

**A checklist of Heteroceridae of Pakistan, with description of
Augyles hameti sp. nov. (Coleoptera: Heteroceridae)**

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SKALICKÝ S. 2021: A checklist of Heteroceridae of Pakistan, with description of *Augyles hameti* sp. nov. (Coleoptera: Heteroceridae). *Acta Musei Moraviae, Scientiae biologicae* **106(2)**: 351–355. – *Augyles hameti* sp. nov. from Pakistan is described, illustrated and compared with similar species. A checklist of Heteroceridae from Pakistan is provided.

Keywords. *Augyles*, checklist, Coleoptera, Heteroceridae, new species, Pakistan, taxonomy

Introduction

Our knowledge of the Heteroceridae fauna of Pakistan is relatively good compared to the neighbouring countries. 15 species have been known so far, with the newly described *A. hameti* sp. nov. increasing the number to 16 (8 species of *Augyles* Schiödte, 1866 and 8 species of *Heterocerus* Fabricius, 1792). *Augyles atratus* (Grouvelle, 1896), *A. bellus* (Grouvelle, 1911), *A. feae* (Grouvelle, 1896), *A. marshalli* (Mamitza, 1928), *A. royi* Skalický, 2005, *A. scharlottae* Skalický, 2005, *A. siyo* (Mascagni, 1995), and *A. skalei* Skalický, 2001 with locality “East Pakistan, Dinajpur” are in fact distributed in Bangladesh (SKALICKÝ 2005). In Mascagni (2006), the species of *A. indicus* (Motschulsky, 1858) is attributed to Pakistan without further locality data. I am not aware of any record of this species from Pakistan and I consider this species to be uncertain in Pakistan.

During the study of unidentified Heteroceridae collected by Dr. A. Hamet (Hradec Králové, Czechia) in the Pakistan province of Balochistan and deposited in the collection of the National Museum of Natural History, I identified one species: *A. hameti* sp. nov. which is described herein. *A. hameti* sp. nov. is close to the widespread *A. turanicus* (Reitter, 1887). A checklist of Heteroceridae with their occurrence in the provinces and autonomous territories of Pakistan is provided below.

Methods

The following acronyms are used in the text to indicate the depository of the material examined:

CSU Coll. S. Skalický, Ústí nad Orlicí
NMP National Museum of Natural History, Prague

Separate labels are indicated by double slashes, locality data are cited verbatim in “quotation marks”. Author’s remarks are given in square brackets.

Checklist of Heteroceridae of Pakistan

The administrative units of Pakistan consist of four provinces (Balochistan, Khyber Pakhtunkhwa, Punjab, Sindh), two autonomous territories (Azad Jammu and Kashmir, Gilgit-Baltistan) and one federal territory (Islamabad Capital Territory).

<i>Augyles cantus</i> Miller, 1995	Pakistan, without further data
<i>Augyles flavidus</i> (Rossi, 1794)	Balochistan Prov.
<i>Augyles hameti</i> sp. nov.	Balochistan Prov.
<i>Augyles kolibaci</i> Skalický, 1998	Punjab Prov.
<i>Augyles manfredjaechi</i> (Mascagni, 1995)	Punjab Prov.
<i>Augyles pucholti</i> Skalický, 2001	Punjab and Sindh Prov.
<i>Augyles stipebozici</i> Mascagni et Rada, 2012	Khyber Pakhtunkhwa Prov.
<i>Augyles uncis</i> Miller, 1995	Gilgit Baltistan territories
<i>Heterocerus dubius</i> Fabricius, 1801	Sindh Prov.
<i>Heterocerus flexuosus</i> Stephens, 1828	Sindh Prov.
<i>Heterocerus holosericeus</i> Rosenhauer, 1856	Sindh Prov.
<i>Heterocerus lorenzevae</i> Mascagni, 1993	Balochistan and Sindh Prov.
<i>Heterocerus mus</i> Charpentier, 1965	Balochistan and Sindh Prov.
<i>Heterocerus nepalensis</i> Mascagni, 1993	Balochistan and Sindh Prov.
<i>Heterocerus persicus</i> Mascagni, 1989	Khyber Pakhtunkhwa and Sindh Prov.
<i>Heterocerus virgatus</i> Mamitza, 1933	Sindh Prov.

The checklist is based on the following references: AHMED *et al.* (2015), MASCAGNI (2003, 2006), MASCAGNI & RADA (2012), MASCAGNI & SFORZI (1999), SKALICKÝ (2005, 2019).

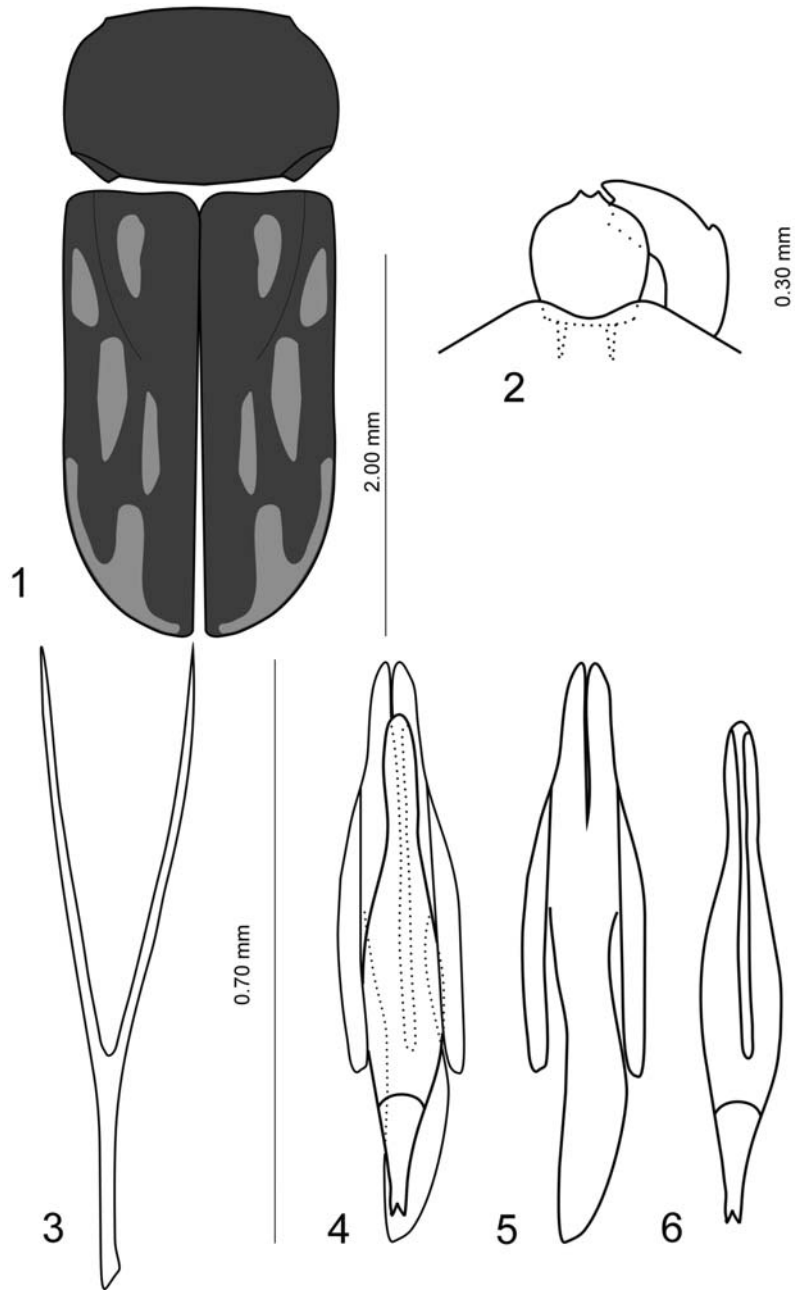
Taxonomy

Augyles hameti sp. nov.

(Figs 1–6)

Type material. Holotype ♂: “PAKISTAN [Balochistan Province] QUET[T]A 5.8.1980 dr. A. Hamet leg.” // “Holotype *Augyles hameti* Skalický det. Skalický 2020” [red label] (NMP); Paratype (Allotype) (♀): the same locality data as holotype, the second red label is: “Allotype *Augyles hameti* Skalický det. Skalický 2020” [red label] (NMP); Paratypes: 84 specimens (10 ♂♂, 74 ♀♀): the same locality data as holotype, the second red label is: “Paratype *Augyles hameti* Skalický det. Skalický 2020” (6 ♂♂, 68 ♀♀ NMP, 4 ♂♂, 6 ♀♀ CSU). Some of the paratypes are mounted in groups of four specimens on single rectangular cards.

Description. Holotype ♂: Total length 3.55 mm (incl. labrum); elytra 2.30 mm long, 1.40 mm wide across shoulders. Body uniformly dark brown to black, elytra with diffuse poorly visible rusty brown spots as in Fig. 1 (these spots are visible when elytra are wet); tibiae dark brown laterally. Ventral side brown. Mandibles (Fig. 2 male paratype) short, robust and curved; dorsal subapical tooth rounded, lateral margin bluntly dentate. Prosthema without notch, series of teeth at interior side sparse. Labrum (Fig. 2 male paratype) with visible part as wide as long, anterior margin pointed, surface finely granular, anterior margin serrate with dense short setae. Antennae 11-segmented, with 7-segmented club. Clypeus (Fig. 2 male paratype) without anterior horns; anterior margin



Figs 1–6. *Augyles hameti* sp. nov. male: 1 – elytra and pronotum, dorsal view; 2 – right mandible, labrum and clypeus, dorsal view; 3 – spiculum gastrale, dorsal view; 4 – aedeagus, dorsal view; 5 – tegmen, dorsal view; 6 – penis, dorsal view. (Figs 1, 3–6 holotype, Fig. 2 paratype.)

deeply emarginate, surface roughly punctured, with intermixed bigger punctures; setae short, white, adjacent. Head finely granular, setae short, adjacent, without longer setae. Pronotum oval, wider than long (ratio 1.95: 1), slightly narrower than base of elytra; pronotal base completely rimmed. Surface of pronotum densely microgranular with intermixed punctures approximately as large as eye facets. Setae on pronotum yellowish, short, adjacent, sparse, without longer setae. Scutellum pointed, triangular, twice as long as wide; anterior margin convex, under the level of elytral surface. Elytra without longitudinal furrows; humeral depression fairly distinct, extending obliquely towards suture at one quarter of elytron, without scutellar depressions. Surface of elytra very densely microgranular with intermixed punctures approximately as large as 1.5 times eye facets. Setae on elytra pale, dense, adjacent, without intermixed longer setae. Epipleural ridges present. Ventral surface relatively densely and coarsely granular; setae adjacent, short. Metaventricle with post-mesocoxal ridge. Mesoventrite U-shaped, neither spinose nor tuberculate in front of each mesocoxa, prosternal spine wide. Post-metacoxal line complete. Stridulatory arch marked with striae. Protibia with 11 stout spines, mesotibia with 10 weak, long spines. Spines of metatibia broken (10 spines occurring in male paratypes). Spiculum gastrale (Fig. 3) V-shaped, 0.85 mm long, arms narrow, connected apically by membrane. Aedeagus (Figs 4–6) elongate, 0.70 mm long, well sclerotized; parameres long, fused with phallobasis. Supporting sheath bordered posteriorly. Penis long and narrow, with long pointed processus accessorius.

Paratype (Allotype) ♀: Total length 3.75 mm (to apex of labrum); elytra 2.50 mm long, 1.50 mm wide across shoulders. Pronotum slightly wider than base of elytra, externally similar to male.

Variability. Size: length 3.40–4.10 mm. Elytral pattern partly variable, very faint in some specimens. No other substantial morphological variability observed in the type series.

Differential diagnosis. In external characters (such as total length, shape of mandibles, presence of epipleural ridges, punctation of body), this species is extremely similar to *A. turanicus* (Reitter, 1887) with a Turano-Mediterranean chorotype. *A. turanicus* is distinguished by the colour, (pale brown to brown with clearly visible dark spots on elytra) and in morphology of male genitalia (*cf.* LITOVKIN & SAZHNEV 2018: figs 1–3 vs. Figs 1–6 herein).

Etymology. Dedicated to Dr. A. Hamet (Hradec Králové, Czechia), collector of the type series.

Acknowledgements

I wish to thank Jiří Hájek (NMP) for the loan and gift of Heteroceridae and Maxwell V. L. Barclay (Natural History Museum, London, England) for his valuable comments.

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