The light coloured specimens are rare in the northern areas, while they are prevalent in the southern territories (e.g. South Hungary, the Southern Carpathians in Romania, as well as Serbia and Croatia). The pronotal

microreticulation is also variable, nevertheless, the darkly coloured specimens have most often dull pronotum with more pronounced microreticulation. It seems that the body colour, the pronotal microreticulation, as well as other characters like the antennal width, the number of macrosetae on the abdominal sternite VIII, the genitalia, as well as the symbiotic hosts (see Maruyama, 2006) are insufficient to separate the two species. I have seen plenty of specimens, both darkly and lightly coloured ones, collected from the nests of *Lasius fuliginosus* and *Liometopum microcephalum*, respectively, and I found no convincing differences between them. Examination of the aedeagi did also not reveal any differences. In conclusion, there is little doubt that the named taxa are conspecific.

Notes on various athetine species

***Atheta boehmei* Linke, 1934**

Atheta (Atheta) böhmei Linke, 1934: 54.

Atheta (Anopleta) tricholomatobia V. B. Semenov, 2002: 273, **syn. n.**

Linke (1934) described *Atheta böhmei* on the basis of six specimens from “Leipziger Umgebung”, Germany. *Atheta tricholomatobia* was described from three species from “Moskauer Gebiet, die Rayon Taldom, Mel’dino”, Russia (Semenov, 2002). The types were not examined, however, the descriptions were in good agreement with one another, especially regarding the conspicuous antennal characters. Since there is little doubt that *Atheta böhmei* and *A. tricholomatobia* are conspecific, so these names are considered synonyms.

Atheta boehmei is an extremely rare species occurring sporadically in Central, East and Southeast Europe: Austria (Lower Austria), Germany (Hessen, Sachsen) and Russia. I have seen a specimen from Brassó (= Braşov, Transylvania, Romania) (leg. Fodor) (HNHM), and recorded here from Romania for the first time.

***Atheta dilaticornis* (Kraatz, 1856)**

Homalota dilaticornis Kraatz, 1856: 293.

Atheta (Ceritaxa) palatina G. Benick in Benick & Lohse, 1974: 171, **syn. n.**

Atheta (Ceritaxa) palatina G. Benick, 1975: 15, nec G. Benick, 1974, **syn. n.**

The original description of *Atheta palatina* is based on two female specimens (syntypes) collected at “Pfalz (Appenhofen)”, Germany (Benick in Benick & Lohse, 1974). In 1975, the type locality was specified equally as “Appenhofen, Pfalz” (Benick, 1975). One of the types was located in the MHNG collection, and I examined it. This is in agreement with the present interpretation of *Atheta dilaticornis* in every respect, therefore, I consider *Atheta palatina* to be a synonym of *Homalota dilaticornis*.

It should be noted that in 1974, the name *Atheta palatina* had unintentionally been published before the formal description was issued in 1975. On the first occasion, Benick made this name available in a diagnostic key that constitutes a description. Many other names were also published by the author in the same paper (Benick & Lohse, 1974), namely *Atheta degenerata*, *A. delecta*, *A. excisoides*, *A. exsecta*, *A. fagi*, *A. glabra*, *A. immixta*, *A. machulkai*, *A. minox*, *A. muelleri*, *A. nuda*,

A. pervagata, *A. similata*, *A. tuingensis*, *A. viennensis* and *A. wallisi*. According to the Code (ICZN 1999), all these names have been made available in 1974 (Benick & Lohse, 1974). The corresponding names published in 1975 are homonyms and also objective synonyms. All the later citations (e.g. Smetana, 2004) were made under the assumption that the names in question were first published in 1975. Their previous usage by Benick and Lohse (1974) was overlooked or ignored (probably the names were thought unavailable).

The publication date of *Atheta abruzziana*, *A. dubiosa* and *A. elegans* has usually been quoted as 1935 (e.g. Smetana, 2004). The names in question were validated in the second part of Benick's work in 1934, though the formal description followed in 1935 (see Benick, 1934, 1935). Although this was not intended to be the first publication of the names, they seem to have been made available the first time around.

Atheta testaceipes (Heer, 1839)

Homalota testaceipes Heer, 1839: 327.

Atheta (*Ceritaxa*) *degenerata* G. Benick in Benick & Lohse, 1974: 170, **syn. n.**

Atheta (*Ceritaxa*) *degenerata* G. Benick, 1975: 17, nec G. Benick, 1974, **syn. n.**

Benick (in Benick & Lohse, 1974) based the original description of *Atheta degenerata* on a male specimen (the holotype) from "Krain". One year later (Benick 1975), he specified the type locality as "Bled. Carn.", Slovenia. The main distinguishing characters indicated by Benick are the body size, the shape of the posterior margin of abdominal tergite VIII and the shape of the aedeagus. A comparison of all available males in HNHM revealed that the conditions in the type of *Atheta degenerata* (MHNG) and in the normally developed *A. testaceipes* are linked by some transitions, suggesting that the referred features are subject to variation in a degree. The degenerated form of the tergite VIII in the type is accounted for by the fact that it is a small male with very weakly pronounced secondary sexual character, an uncommon phenomenon in this species. No appreciable difference was found in the morphology of the aedeagus. Consequently, *Atheta degenerata* is here placed in the synonymy of the senior name *Homalota testaceipes*.

Atheta velebitica nom. nov.

Atheta (*Atheta*) *serotina* Ádám, 2008: 157, nec *Atheta serotina* Blackwelder, 1944: 161
(as "serotinus")

After the recent description of *Atheta serotina* from Croatia (Ádám, 2008), A. F. Newton (Chicago) kindly made me aware of the fact that the name was a junior primary homonym of *Atheta serotina* Blackwelder, 1944, currently attributed to the genus *Leptonia* Sharp, 1883. Therefore, I here propose the name *Atheta velebitica* nom. nov. for *Atheta serotina* Ádám, 2008, nec *Atheta serotina* Blackwelder, 1944. The name refers to the area (*Velebit Mountains*), where the known specimens were collected.

*Description of a new species****Rhopaletes slavoniae* sp. n.**

(Figs 2 A-G, 3 A-F)

Type material. *Holotype* (male): “Ludbreg, Apfelbeck”, Croatia. *Paratypes* (one male and one female): same data as the holotype. The types are deposited in the Hungarian Natural History Museum, Budapest.

Description.

Body length 1.8–2.1 mm. Length of forebody 0.90–0.91 mm. Pronotal width about 0.40, length 0.33 mm.

Body more or less unicoloured. Head, pronotum, elytra and abdomen reddish yellow. Antennae and legs light reddish yellow.

Body weakly fusiform. Surface with fairly superficial or obsolete microreticulation, and with more or less reclinate pubescence. Forebody finely coriaceous, with fine microreticulation of weakly transverse meshes, surface weakly shining. Abdomen a little more shining, with obsolete, almost indiscernible microreticulation of transverse meshes, and with characteristic imbricate sculpture. Vertex, pronotum and elytra with moderately dense and more or less asperate puncturation. Punctures on vertex indistinct, very fine, hardly asperate, obsolescent in the middle, difficult to see among microreticulation, and distinctly smaller than interstices. Puncturation of pronotum less fine, and more distinctly visible than that of head; punctures somewhat obsolete, faintly asperate, and smaller than interstices. Elytra with somewhat obsolete, and finely asperate puncturation, which a little stronger than that of pronotum; punctures on average smaller than interstices. Abdominal tergites III–V finely and less densely punctured; puncturation becoming finer and sparser toward abdominal apex; punctures, especially on last tergites smaller than interstices.

Head weakly transverse (Fig. 3 A), 1.10–1.20 times wider than long (length measured from anterior margin of clypeus), with rounded posterior angles. Frontoclypeal suture present as fine, transversal line. Vertex with pubescence directed anterolaterally. Surface slightly flattened, especially in males. Eyes absent. Temples fully margined; occipital carinae extend from occipital region to hypostoma. Neck broad, poorly delimited.

Antennae relatively short and stout (Fig. 3 E), distinctly incrassate apically. Antennomeres II and III elongate. Antennomere III much shorter than II. Antennomeres IV–X increasing in width apically. Antennomere IV weakly transverse, at most about 1.3 times wider than long, X strongly transverse, 2.3–2.5 times wider than long. Antennomere XI suboval and barely longer than combined length of antennomeres IX and X.

Pronotum weakly transverse (Fig. 3 B), about 1.22 times wider than long, and 1.16–1.22 times wider than head. Surface slightly convex, with vague transverse impression in the middle, near posterior margin. Posterior margin, though in small degree, obtusely angled in the middle. Posterior angles feebly marked, obtuse. Microsetae directed posteriorly along midline, and posterolaterally in lateral portion on disc (type V; see Höeg, 1945). Hypomera fully but narrowly visible in lateral view.

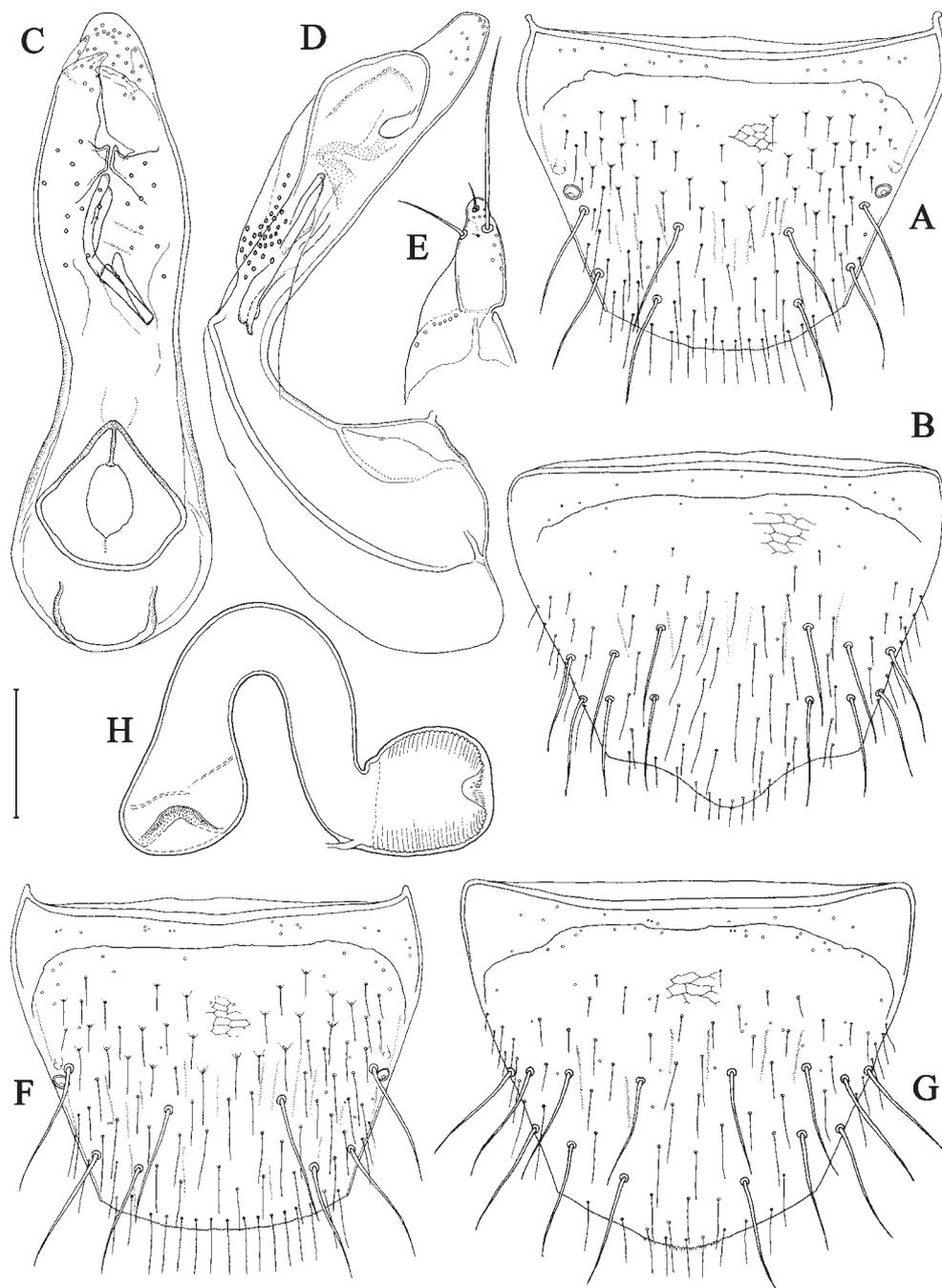


Fig. 2 - *Rhopaletes slavoniae* sp. n.: A, male tergite VIII; B, male sternite VIII; median lobe of aedeagus: C, ventral view; D, lateral view; E, apex of paramere; F, female tergite VIII; G, female sternite VIII; H, spermatheca. Scales (in mm): A, B, F, G, 0.1; C-E, H, 0.057.

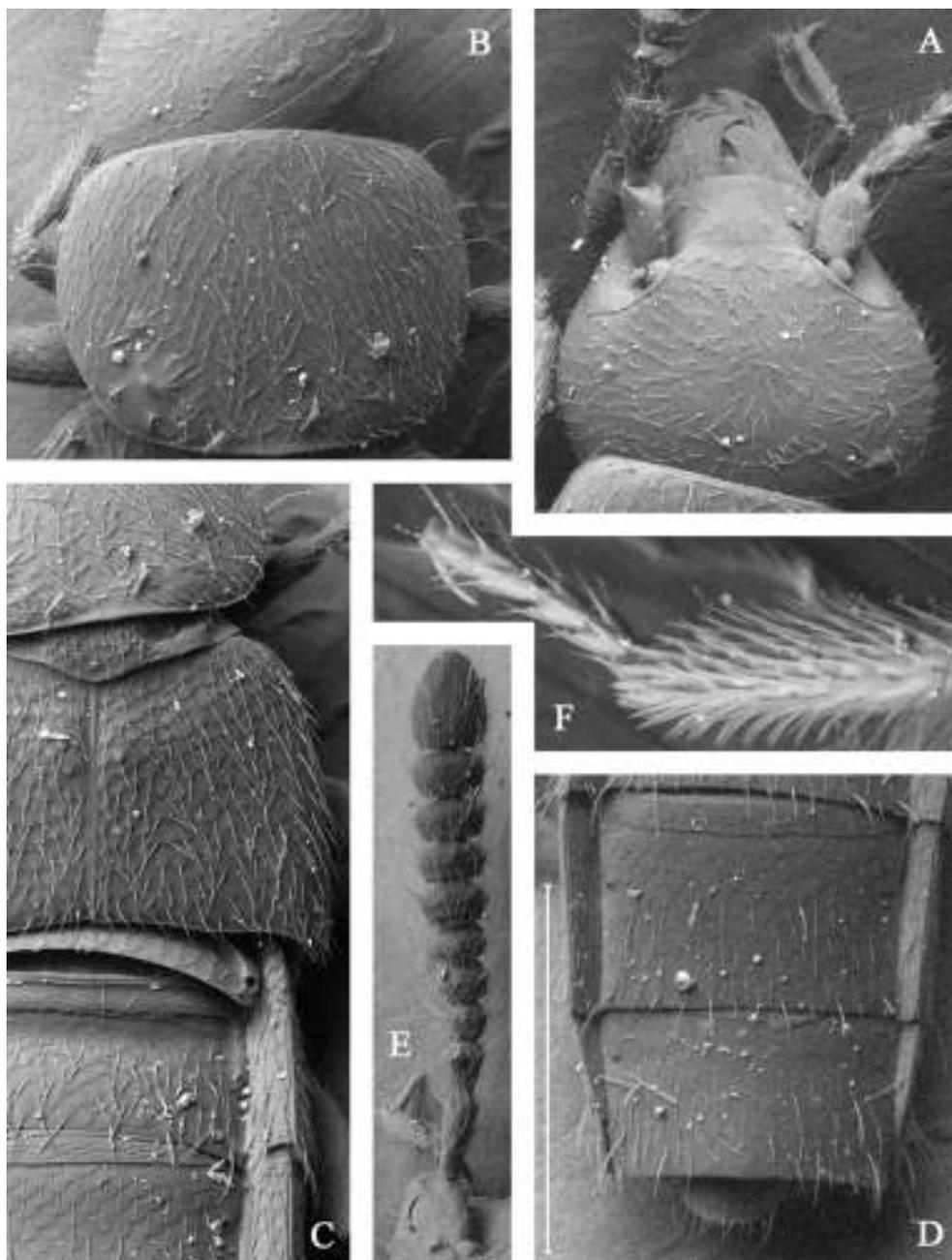


Fig. 3 - *Rhopaletes slavoniae* sp. n.: A, head; B, pronotum; C, elytron; D, abdominal tip; E, antenna; F, protarsus and protibia (scanning electron micrographs, vacuum 25 Pa, voltage 25 kV, uncoated). Scales (in mm): A, 0.31; B, C, E, 0.35; D, 0.50; F, 0.17.

Elytra wider (Fig. 3 C), and at suture (measured from apex of scutellum to inner apical angles) 0.69–0.74 times shorter than pronotum, either with a small, oblong, hardly elevated knob close to suture, nearer to sutural angle. Microsetae directed more or less posteriorly on disc. Posterior margin near posterolateral angle barely emarginate. Wings reduced.

Legs relatively short. Tarsal segmentation 4-5-5. Each tarsus with one empodial seta shorter than claws. Tarsal claws of similar length, external claw about as long as internal one. Protarsus and protibia: fig. 3 F. Medial macroseta of mesotibia hardly discernible among microsetae, about as long as tibial width. Metatarsus distinctly shorter than metatibia. First metatarsomere about as long as second, and much shorter than combined length of second and third metatarsomeres. Last metatarsomere much longer than first.

Abdomen more or less fusiform, widest at segment IV, slightly narrower than elytra. Abdominal tergite III with shallow transverse basal impression. Abdominal tip: fig. 3 D. Posterior margin of tergite VII with rudimentary white fringe.

Male: posterior margin of abdominal tergite VIII rounded (Fig. 2 A). Abdominal sternite VIII a little longer than tergite VIII. Posterior margin of sternite VIII obtusely pointed in the middle, with row of thin and short setae (Fig. 2 B). Median lobe of aedeagus is of similar morphology as other species of the genus (see, e.g. Pace, 1975), without dorsal bridge, and with unmodified ventral process (Fig. 2 C-E).

Female: posterior margin of abdominal tergite VIII rounded (Fig. 2 F). Abdominal sternite VIII barely longer than tergite VIII. Posterior margin of sternite VIII obtusely produced in the middle, with row of short setae, which stouter than in male (Fig. 2 G). Spermatheca of similar morphology as in other species of genus (see, Pace, 1975), with small umbilicus, and with relatively long duct (Fig. 2 H).

Comparative notes.

Rhopaletes slavoniae is closely related, and in all features very similar to the other Western Palaearctic representatives of the genus. Nevertheless, it can be readily distinguished from any known European species by the following combination of characters: eyes are completely absent; posterior margin of pronotum, though in a small degree, obtusely angled in the middle; either elytron with a small, oblong, hardly elevated knob close to the suture, nearer to the sutural angle; abdominal tergites with obsolete, almost indiscernible microreticulation, as well as with distinct imbricate sculpture and fairly well-visible puncturation; only tergite III has a shallow transverse basal impression; posterior margin of sternite VIII obtusely pointed (male) or produced in the middle (female). The spermatheca of *Rhopaletes slavoniae* is very similar in shape to that of *Rh. bericus* (Pace, 1975). The difference between the males of the named taxa in the shape of aedeagus is also insignificant. For an illustration of the genitalia of *Rhopaletes bericus*, see Pace (1975).

Comments.

The genus *Rhopaletes* Cameron, 1939 belonging to the subtribe Thamiaraeina Fenyes, 1921 is currently represented by six species, four of them confined to the Western Palaearctic and two to the Eastern Palaearctic subregion (Smetana, 2004; the present paper). The species are micro- or anophthalmous, have reduced hind wings, and are locally endemic to the southern slopes of the Himalayas, the Alps and the Dinaric Mountains. All representatives of the genus seem to have a subterranean

habitat. The species are usually collected only by methods such as soil sifting and soil washing.

Owing to the highly derived morphology of *Rhopaletes* species, which can be explained as the result of an adaptation to subterranean habitats, their phylogenetic affiliations are difficult to assess based on morphological data alone. As can be concluded from the statements below, *Rhopaletes* is not very likely to be closely allied to *Thamiaraea* Thomson, 1858 (and *Thamiaraeina*, respectively), with which it shares a few characters. The hypothesis that the named genera are phylogenetically closely affiliated is virtually supported only by the fact that in case of their species, the labial palpomeres I and II are fused. *Rhopaletes* is characterised by numerous obvious features separating the genus from *Thamiaraea*, especially the differently shaped ligula and labial palpi, the presence of frontoclypeal suture, the different pubescence pattern of pronotum, the absence of an anterior transverse impression of abdominal tergites IV–V, the different genital morphology, etc.

Rhopaletes shares several characters with the genus *Geostiba* Thomson, 1858, especially the relatively short and stout antennae, the morphology of pronotum and elytra, the similar pubescence pattern of pronotum, etc. However, its other features such as the presence of frontoclypeal suture, the broad, poorly delimited neck, the fully margined temples, the absence of an anterior transverse impression of abdominal tergites IV–V, the different genital characters, etc. are distinctive. The genus *Platyola* Mulsant et Rey, 1875 has also similar morphology, sharing the subsequent features with *Rhopaletes*: the visible frontoclypeal suture, the relatively short and stout antennae, the pronotal pubescence pattern of the same type, the absence of an anterior transverse impression of abdominal tergites IV–V, the similar morphology of the genitalia, etc. (On the basis of near resemblance, Pace, in 2005, placed *Rhopaletes* in synonymy with *Platyola*.) However, the similarities are in conflict with other characters, for example, the pronotal hypomera of *Platyola* species are not visible in lateral view. *Platyola* and *Rhopaletes* are probably separate genera, all the same a closer relationship of them is quite obvious.

The systematic position of *Platyola* and *Rhopaletes* is not clear at present, although they have been classified into the tribe Athetini Casey, 1910. Based on the evidence currently available, it can not be decided with sufficient certainty whether they are more closely allied to the subtribe *Thamiaraeina* or to Athetina.

Etymology. The name refers to the historical territory (*Slavonia*), where the known specimens were collected. (Slavonia, in geographical sense, is a much smaller region between the rivers Drave and Save, close to the Danube river.)

Distribution and bionomics. At the moment, *Rhopaletes slavoniae* is known only from Ludbreg, the type locality, from surroundings of the Kalnik Mountains in Croatia. The distribution of this species is presumably restricted to the Western Balkan region. There is no information available about its ecology.

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OBSERVAȚII ASUPRA UNOR ALEOCHARINAE EUROPENE, CU DESCRIEREA UNEI NOI SPECII DE *RHOPALETES* DIN CROAȚIA (COLEOPTERA: STAPHYLINIDAE)

REZUMAT

Pornind de la studierea materialului tip și a altor materiale, au fost sinonimizate denumirile a zece specii: *Atheta mediterranea* G. Benick, 1941, *Aloconota carpathica* Jeannel et Jarrige, 1949 și *Atheta carpatensis* Tichomirova, 1973 cu *Aloconota mihoki* (Bernhauer, 1913); *Amischa jugorum* Scheerpeltz, 1956 cu *Amischa analis* (Gravenhorst, 1802); *Amischa strupii* Scheerpeltz, 1967 cu *Amischa bifoveolata* (Mannerheim, 1830); *Atheta tricholomatobia* V. B. Semenov, 2002 cu *Atheta boehmei* Linke, 1934; *Atheta palatina* G. Benick, 1974 și *Atheta palatina* G. Benick, 1975 cu *Atheta dilaticornis* (Kraatz, 1856); *Atheta degenerata* G. Benick, 1974 și *Atheta degenerata* G. Benick, 1975 cu *Atheta testaceipes* (Heer, 1839). Un nou nume, *Atheta velebitica* nom. nov., este propus pentru *Atheta serotina* Ádám, 2008, un omonim primar junior al *Atheta serotina* Blackwelder, 1944. Este prezentată și o cheie de determinare revizuită a speciilor central-europene ale grupului *Aloconota sulcifrons*. De asemenea, sunt făcute comentarii asupra separării masculilor de *Amischa bifoveolata* și *A. analis*. Este prezentată și o cheie de determinare a speciilor de *Amischa* colectate din Ungaria și din împrejurimi. Sunt făcute observații asupra relațiilor genurilor *Alevonota* Thomson, 1858 și *Enalodroma* Thomson, 1859. Statutul taxonomic al genurilor *Oxypodera* Bernhauer, 1915 și *Mycetota* Ádám, 1987 este pus în discuție. De asemenea, este dezbătut și statutul specific al speciei *Pella hampei* (Kraatz, 1862). Sunt prezentate observații asupra relațiilor lui *Alevonota* Thomson, 1858, precum și cele ale lui *Mycetota* Ádám, 1987, *Oxypodera* Bernhauer, 1915 și *Rhopaletes* Cameron, 1939. Sunt discutate datele publicate ale mai multor specii de *Atheta*, descrise de G. Benick. *Aloconota mihoki*, *Amischa forcipata*, *A. filum* și *Atheta boehmei* sunt menționate pentru prima oară din Ungaria, Croația și România. Este descrisă o nouă specie, *Rhopaletes slavoniae* sp. n., din Croația.

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Aranyvirág sétány 7
H-1098 Budapest, Hungary