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NEW SPECIES OF ALEOCHARINAE FROM ROMANIA AND CROATIA (COLEOPTERA: STAPHYLINIDAE)

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Abstract. *Eumorphotheta*, a new subgenus of the genus *Atheta*, as well as five new species – *Atheta georgii* sp. n. (from Romania), *A. serotina* sp. n. (from Croatia), *A. sicularum* sp. n. (from Romania), *Gyrophaena transsylvanica* sp. n. (from Romania) and *Halobrecta hadriatica* sp. n. (from Croatia and other localities in the Apennines and Balkan Peninsula) – are described. Detailed comparisons to close relatives or congeners are provided, as well as available biological information.

Résumé. *Eumorphotheta*, un nouveau sous-genre du genre *Atheta*, ainsi que cinq nouvelles espèces - *Atheta georgii* sp. n. (de Roumanie), *A. serotina* sp. n. (de Croatie), *A. sicularum* sp. n. (de Roumanie), *Gyrophaena transsylvanica* sp. n. (de Roumanie) et *Halobrecta hadriatica* sp. n. (de Croatie et d'autres localités dans les Apennins et de la Péninsule Balkanique) - sont décrites. On offre aussi des comparaisons détaillées avec des espèces proches et des congénères, ainsi que des informations biologiques valables.

Key words: Coleoptera, Staphylinidae, Aleocharinae, new subgenus, new species, systematics.

INTRODUCTION

In the course of a long-term study on the aleocharines of the Carpathian Basin and surrounding areas a considerable amount of yet undescribed taxa were encountered. This paper names these new taxa (5 species and 1 genus-group names). The actual number of unknown species found was higher; in the present article only those are named, where an adequate material and data were available. Since there were very few studies on the Aleocharinae from the mountainous parts of these areas, it was considered very desirable to draw attention to these taxa, for they might even have a wider distribution.

MATERIAL AND METHOD

The studied specimens, from the Eastern and Southern Carpathians (Romania), as well as from the coasts of the Adriatic and Ionian Sea (Croatia, Italy and Greece) are deposited in the following collections:

- Field Museum of Natural History, Chicago, United States of America (FMNH; A. F. Newton).
- “Grigore Antipa” National Museum of Natural History, București (Bucharest), Romania (MGAB; M. Stan).
- Hungarian Natural History Museum, Budapest, Hungary (HNHM; Gy. Szél).
- Natural History Museum, University of Oslo, Oslo, Norway (ZMUN; V. I. Gusarov).

Illustrations were made by permanent preparations in Euparal mounting medium on plastic cards pinned with the specimens. For the drawings a Jenalab compound microscope was used (Carl Zeiss, Jena) with a drawing tube.

RESULTS AND DISCUSSIONS

Description of new taxa

***Atheta (Atheta) georgii* sp. n.**

(Fig. 1)

Type material. Holotype (male): "ROMANIA, jud. Harghita, 1-3 km SE Băile Tuşnad, Vf. Ciomatul Mic, spruce forest, 800-1000 m, from mushrooms (e.g. *Lactarius* sp.) and litter [241], bw. 46°08'20"N, 25°51'40"E and 46°07'40"N, 25°53'40"E, 11.VIII.2006, Gy. Makranczy". *Paratypes* (one male and one female): same data as the holotype. The holotype and the female paratype are deposited in the Hungarian Natural History Museum, Budapest, the male paratype in the "Grigore Antipa" National Museum of Natural History, Bucharest.

Description.

Body length 2.3–2.8 mm. Length of forebody 1.23–1.44 mm. Pronotal width 0.60–0.66, length 0.44–0.50 mm.

Body slightly to barely bicoloured. Head, pronotum and abdomen black. Elytra brown to yellowish brown, more or less infuscate, with sutural and posterolateral angle, as well as epipleura more or less largely blackish. Antennae brownish black to blackish brown. Legs brownish yellow, femora distinctly, tibiae slightly to barely infuscate.

Body weakly fusiform. Surface with fairly deep, dense microreticulation, and with more or less reclinate pubescence. Forebody with pronounced microreticulation of approximately isodiametric meshes, surface almost dull. Abdomen weakly shining, with fine microreticulation of strongly transverse meshes. Vertex, pronotum and elytra with more or less distinct, moderately dense and asperate puncturation. Punctures on vertex fine, faintly asperate, obsolescent in the middle, difficult to see among microreticulation, and distinctly smaller than interstices. Puncturation of pronotum a little stronger and denser 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 and denser than that of pronotum; punctures on average about as large as interstices. Abdominal tergites III–V finely and less densely punctured; puncturation becoming finer and sparser toward abdominal apex; punctures, especially on last tergites much smaller than interstices.

Head weakly transverse, 1.13–1.17 times wider than long (length measured from anterior margin of clypeus), with rounded posterior angles. Vertex with pubescence directed more or less medially. Surface slightly flattened, especially in the males. Eyes relatively large and prominent, distinctly projecting from lateral outline of head, and clearly longer than postocular region in dorsal view. Postocular region 0.6–0.7 times shorter than eye. Temples fully margined; occipital carinae extend from occipital region to hypostoma. Neck broad, poorly delimited.

Antennae relatively slender, slightly incrassate apically. Antennomeres II and III elongate. Antennomere III about as long as or barely longer than II. Antennomeres IV–X increasing in width apically. Antennomere IV quadrate or barely transverse, at most about 1.1 times wider than long, X weakly transverse, 1.3–1.4 times wider than long. Antennomere XI suboval and barely longer than combined length of antennomeres IX and X.

Pronotum weakly transverse, 1.30–1.36 times wider than long, and 1.23–1.31 times wider than head. Surface slightly convex, with narrow, barely noticeable

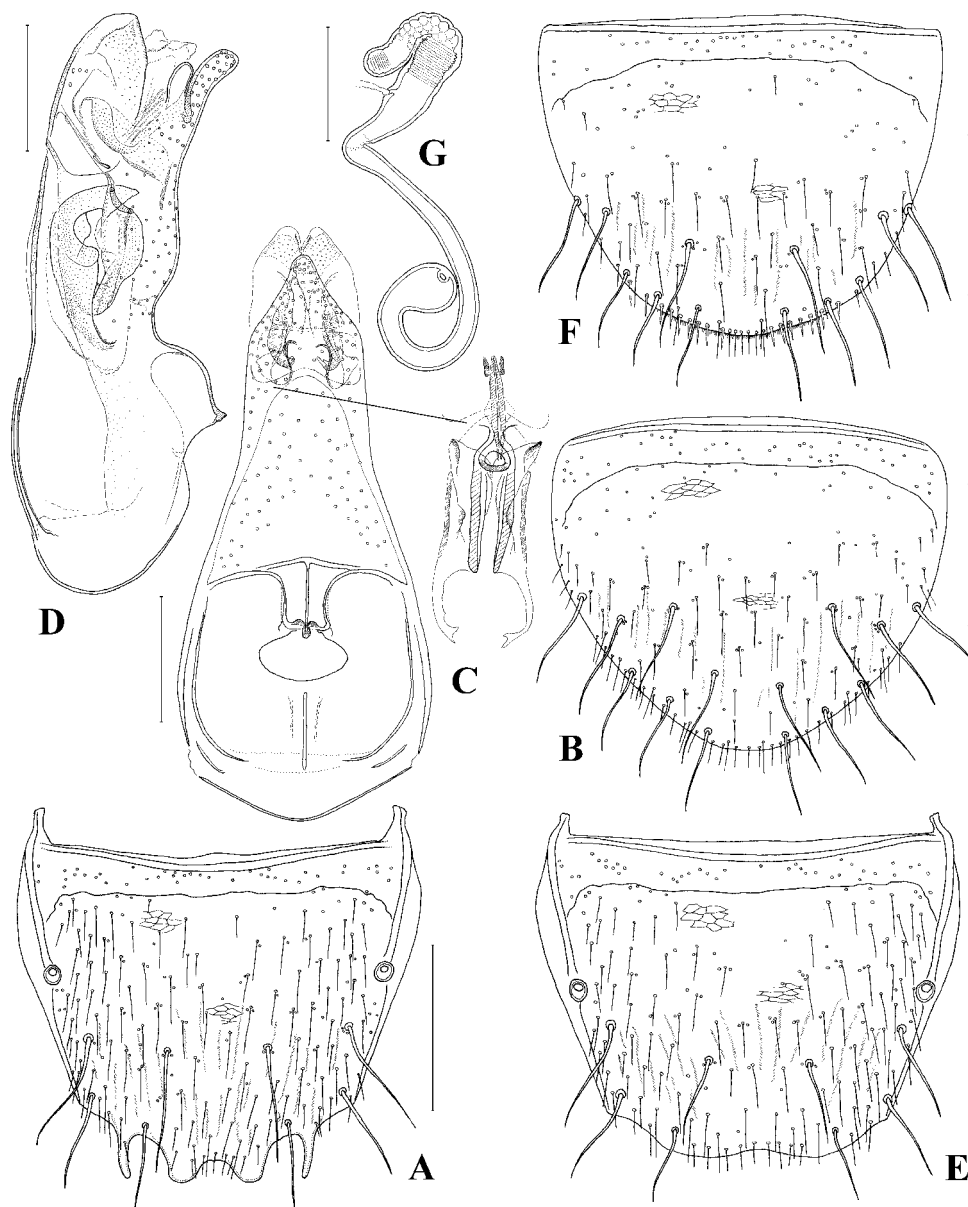


Fig. 1 – *Atheta georgii* sp. n. A, male tergite VIII; B, male sternite VIII; median lobe of aedeagus: C, ventral view; D, lateral view; E, female tergite VIII; F, female sternite VIII; G, spermatheca. Scales (in mm): A-B 0.2; C-D 0.1; E-F 0.2; G 0.1.

sulcus along posterior half of median line, and with a very shallow circular impression near posterior margin. Posterior angles feebly marked, obtuse. Microsetae directed anteriorly along midline, and more or less laterally in lateral portion on the disc (type I; see Höeg, 1945). Hypomera fully but narrowly visible in lateral view.

Elytra wider, and at suture (measured from apex of scutellum to inner apical angles) 1.02–1.04 times longer than pronotum. Microsetae directed posterolaterally on the disc. Posterior margin near posterolateral angle barely emarginate. Wings fully developed.

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. Medial macroseta of mesotibia conspicuous, about 1.75 times longer than tibial width. Metatarsus distinctly shorter than metatibia. First metatarsomere about as long as second, and much shorter than the combined length of the second and third metatarsomeres. Last metatarsomere much longer than first.

Abdomen more or less fusiform, widest at segment IV, slightly narrower than elytra. Abdominal tergites III–V with moderately deep transverse basal impression. Posterior margin of tergite VII with distinct white fringe.

Male: posterior margin of abdominal tergite VIII with four denticles: lateral ones narrow and acutely pointed, and inner ones fairly wide and obtuse (Fig. 1 A). Abdominal sternite VIII a little longer than tergite VIII. Posterior margin of sternite VIII strongly convex, with a row of thin and short setae (Fig. 1 B). Median lobe of aedeagus with dorsal bridge, and with unmodified ventral process (Fig. 1 C–D).

Female: posterior margin of abdominal tergite VIII truncate and shallowly emarginate in the middle (Fig. 1 E). Abdominal sternite VIII barely longer than tergite VIII. Posterior margin of sternite VIII strongly convex but less so than in the male, with a row of short setae, which are stouter than in the male (Fig. 1 F). Spermatheca with small umbilicus, and with relatively long duct (Fig. 1 G).

Comparative notes.

Atheta georgii is closely related to *A. boleticola* J. Sahlberg, 1876 but differs feebly in the following characters. It is smaller in size (2.3–2.8 mm). In general aspect it resembles *Atheta aeneipennis* (Thomson, 1856) rather than *A. crassicornis* (Fabricius, 1793). Its body colours are less contrasting. Antennae and pronotum are uniformly brownish black to blackish brown in colour. Elytra are brown to yellowish brown, the sutural and posterolateral angle, as well as epipleura is more or less largely blackish. Legs are brownish yellow but femora and tibiae are more or less infuscate. Palpi are also infuscate. The surface of forebody is almost dull because of the more pronounced microreticulation. The puncturation of vertex, pronotum, elytra and abdominal tergites is denser: punctures on the elytra are on average as large as the interstices. Eyes are a little larger: postocular region is 0.6–0.7 times shorter than the eye. Microsetae are directed more posteriorly on elytral disc. Medial macroseta of mesotibia is more conspicuous, being a little longer and stronger. Macrosetae on the lateral margins of pronotum, etc. are similarly a little longer and stronger. Abdomen is more fusiform, and segment VIII is more conical. The posterior margin of abdominal tergite VIII of male has four denticles: the lateral ones are acutely pointed, and the inner ones are obtuse and prominent. The posterior margin of abdominal sternite VIII is more convex in both sexes. The female has a differently shaped spermatheca.

Atheta boleticola is larger in size (3.0–3.4 mm). In general aspect, it resembles *Atheta crassicornis* rather than *A. aeneipennis*. Its body colours are more contrasting. Antennae are brown, the first three or two antennomeres are distinctly lighter, brownish yellow in colour. Pronotum is brownish black to blackish brown but the lateral margins are lighter, brown in colour. Elytra are light brown to yellowish brown, the sutural and posterolateral angle, as well as epipleura is at most slightly infuscate. Legs and palpi are unicoloured brownish yellow. The surface of forebody is weakly shining because of the less pronounced microreticulation. The puncturation of vertex, pronotum, elytra and abdominal tergites is less dense: punctures on the elytra are on average distinctly smaller than the interstices. Eyes are a little smaller: postocular region is about 0.8 times shorter than the eye. Microsetae are directed less posteriorly on elytral disc. Medial macroseta of mesotibia is less conspicuous, being a little shorter and finer. Macrosetae on the lateral margins of pronotum, etc. are similarly a little shorter and finer. Abdomen is less fusiform, and segment VIII is less conical. The posterior margin of abdominal tergite VIII of male has four denticles: the lateral ones are obtuse, and the inner ones are very obtuse and feebly prominent. The posterior margin of abdominal sternite VIII is less convex in both sexes. The female has a different spermatheca. For an illustration of the abdominal tergite VIII and the genitalia, see Palm (1970).

The species with posterior margin of abdominal tergite VIII most resembling that of *Atheta georgii* are *A. gagatina* (Baudi di Selve, 1848), *A. scapularis* (C. R. Sahlberg, 1831) and *A. oblita* (Erichson, 1839) from Europe, which, however, are distinguished from the new species by the different pronotal pubescence pattern (type II; see Höeg, 1945), or by the body colour, or by the much smaller size, respectively, as well as by the genitalia. For an illustration of the abdominal tergite VIII and the genitalia of those species, see Benick & Lohse (1974).

Etymology. This species is dedicated to György Makranczy, who collected the type specimens. The name is derived from the Greek noun γέωργος.

Distribution and bionomics. *Atheta georgii* is presumably a very rare species. At the moment, it is known only from the type locality, from the Eastern Carpathians in Romania. The type specimens were found in a material that contained several hundred *Atheta* specimens gathered in the same habitat. However, the species is probably more widespread, as suggested by the fully developed wings and the relatively low altitude of the type locality. There is a possibility that this species originate from Eastern Asia, where a number of similar species (described under the subgeneric name *Datomicra*) occur (see, for instance, Pace, 1986 a, b, 1987, 1998, 2004). *Atheta georgii* lives most probably on rotten fungus, on fungous leaf litter, etc.

***Atheta (Atheta) serotina* sp. n.**

(Fig. 2)

Type material. *Holotype* (male): “CROATIA, Velebit, 3 km SE Sveti Juraj, pasture/garden on hill above road to Lopci, 300 m, from sheep dung, 44°54’45”N, 14°56’21”E, 31.X.2005, Gy. Makranczy”. *Paratypes* (three males and one female): same data as the holotype. The types are deposited in the Hungarian Natural History Museum, Budapest.

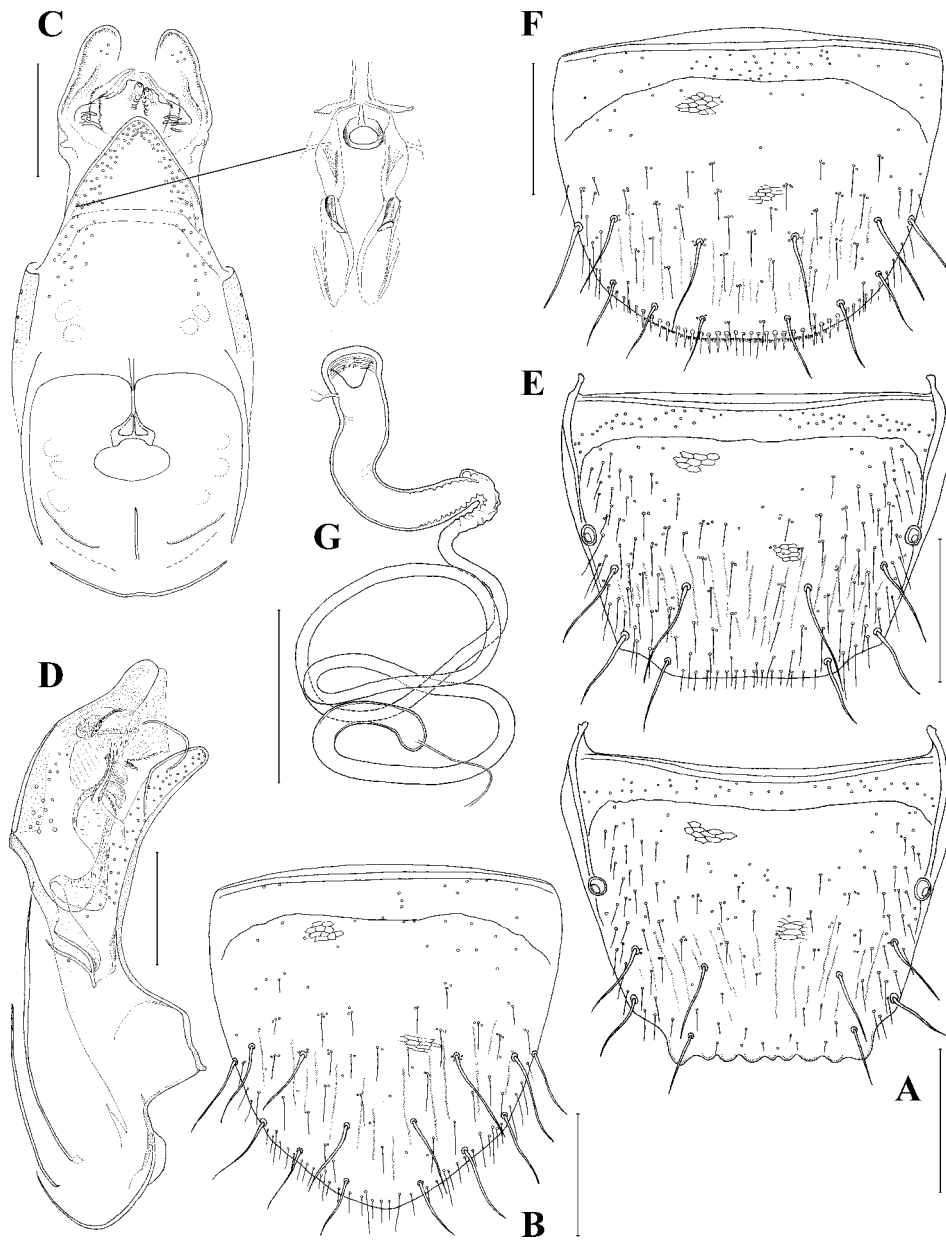


Fig. 2 – *Atheta serotina* sp. n. A, male tergite VIII; B, male sternite VIII; median lobe of aedeagus: C, ventral view; D, lateral view; E, female tergite VIII; F, female sternite VIII; G, spermatheca. Scales (in mm): A-B 0.2; C-D 0.1; E-F 0.2; G 0.1.

Description.

Body length 3.0–3.6 mm. Length of forebody 1.40–1.71 mm. Pronotal width 0.64–0.71, length 0.51–0.58 mm.

Body slightly bicoloured, with vague metallic lustre. Head, pronotum and abdomen black. Elytra yellowish brown to brownish yellow, with sutural and posterolateral angle, as well as epipleura more or less infuscate. Antennae brownish black, scape barely lighter. Legs brownish yellow, femora hardly infuscate.

Body weakly fusiform. Surface with fairly deep, dense microreticulation, and with more or less reclinate pubescence. Forebody with fairly pronounced microreticulation of approximately isodiametric meshes, surface weakly shining. Abdomen weakly shining, with fine microreticulation of very transverse meshes. Vertex, pronotum and elytra with more or less discernible, not dense, indistinctly asperate puncturation. Punctures on vertex fine, obsolescent in the middle, difficult to see among microreticulation, and distinctly smaller than interstices. Puncturation of pronotum barely stronger than that of head; punctures somewhat obsolete, smaller than interstices. Elytra with somewhat obsolete puncturation, which is a little stronger than that of pronotum; punctures smaller than interstices. Abdominal tergites III–V finely and sparsely punctured; puncturation becoming finer and sparser toward abdominal apex; punctures, especially on last tergites very much smaller than interstices.

Head weakly transverse, 1.08–1.19 times wider than long (length measured from anterior margin of clypeus), with rounded posterior angles. Vertex with pubescence directed more or less medially. Surface slightly convex. Eyes relatively large and prominent, distinctly projecting from lateral outline of head, and generally a little longer than postocular region in dorsal view. Postocular region 0.8–1.0 times shorter than, or as long as eye. Temples not completely margined; occipital carinae rather long but vanishing under eyes before hypostoma. Neck broad, poorly delimited.

Antennae relatively slender, slightly incrassate apically. Antennomeres II and III elongate. Antennomere III about as long as II. Antennomeres IV–X slightly increasing in width apically. Antennomere IV quadrate or slightly transverse, at most 1.2 times wider than long, X weakly transverse, 1.2–1.4 times wider than long. Antennomere XI suboval and a little longer than combined length of antennomeres IX and X.

Pronotum weakly transverse, 1.19–1.25 times wider than long, and 1.23–1.32 times wider than head. Surface slightly convex, with barely noticeable median impression along posterior half of median line, and with a very shallow impression near posterior margin. Posterior angles feebly marked, obtuse. Microsetae directed anteriorly along midline, and more or less laterally in lateral portion on the disc (type I; see Höeg, 1945). Hypomera fully but narrowly visible in lateral view.

Elytra wider, and at suture (measured from apex of scutellum to inner apical angles) 0.76–1.00 times shorter than, or as long as pronotum. Microsetae directed posterolaterally in anterior and interior half of surface, as well as along posterior margin, directed more posteriorly along exterior margin and near outer apical angle, and they constitute, as in case of *Atheta atramentaria* (Gyllenhal, 1810), a characteristic whirl near posterior third. For an illustration of the elytra of *Atheta atramentaria*, see Benick & Lohse, 1974. Posterior margin near posterolateral angle barely emarginate. Wings fully developed.

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. Medial macroseta of mesotibia conspicuous, 1.5–1.7 times longer than tibial width. Metatarsus distinctly shorter than metatibia. First metatarsomere about as long as second, and much shorter than the combined length of the second and third metatarsomeres. Last metatarsomere much longer than first.

Abdomen more or less fusiform, widest at segment IV, slightly narrower than elytra. Abdominal tergites III–V with moderately deep transverse basal impression. Posterior margin of tergite VII with distinct white fringe.

Male: posterior margin of abdominal tergite VIII truncate, with 9 or 11 fine denticles: lateral ones about as large as, or a little larger than inner ones (Fig. 2 A). Abdominal sternite VIII a little longer than tergite VIII. Posterior margin of sternite VIII strongly convex, with a row of thin and short setae, which are longer in the middle (Fig. 2 B). Median lobe of aedeagus with dorsal bridge, and with unmodified ventral process (Fig. 2 C–D).

Female: posterior margin of abdominal tergite VIII truncate (Fig. 2 E). Abdominal sternite VIII barely longer than tergite VIII. Posterior margin of sternite VIII convex but narrowly truncate in the middle, with a row of short setae, which are stouter than in the male (Fig. 2 F). Spermatheca with small umbilicus, and with relatively long, convoluted duct (Fig. 2 G).

Comparative notes.

Atheta serotina is closely related to *A. oraria* (Kraatz, 1856), and resembling in some extent *A. aeneicollis* (Sharp, 1869), too. It differs feebly from *Atheta oraria* in the following characters. It is a little smaller in size (3.0–3.6 mm). The surface of vertex and pronotum is less shining because of the more pronounced microreticulation. The sculpture of pronotum – the more pronounced microreticulation, and the very fine, indistinctly asperate puncturation – differs barely from that of elytra. The median lobe of aedeagus has no ventral spine before paramere condyles. The female has a different spermatheca.

Atheta oraria is a little larger in size (3.3–4.0 mm). The surface of vertex and pronotum is more shining because of the less pronounced microreticulation. The sculpture of pronotum – the less pronounced microreticulation, and the extremely fine, not asperate puncturation – differs fairly from that of elytra. The median lobe of aedeagus has a quite long, proclivous ventral spine before paramere condyles. The female has a different spermatheca.

Atheta aeneicollis differs primarily from the new species in having a finely but distinctly asperate pronotal puncturation. In addition, the surface of vertex and pronotum is more shining because of the less pronounced microreticulation. Antennae are often lighter, scape frequently yellowish in colour. Elytra and legs are also a little paler in colour. The posterior margin of abdominal tergite VIII of the male is truncate, with usually 6 or 8 fine denticles: the lateral ones are characteristically a little larger than the inner ones. Aedeagus and spermatheca of *Atheta aeneicollis* also differ from those of the new species. For an illustration of the genitalia of *Atheta aeneicollis*, see Benick & Lohse (1974).

Etymology. The name refers to the time of appearance of this athetine. The Latin adjective *serotina* means late, tardy.

Distribution and bionomics. At the moment, *Atheta serotina* is known only from the type locality, from the Velebit Mountains in Croatia. It has been collected in sward of a clearing, in a thermophilous (sub-Mediterranean) scrub forest, from

sheep dung. It appears presumably the late autumnal days, and most likely active during the winter and early spring, too. *Atheta serotina* lives most probably on decaying organic substances (dung, rotten fungus, etc.).

***Eumorphotheta* subgen. n.**

Type species: Atheta sicularum sp. n. (present designation).

Diagnosis.

Species of small size (2.0–2.7 mm). Body usually dark coloured, pitchy black to dark brown, head and abdominal segments V–VII or VI–VII usually darker, pronotum and abdominal segments III–IV or III–V lighter. Elytra dark brown to reddish brown. Legs, antennae and mouthparts reddish brown to brownish red.

Head subquadrate, barely wider than long. Eyes relatively small but very protruding, clearly shorter than postocular region in dorsal view. Temples incompletely margined; occipital carinae short, present only at occipital region. Neck broad, poorly delimited.

Antennae relatively short and stout, distinctly incrassate apically. Antennomeres II and III elongate and subequal in length. Antennomere X clearly transverse.

Pronotum weakly transverse. Microsetae directed anteriorly along anterior third of midline, posteriorly along posterior part of midline, and more or less laterally in lateral portion on the disc (type III; see Höeg, 1945). Hypomera fully but narrowly visible in lateral view.

Elytra relatively short, wider, and at suture clearly shorter than pronotum. 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. Medial macroseta of mesotibia inconspicuous, shorter than tibial width. Metatarsus distinctly shorter than metatibia. First metatarsomere about as long as second, and much shorter than the combined length of the second and third metatarsomeres.

Abdomen distinctly dilated posteriorly. Abdominal tergites III–V with moderately deep transverse basal impression. Posterior margin of tergite VIII truncate, and shallowly emarginate in the middle. Shape of posterior margin of sternite VIII with less prominent sexual dimorphism.

Median lobe of aedeagus with dorsal bridge, and with unmodified ventral process. Spermatheca with very small umbilicus, and with relatively short, strongly coiled duct.

Etymology. This name is derived from the Greek adjective εὐμορφος and the name *Atheta*. It means nicely figured athetine.

***Atheta (Eumorphotheta) sicularum* sp. n.**

(Fig. 3)

Type material. Holotype (male; right antenna missing): “Hu. Csik-m., Kászón [=Iacobeni], Dr. Székessy, Salutaris, 800 m, 1943 VII 10–31”. *Paratype* (female): same data as the holotype. *Paratype* (female; left elytron missing): “Torjai-szan. [=Turia], 1943. VII., leg. Balogh et Kalmar”. *Paratype* (female; spermatheca missing): “TRANSSYLV., Csik m., Hidegség [=Valea Rece], Hegyes-havas

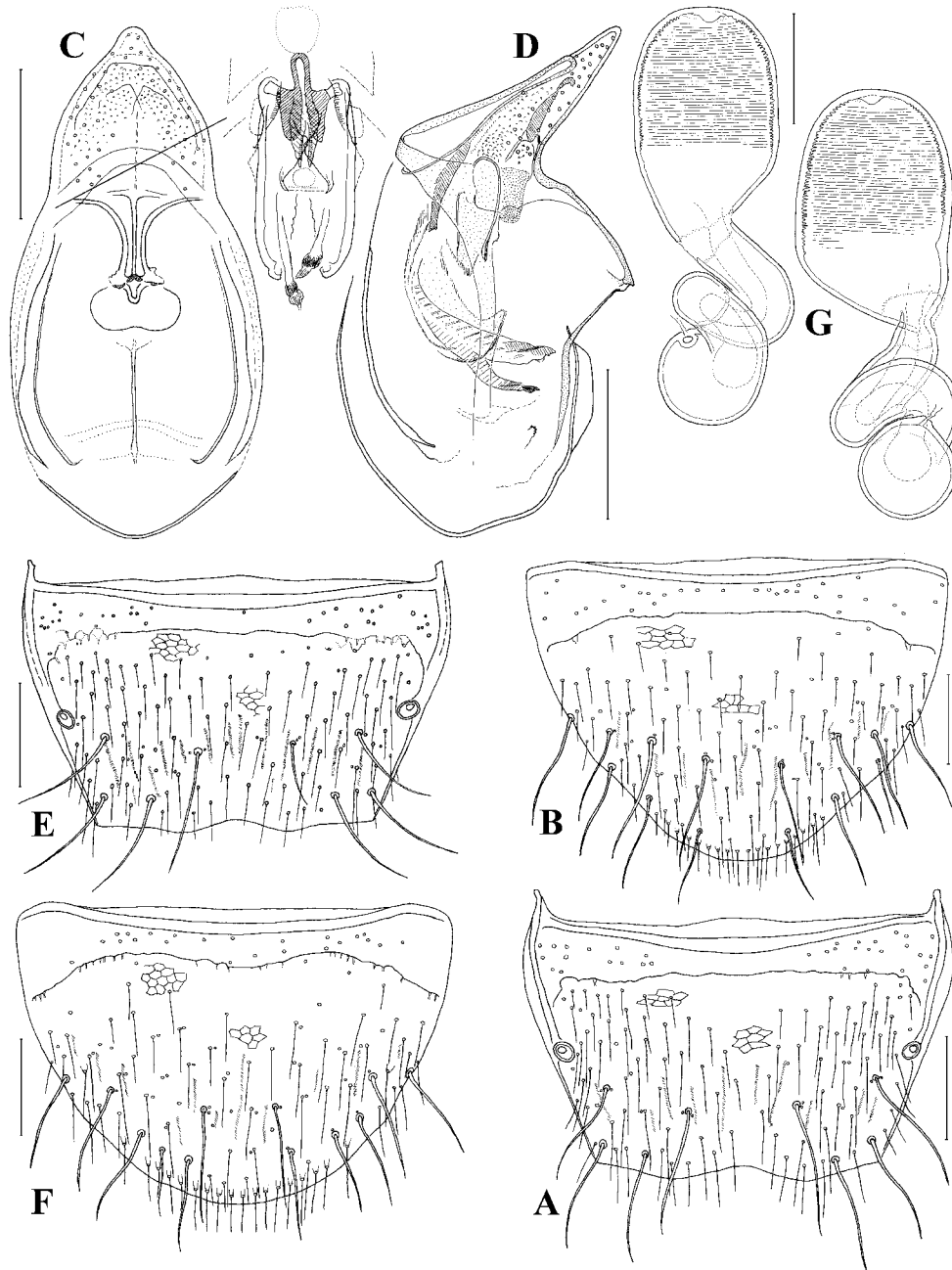


Fig. 3 – *Atheta siculorum* sp. n. A, male tergite VIII; B, male sternite VIII; median lobe of aedeagus: C, ventral view; D, lateral view; E, female tergite VIII; F, female sternite VIII; G, spermatheca (two views). Scales (in mm): A–G 0.1.

[=Vârful Ascuțit], 1918. IX. 10., leg. Dr. J. Fodor". The types are deposited in the Hungarian Natural History Museum, Budapest.

Description.

Body length 2.0–2.7 mm. Length of forebody 1.04–1.13 mm. Pronotal width 0.46–0.53, length 0.40–0.44 mm.

Body slightly bicoloured. Head pitchy black. Pronotum pitchy black to blackish brown with lateral margins reddish brown. Elytra dark brown to reddish brown. Abdomen with segments III–IV or III–V dark brown, segments V–VII or VI–VII pitchy black to blackish brown, segment VIII brown to reddish brown. Antennae reddish brown to brownish red with antennomeres I–III slightly lighter. Legs brownish red, tarsi slightly lighter.

Body surface with fairly superficial but more or less distinct transverse microreticulation, and with suberect pale pubescence. Vertex, pronotum and elytra with distinct, dense and relatively coarse puncturation. Punctures on vertex large but rather shallow, obsolescent in the middle, and distinctly larger than interstices. Puncturation of pronotum dense, and a little finer than that of head; punctures somewhat obsolete, faintly asperate, and distinctly larger than interstices. Elytra with dense, well-defined, and slightly asperate puncturation, which slightly coarser than that of pronotum; punctures clearly larger than interstices. Abdominal tergites finely and sparsely punctured; punctures, especially on last tergites much smaller than interstices.

Head subquadrate, 1.03–1.12 times wider than long (length measured from anterior margin of clypeus), with obtusely rounded posterior angles. Vertex with pubescence directed anteromedially. Surface more or less flattened, medially with small, weakly delimited, shallow fovea of circular or ovoid shape. Eyes relatively small but protruding, distinctly projecting from lateral outline of head, and clearly shorter than postocular region in dorsal view. Postocular region 1.2–1.5 times longer than eye. Temples incompletely margined; occipital carinae short, present only at occipital region. Neck broad, poorly delimited.

Antennae relatively short and stout, distinctly incrassate apically. Antennomeres II and III elongate and subequal in length. Antennomere III relatively long, 1.4–1.7 times longer than wide (width measured both at narrower and at wider side of antennomere). Antennomeres IV–X increasing in width apically. Antennomere IV slightly transverse, 1.2–1.3 times wider than long, X clearly transverse, 1.7–1.8 times wider than long. Antennomere XI suboval and barely longer than combined length of antennomeres IX and X.

Pronotum weakly transverse, 1.17–1.22 times wider than long, and 1.17–1.26 times wider than head. Surface slightly convex. Posterior angles fairly well-marked but obtuse. Microsetae directed anteriorly along anterior third of midline, posteriorly along posterior part of midline, and more or less laterally in lateral portion on the disc. Hypomera fully but narrowly visible in lateral view.

Elytra relatively short, wider, and at suture (measured from apex of scutellum to inner apical angles) 0.64–0.72 times shorter than pronotum. Microsetae directed posterolaterally on the disc. Posterior margin near posterolateral angle distinctly 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. Medial macroseta of mesotibia inconspicuous, shorter than tibial width. Metatarsus distinctly shorter than metatibia. First metatarsomere about

as long as second, and much shorter than the combined length of the second and third metatarsomeres. Last metatarsomere much longer than first.

Abdomen distinctly dilated posteriorly, widest at segment V, slightly wider than elytra. Abdominal tergites III–V with moderately deep transverse basal impression. Posterior margin of tergite VII with rudimentary white fringe. Posterior margin of tergite VIII truncate, and shallowly emarginate in the middle (Fig. 3 A, E).

Male: abdominal sternite VIII a little longer than tergite VIII. Posterior margin of sternite VIII strongly convex, with a row of thin and long setae (Fig. 3 B). Median lobe of aedeagus with dorsal bridge, and with unmodified ventral process (Fig. 3 C–D).

Female: abdominal sternite VIII barely longer than tergite VIII. Posterior margin of sternite VIII strongly convex but less so than in the male, with a row of long setae, which are stouter than in the male (Fig. 3 F). Spermatheca with very small umbilicus, and with relatively short, strongly coiled duct (Fig. 3 G).

Comparative notes.

Atheta siculorum is distinguished from the species of *Bellatheta* Roubal, 1928 in the following main characters. The puncturation of the forebody is dense and relatively coarse. The eyes are relatively small but protruding. Postocular region 1.2–1.5 times longer than eye. Antennomere I has no longitudinal cavity, as it is usual for most athetines. Antennomeres II and III are subequal in length. The pattern of pronotal pubescence is type III (see Höeg, 1945). The abdomen is clearly dilated posteriorly, and slightly wider than the elytra. Abdominal tergite VI has no transverse basal impression. Ventral process of median lobe of aedeagus is undivided. Spermatheca has a strongly coiled duct.

Bellatheta fatrica Roubal, 1928, the type of the genus *Bellatheta* (see also in Roubal, 1928) has the following main characters. The puncturation of the forebody is sparse and very fine. The eyes are relatively small and barely protruding. Postocular region about 2 times longer than eye. Antennomere I has a unique longitudinal cavity, which is margined on both sides by a ridge. Antennomere III distinctly shorter than the II. The pattern of pronotal pubescence is type I (see Höeg, 1945). Abdomen is rather fusiform and about as wide as the elytra. Abdominal tergite VI has a more or less distinct transverse basal impression. Ventral process of median lobe of aedeagus is deeply incised. Spermatheca has a weakly coiled duct. For an illustration of the genitalia, see Vogel, 2007.

Etymology. The name refers to the area (*terra Siculorum*) where the known specimens were collected.

Distribution and bionomics. The distribution of this apparently very rare species is presumably restricted to the Eastern Carpathians. Its ecology is unknown, but knowing the habits of the collectors, the specimens were most likely collected by sifting. The species is brachypterous and incapable of flight.

***Gyrophaena transsylvanica* sp. n.**

(Fig. 4 A–C)

Type material. *Holotype* (male): “Herkulesfürdő [=Băile Herculane], Coll. Mihók, 16 6/25”. *Paratypes* (one male and one female): “Hu. Bihar, Galbina, Bokor”. The holotype is deposited in the Hungarian Natural History Museum, Budapest. The two paratypes are deposited in the Field Museum of Natural History, Chicago.

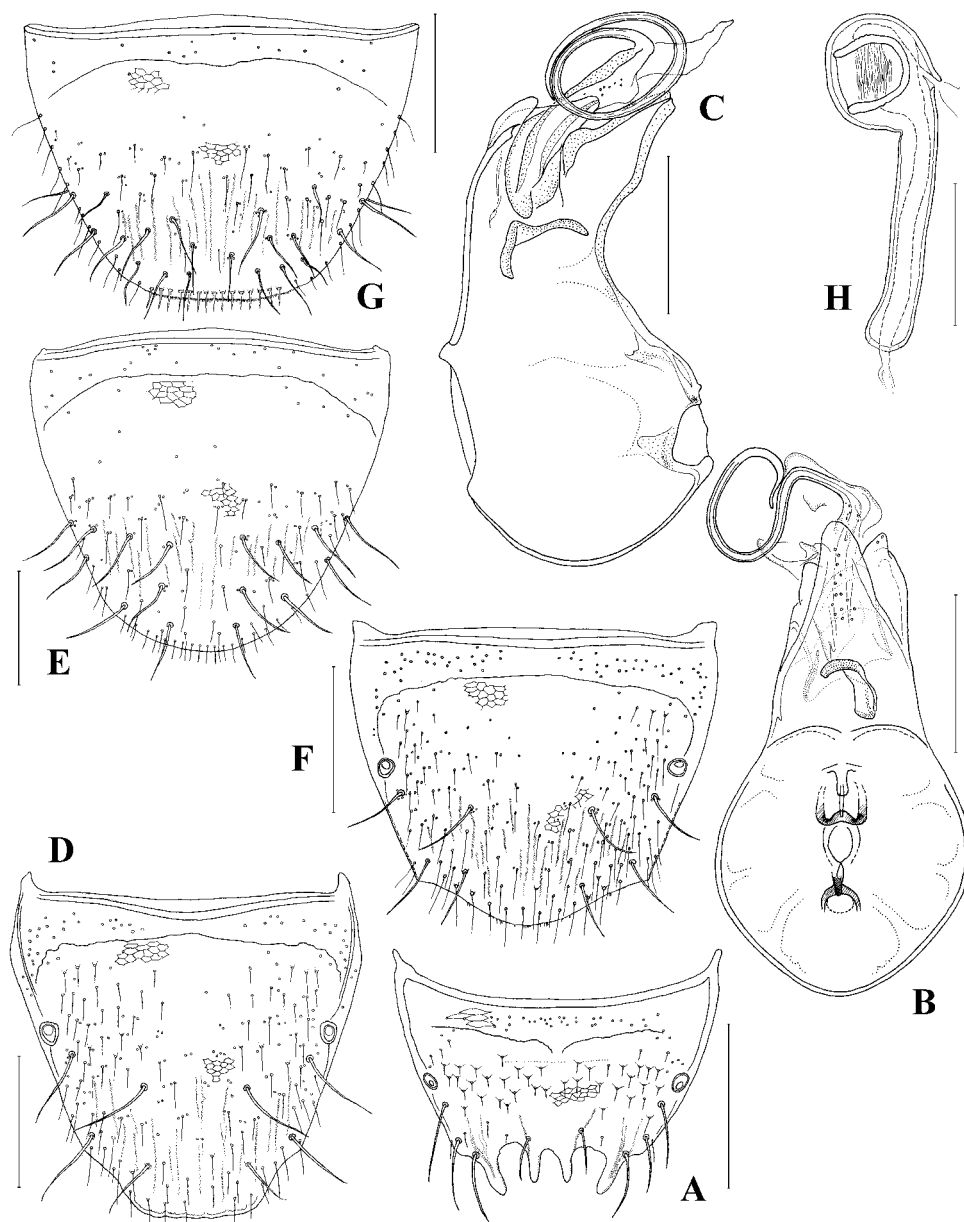


Fig. 4 – *Gyrophaena transsylvanica* sp. n. A, male tergite VIII; median lobe of aedeagus: B, ventral view; C, lateral view. *Halobrecta hadriatica* sp.n. D, male tergite VIII; E, male sternite VIII; F, female tergite VIII; G, female sternite VIII; H, spermatheca. Scales (in mm): A 0.2; B-C 0.1; D-G 0.2; H 0.1.

Description.

Body length 2.0–2.3 mm. Length of forebody 0.97–1.07 mm. Pronotal width 0.46–0.57, length 0.33–0.39 mm.

Body slightly varicoloured. Head brownish black or blackish brown. Pronotum brown, reddish brown or brownish red, disc more or less darker. Elytra brownish or reddish yellow, outer apical angle infuscate. Abdomen brownish or reddish yellow, tergite VI brownish black or blackish brown, tergites V and VII also brownish in part. Antennae brown or yellowish brown, antennomeres I–III brownish or reddish yellow. Legs brownish or reddish yellow.

Body weakly fusiform, slightly flattened. Surface subshining to shining, more or less obsolete reticulate or smooth, slightly pubescent to subglabrous, various on different regions of body.

Head distinctly transverse, 1.52–1.55 times wider than long (length measured from anterior margin of clypeus). Surface of vertex subshining to shining, with weak microreticulation near margins; frontoclypeal region and the middle of vertex smooth, without microreticulation. Eyes relatively large and prominent, distinctly projecting from lateral outline of head, and much longer than postocular region in dorsal view. Postocular region 0.4–0.6 times shorter than eye. Temples completely margined; occipital carinae extend from occipital region to hypostoma. Neck broad, poorly delimited.

Antennae relatively short and stout, distinctly incrassate apically. Antennomeres II and III elongate. Antennomere III distinctly shorter than II. Antennomere V 1.5–1.6 times wider than long, X clearly transverse, 1.6–1.7 times wider than long. Antennomere XI suboval and a little longer than combined length of antennomeres IX and X.

Pronotum weakly transverse, 1.39–1.48 times wider than long, and 1.10–1.14 wider than head. Surface slightly convex, subglabrous, smooth and shining, with traces of microreticulation in the middle of disc only; with two rows of a few punctures bearing macrosetae. Basal border narrower than antennomere II. Posterior angles rounded. Hypomera fully but narrowly visible in lateral view.

Elytra wider, and at suture (measured from apex of scutellum to inner apical angles) 1.00–1.04 times longer than, or as long as pronotum. Surface slightly pubescent, moderately shining, with weak microreticulation (poorly visible on disc); puncturation moderately dense, fine and quite irregular. Posterior margin near posterolateral angle indistinctly emarginate. Wings fully developed.

Legs relatively short. Tarsal segmentation 4-4-5. Each tarsus with one empodial seta shorter than claws. Tarsal claws of similar length, external claw about as long as internal one. Medial macroseta of mesotibia inconspicuous, a little shorter than tibial width. Metatarsus distinctly shorter than metatibia. First metatarsomere about as long as second, and much shorter than the combined length of the second and third metatarsomeres. Last metatarsomere much longer than first.

Abdomen more or less oviform, widest at segment IV, slightly narrower than elytra. Abdominal tergites III–V with shallow transverse basal impression. Abdominal tergites with fine microreticulation consisting of slightly transverse meshes. Posterior margin of tergite VII with normally developed white fringe.

Male: posterior margin of tergite VIII with four denticles (Fig. 4 A). Posterior margin of sternite VIII convex. Median lobe of aedeagus without apical process; flagellum long, whip-like (Fig. 4 B–C).

Female: posterior margin of tergite and sternite VIII convex. Spermatheca simple.

Comparative notes.

Gyrophæna transsylvanica is extremely similar to *G. munsteri* A. Strand, 1935, and resembling in some extent *G. williamsi* A. Strand, 1939, too. It differs from the foregoing species slightly in the following characters. Vertex and pronotum are typically glossier, the microreticulation of frontoclypeal region and in the middle of vertex, as well as pronotal disc is vanishing. Antennomeres IV–XI are lighter, brown or yellowish brown in colour. The basal margin of pronotum is much narrower than antennal segment II. The median lobe of aedeagus has no an apical process; flagellum is long, whip-like.

Vertex and pronotum of *Gyrophæna munsteri* (see also in Strand, 1935) are typically less glossy, the microreticulation of frontoclypeal region and in the middle of vertex, as well as pronotal disc is more or less distinct. Antennomeres IV–XI are darker, blackish brown or brown in colour. The basal margin of pronotum is about as wide as antennal segment II. The median lobe of aedeagus has an apical process; flagellum is quite long, stick-like.

Gyrophæna transsylvanica differs from *G. williamsi* (see also in Strand, 1939) in the following characters. Antennomeres IV–XI (in contrast to antennomeres I–III and to legs) are dark, brownish in colour. The microreticulation of vertex near eyes is distinct. The pronotum is more darkly coloured.

Etymology. The name refers to the area (Transylvania) where the known specimens were collected.

Distribution and bionomics. *Gyrophæna transsylvanica* is probably a very rare species, known only from the Bihor Mountains (Galbina) and from the Southern Carpathians (Băile Herculane) in Romania. There is no information available about its ecology.

***Halobrecta hadriatica* sp. n.**

(Fig. 4 D–H)

Type material. *Holotype* (male): “CROATIA, sandy bay (seashore) at Povile, 0 m, fine gravel+clay between stones with *Lagenaria* sp., 45°07'19"N, 14°48'30"E, 16.V.2006., Gy. Makranczy”. *Paratypes* (two males and seven females): same data as the holotype. *Paratype* (one female): “Morea [=Peloponnisos], *Atheta puncticeps* Thoms., Coll. Reitter”. *Paratype* (one male): “Morea [=Peloponnisos], Hagios Wlassis, Brenske., *Atheta puncticeps* Thoms., Coll. Reitter”. *Paratype* (one female): “Morea [=Peloponnisos], Taygetus [=Taygetos Oros], Brenske., *Atheta puncticeps* Thoms., Coll. Reitter”. *Paratype* (one female): “Jus. Veglia [=Otok Krk], Reitter 79., *Atheta flavipes*, Thoms., Coll. Reitter”. *Paratypes* (two males): “Montfalcone [=Monfalcone], Reitter, *Atheta puncticeps* Thoms., Coll. Reitter”. The types are deposited in the Hungarian Natural History Museum, Budapest except for one male paratype from Povile in the Natural History Museum, University of Oslo, Oslo.

Description.

Body length 2.6–3.9 mm. Length of forebody 0.79–1.80 mm. Pronotal width 0.34–0.73, length 0.41–0.64 mm.

Body more or less unicoloured. Head, pronotum and abdomen black. Elytra black or brownish black. Antennae brownish black or blackish brown, antennal segments I–III reddish brown or brownish red. Legs reddish brown or brownish red,

femorae a little darker, tibiae often more or less infusate. Old specimens slightly lighter, brownish in colour.

Body weakly fusiform. Surface with fairly deep, dense microreticulation, and with more or less reclinate pubescence. Forebody with fairly pronounced microreticulation consisting of approximately isodiametric and somewhat irregular, more or less elongate or transverse meshes; surface weakly shining. Abdomen weakly shining, with fine microreticulation of transverse meshes. Forebody with more or less discernible, dense puncturation. Punctures on vertex fine; distance between punctures about equal to their diameter. Puncturation of pronotum finer than that of vertex; punctures obsolete, poorly visible on microreticulated ground; distance between punctures equal to 1–2 times their diameter. Elytra with somewhat obsolete puncturation, which is finer than that of vertex but much stronger than that of pronotum; distance between punctures about equal to their diameter. Abdominal tergites III–V finely and sparsely punctured; puncturation becoming finer and sparser toward abdominal apex; punctures, especially on last tergites very much smaller than interstices.

Head weakly transverse, 1.06–1.17 times wider than long (length measured from anterior margin of clypeus), with rounded posterior angles. Vertex with pubescence directed more or less anteromedially. Surface slightly convex, or somewhat flattened anteriorly. Eyes not specifically large, weakly projecting from lateral outline of head, and shorter than postocular region in dorsal view. Postocular region 1.2–1.5 times longer than eye. Temples completely margined; occipital carinae extend from occipital region to hypostoma. Neck broad, poorly delimited.

Antennae relatively slender, slightly incrassate apically. Antennomeres II and III elongate. Antennomere III a little shorter than II. Antennomeres IV–X slightly increasing in width apically. Antennomere IV slightly elongate, 1.1–1.5 times longer than wide, X moderately transverse, 1.5–1.7 times wider than long. Antennomere XI suboval and a little longer than combined length of antennomeres IX and X.

Pronotum weakly transverse, 1.09–1.24 times wider than long, and 1.11–1.21 times wider than head. Surface slightly convex, with relatively large, slightly flattened area along median line, and with a very shallow impression near posterior margin. Posterior angles feebly marked, obtuse. Microsetae directed anteriorly along anterior half of midline, posteriorly along posterior half of midline, and more or less laterally in lateral portion on the disc (type III; see Höeg, 1945). Hypomera fully but narrowly visible in lateral view.

Elytra wider, and at suture (measured from apex of scutellum to inner apical angles) 1.00–1.18 times longer than, or as long as pronotum. Microsetae directed laterally and slightly posteriorly on disc, laterally near posterior margin, and posterolaterally along exterior margin. Posterior margin near posterolateral angle distinctly emarginate. Wings fully developed.

Legs relatively long. Tarsal segmentation 4-5-5. Each tarsus with one empodial seta longer than claws. Tarsal claws of slightly different length (best observed in dorsal view), external claw longer than internal one. Medial macroseta of mesotibia not conspicuous, about as long as tibial width. Metatarsus distinctly shorter than metatibia. First metatarsomere a little longer than second, and shorter than the combined length of the second and third metatarsomeres. Last metatarsomere much longer than first.

Abdomen more or less fusiform, widest at segment IV, slightly narrower than elytra. Abdominal tergites III–V with moderately deep transverse basal impression. Posterior margin of tergite VII with distinct white fringe.

Male: microreticulation of posterior half of finely granulose abdominal tergites VII and VIII much denser than that of tergite VI: largest part of meshes very weakly or weakly transverse in this region. Posterior margin of abdominal tergite VIII truncate in the middle, truncate part relatively narrow, and not quite straight, and indistinctly crenulate (Fig. 4 D). Abdominal sternite VIII barely longer than tergite VIII. Posterior margin of sternite VIII convex, somewhat ogival, with a row of thin setae (Fig. 4 E). The illustrations of the aedeagus provided by Gusarov (2004: figs 62–63) refer to this species.

Female: posterior margin of abdominal tergite VIII convex (Fig. 4 F). Abdominal sternite VIII about as long as tergite VIII. Posterior margin of sternite VIII convex or indistinctly truncate apically, with a row of stout setae in the middle (Fig. 4 G). Spermatheca with large umbilicus, and with relatively short duct (Fig. 4 H).

Comparative notes.

Halobrecta hadriatica is closely related and in all character states very similar to *H. algae* (Hardy, 1851). These two species probably cannot be reliably distinguished without examination of the male genitalia. The new species differs from *Halobrecta algae* in the shape of the aedeagus, particularly in having a narrower (in ventral view) and less bent median lobe (in lateral view). For an illustration of the genitalia of *Halobrecta algae*, see Gusarov (2004).

Halobrecta hadriatica differs from *H. princeps* (Sharp, 1869) in having the body size smaller (that species is considerably larger than 3.9 mm in average), and in having the vestiture consisting of more or less reclinate, shorter microsetae (the vestiture of *H. princeps* consists of suberect, longer microsetae). In addition, *Halobrecta princeps* has more slender antennae: antennal segments IV–VI are distinctly elongate, VII is subquadrate, VIII–X are slightly transverse, 1.1–1.4 times wider than long, and XI is oblong (the new species has segment IV elongate, V slightly elongate or subquadrate, VI subquadrate or slightly transverse, VII–X distinctly transverse, and XI suboval). The pronotal setation pattern of *Halobrecta hadriatica* is of type III, while *H. princeps* has the pattern of type I, with microsetae directed anteriorly along the midline. The body surface of *Halobrecta princeps* is glossier because of the weak microreticulation; the puncturation of pronotum is distinct, clearly visible on the weakly microreticulated ground. The body surface of the new species is weakly shining because of the more pronounced microreticulation; the puncturation of pronotum is indistinct, poorly visible on the strongly microreticulated ground. In case of *Halobrecta princeps* the medial macroseta of mesotibia is distinctly, about 1.5 times longer than the tibial width, while in case of the new species medial macroseta is about as long as the tibial width. *Halobrecta princeps* has abdominal tergites III–VI with moderately deep transverse basal impression, while the new species has basal impression on abdominal tergites III–V only.

Etymology. The name refers to the area (*mare Hadriaticum*) where the largest part of the known specimens was collected.

Distribution and bionomics. *Halobrecta hadriatica* is known to occur in the coasts of the Adriatic Sea in Croatia and Italy, as well as the coasts of the Ionian Sea in Greece. It is most likely widespread in the East Mediterranean, for instance, it was mentioned by Gusarov (2004) as “*Halobrecta* sp. aff. *algae* (Hardy)” from Grado, Italy. It lives on sandy seashore, under vegetable detritus (e. g. algae), stones, etc.

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NOI SPECII DE ALEOCHARINAE DIN ROMÂNIA ȘI CROAȚIA (COLEOPTERA: STAPHYLINIDAE)

REZUMAT

Sunt descrise *Eumorphotheta*, un nou subgen al genului *Atheta* și cinci specii noi – *Atheta georgii* sp. n., *A. siculorum* sp. n., *Gyrophæna transsylvanica* sp. n. din România (Carpații Răsăriteni și Meridionali), *Atheta serotina* sp. n. din Croația (Munții Velebit) și *Halobrecta hadriatica* sp. n. din Croația și Italia (litoralul Mării Adriatice) și Grecia (litoralul Mării Ionice). Se fac descrieri comparative între aceste specii noi și specii congenerice. Informații referitoare la distribuție și bionomie vin să completeze descrierea speciilor.

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