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New species of Heteroceridae from Thailand and Namibia (Coleoptera: Heteroceridae)

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Abstract

Augyles rejseki sp.n. (Thailand), *A. namibiensis* sp.n. (Namibia) and *Heterocerus pavliceki* sp.n. (Namibia) are described and illustrated. *Augyles anulatus* (MASCAGNI, 1991) is reported from Thailand for the first time.

Key words: Coleoptera, Heteroceridae, taxonomy, new species, Thailand, Namibia.

Introduction

A series of Heteroceridae collected by J. Rejsek in Thailand in 1994 and M. Snížek in Namibia in 1995 yielded seven species of Heteroceridae, among them three species new to science. These species are described below, together with distributional notes on the other species collected.

Taxonomy

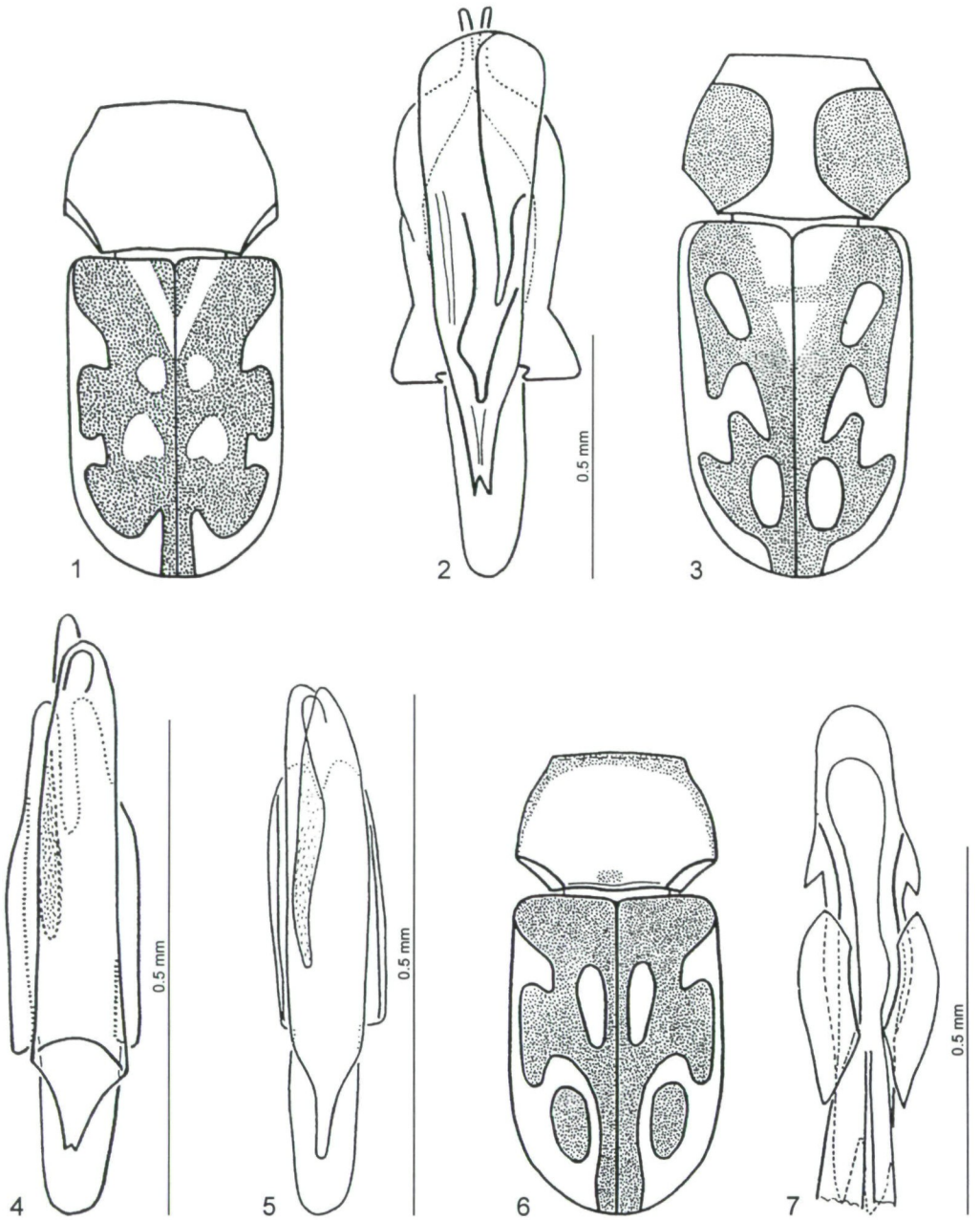
Heterocerus pavliceki sp.n.

TYPE LOCALITY: "Namibia Caprovi Zipfel, Katimo Mulilo".

TYPE MATERIAL: Holotype ♂: "Namibia Caprovi Zipfel, Katimo Mulilo, 15-26. I. 1995, M. Snizek leg.". Allotype ♀: same data as holotype. Paratypes: 32 specimens, same data as holotype. Holotype, allotype and 30 paratypes are deposited in the author's collection, 2 paratypes are housed in the collection of A. Mascagni, Scandicci, Italy.

DESCRIPTION: Holotype ♂: Total length 4.7 mm; elytra 2.9 mm long, 1.7 mm wide across shoulders. Colour brown to black; labrum laterally pale brown; mandibles rusty-brown; elytra with orange spot (Fig. 1); legs orange, protibia with darker lateral margin. Labrum longer than wide, softly granulate; densely setose. Mandibles dentate with acute apex. Antennae 11-segmented, with 7-segmented apical club; antennomeres 2 and 3 with sparse, long, erect setae. Clypeus with a pair of anterior horns; with dense, short, pale setae. Head finely punctate; setae dense, short. Pronotum (Fig. 1) as wide as elytra; softly granulate; pronotal base completely rimmed, lateral margin serrate in posterior 0.5; disc with short, adpressed setae, lateral margins with long, erect setae. Scutellum oblong, pointed. Elytra softly granulate; shoulders and anterior part of lateral margin serrate. Each elytron with 6 longitudinal ridges; setae short, yellowish and semierected. Ventral surface sparsely setose. Metasternum with a post-mesocoxal ridge. Stridulatory arch marked with striae. Post-metacoxal line absent.

Tibiae densely setose with intermixed sparse, long, erect setae. Protibia with 9 stout spines, meso- and metatibia with 8 weak spines. Spiculum gastrale V-shaped. Aedeagus (Fig. 2) 1.2 mm long; vaginate; tegmen with narrow parameres; lateral arms of phallobase well sclerotized; median lobe without a long, narrow, projectable processus accessorius.



Figs. 1 - 2: *Heterocerus pavliceki* sp.n., holotype: 1) pronotum and elytra, dorsal view; 2) aedeagus, dorsal view. Figs. 3 - 4: *Augyles namibiensis* sp.n., holotype: 3) pronotum and elytra, dorsal view; 4) aedeagus, dorsal view. Fig. 5: *Augyles niloticus*, aedeagus, dorsal view, after CHARPENTIER (1965). Figs. 6 - 7: *Augyles rejseki* sp.n., holotype: 6) pronotum and elytra, dorsal view; 7) aedeagus, dorsal view. Figs. 1, 3, and 6 not to scale.

Allotype ♀: Total length 4.9 mm; elytra 3.1 mm long, 1.8 mm wide across shoulders. Clypeus without anterior horns. Mandibles differently shaped, smaller and more inflexed.

Variability: No substantial morphological variability observed in the type series.

DIFFERENTIAL DIAGNOSIS: Due to the shape of the aedeagus, the presence of clypeal horns in male and the serrate shoulders and anterior part of pronotum, *Heterocerus pavliceki* sp.n. belongs to the *bredoi* group sensu CHARPENTIER (1965). It is probably related to *H. sennarensis* GROUVELLE, 1909 and *H. snizeki* SKALICKY, 1996 from which it differs in the different elytral pattern and in the morphology of the male genitalia; see CHARPENTIER (1965) and SKALICKY (1996). *Heterocerus pavliceki* sp.n. differs from the latter two species by the asymmetrical dorsolateral folds of the median lobe, the right fold (in dorsal aspect) being very broad and conspicuously excised. Moreover it differs from *H. snizeki* by the rounded anterior margin of median lobe (emarginate in *H. snizeki*) as well as by the separated parameral apices (tightly articulated in *H. snizeki*).

DISTRIBUTION: So far known only from the type locality.

ECOLOGY: All specimen were collected at light.

ETYMOLOGY: The new species is dedicated to my friend Dr. Tomás Pavliček (Haifa, Israel).

Augyles namibiensis sp.n.

TYPE LOCALITY: "Namibia Caprovi Zipfel, Katimo Mulilo".

TYPE MATERIAL: Holotype ♂: "Namibia, Caprovi Zipfel, Katimo Mulilo, 15-26. I. 1995, M. Snizek leg.". Allotype ♀: same data as holotype. Paratypes: 30 specimens, same data as holotype. Holotype, allotype and 28 paratypes are deposited in the author's collection, 2 paratypes are housed in the collection of A. Mascagni, Scandicci, Italy.

DESCRIPTION: Holotype ♂: Total length 2.6 mm; elytra 1.6 mm long, 0.95 mm wide across shoulders. Colour dark brown; pronotum with pale brown design; elytra with orange design (Fig. 3); basal antennomeres, mandibles, legs and abdomen pale brown. Clypeus without anterior horns. Mandibles dentate with acute apex. Antennae10-segmented, with 6-segmented apical club. Pronotum as wide as base of elytra; pronotal base completely rimmed; finely granulate; setae fine, sparse. Scutellum oblong, pointed. Elytra without longitudinal ridges; surface finely irregularly punctate; setae short, pale and adpressed. Ventral surface with adpressed, thin setae, with single longer hairs. Metasternum with a post-mesocoxal ridge. Stridulatory arch marked with striae. Post-metacoxal line present. Legs with adpressed setae; protibia with 9 spines, meso- and metatibia with 7 spines. Spiculum gastrale Y-shaped. Aedeagus (Fig. 4) 0.6 mm long, narrow; tegmen with deeply separated parameres; aedeagus with a projectable processus accessorius.

Allotype ♀: Total length 2.5 mm; elytra 1.6 mm long, 0.9 mm wide across shoulders. Secondary sexual dimorphism not pronounced.

Variability: No substantial morphological variability observed.

DIFFERENTIAL DIAGNOSIS: Due to the complete abdominal ridges on the ventrite 1, this species belongs to the genus *Augyles*. Furthermore it belongs to the *cribratellus* group sensu CHARPENTIER (1965) due to the shape of the aedeagus. This group contains three species with 10-segmented antennae, *Augyles flavidus* (ROSSI, 1794), *A. niloticus* (GROUVELLE, 1896) and *A. pallens* (CHARPENTIER, 1965), the latter two also possessing clypeal horns in males. *Augyles namibiensis* is probably related to *A. niloticus* from which it differs by the absence of clypeal horns in males and the differently shaped aedeagus: parameres are more deeply separated and apically distinctly narrower in *A. namibiensis* than in *A. niloticus* (Fig. 5). The elytral pattern is very variable in *A. niloticus* and cannot be used for a safe determination. Moreover, *A. niloticus*

is known from North Africa (Morocco, northen Algeria, Egypt and Sudan) (CHARPENTIER 1965) whereas *A. namibiensis* is so far known only from Namibia.

DISTRIBUTION: So far known only from the type locality.

ECOLOGY: All specimens were collected at light.

ETYMOLOGY: Named in reference to the type locality.

Augyles rejseki sp.n.

TYPE LOCALITY: W Thailand, Umphang.

TYPE MATERIAL: Holotype ♂: "W THAILAND, Umphang, 20. X. 1994, J. Rejsek. leg.". Allotype ♀: same data as holotype. Paratypes: 21 specimens, same data as holotype. Holotype, allotype and 13 paratypes deposited in the author's collection, 4 paratypes in the collection of A. Mascagni, Scandicci, Italy, 4 paratypes in the collection of Jiri Rejsek, Podebrady, Czech Republic.

DESCRIPTION: Holotype ♂: Total length 3 mm; elytra 1.7 mm long, 1.1 mm wide across shoulders. Colour dark brown; labrum, clypeus, head and abdomen brownish black; mandibles reddish brown; pronotum brown anteriorly and reddish laterally, with a reddish spot anterior to scutellum; elytra with a pale brown spot (Fig. 6). Labrum almost square, softly granulate; laterally with dense, yellowish setae. Mandibles without lateral tooth. Clypeus without anterior horns. Antennae 11-segmented, with a 7-segmented apical club.

Pronotum as wide as elytra; finely granulate, with adpressed, yellowish setae; pronotal base completely rimmed. Scutellum rounded. Elytra softly granulate, pubescence as on pronotum, short; with faint subhumeral impressions; without epipleural ridges. Each elytron with 6 longitudinal ridges. Ventral surface with adpressed thin setae with single longer hairs. Metasternum with a post-mesocoxal ridge. Stridulatory arch marked with striae. Post-metacoxal line present. Protibia with 11 strong spines, mesotibia with 10 and metatibia with 9 weak spines.

Spiculum gastrale V-shaped. Aedeagus (Fig. 7) 0.7 mm long, narrow; tegmen without parameres, anterior margin rounded, lateral margin in anterior 0.3 strongly dentate. Lateral arms of phallobase vaginate. Supporting sheath posteriorly excised. Aedeagus posteriorly deeply excised; without internal sac and without processus accessorius.

Allotype ♀: Total length 3.4 mm; elytra 2.0 mm long, 1.4 mm wide across shoulders. Secondary sexual dimorphism not pronounced.

Variability: Size: ♂♂ length 2.6 - 3.0 mm; ♀♀ length 2.2 - 2.3 mm. Elytral markings partially variable in the type series. Elytral longitudinal ridges only slightly indicated in some paratypes.

DIFFERENTIAL DIAGNOSIS: *Augyles rejseki* sp.n. is probably related to *A. hiekei* (MASCAGNI, 1995) described from Vietnam. It differs from the latter in the elytral pattern and in the structure of male genitalia. In *A. hiekei*, the lateral margin of tegmen is evenly curved, not dentate; the supporting sheath is posteriorly rounded, not excised (MASCAGNI 1995).

DISTRIBUTION: So far known only from the type locality.

ECOLOGY: All specimens were collected at light.

ETYMOLOGY: Named after Jiří Rejsek (Poděbrady, Czech Republic) who collected the type series.

Distributional notes

H. fenestratus THUNBERG, 1784

MATERIAL EXAMINED: 36 specimens, "W THAILAND, Umphang, 20. X. 1994, J. Rejsek. leg.".

DISTRIBUTION: Palearctic, the Philippines, Canada, United States.

A. anulatus (MASCAGNI, 1991)

MATERIAL EXAMINED: 18 specimens, "W THAILAND, Umphang, 20. X. 1994, J. Rejsek. leg.".

DISTRIBUTION: *A. anulatus* was so far know from Cambodia and Vietnam (MASCAGNI 1991). First record for Thailand.

H. thebaicus GROUVELLE, 1896

MATERIAL EXAMINED: 89 specimens, "Namibia, Caprovi Zipfel, Katimo Mulilo, 15.-26.I.1995, M. Snizek leg.".

DISTRIBUTION: Widely distributed in Africa, except East Africa and Madagascar (CHARPENTIER 1965).

H. vulpes GROUVELLE, 1906

MATERIAL EXAMINED: 26 specimens, "Namibia, Caprovi Zipfel, Katimo Mulilo, 15.-26.I.1995, M. Snizek leg.".

DISTRIBUTION: Madagascar, South Africa (CHARPENTIER 1965).

Acknowledgements

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References

CHARPENTIER, R. 1965: A monograph of the family Heteroceridae (Coleoptera) of the Ethiopian Region. - South African Animal Life 11: 214-343.

MASCAGNI, A. 1991: Contributo alla conoscenza degli Heteroceridae del Burma e della Cambogia con descrizione di *Heterocerus anulatus* n. sp. (Insecta: Coleoptera: Heteroceridae). - Redia 74(1): 15-28.

MASCAGNI, A. 1995: Heteroceridae: Check list of the Heteroceridae of China and neighbouring countries, and description of two new species (Coleoptera), pp. 341-348. - In M.A. Jäch & L. Ji (eds.): Water Beetles of China, Vol. I. - Zoologisch - Botanische Gesellschaft in Österreich and Wiener Coleopterologenverein, Wien, 410 pp.

SKALICKÝ, S. 1996: A new species of Heteroceridae from Tanzania (Coleoptera: Heteroceridae). - Klapalekiana 32: 237-239.

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