

A new species in the genus *Dyschirius* Bonelli, 1810 (Coleoptera: Carabidae: Scaritinae) from Bangladesh

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Abstract. A new species, *Dyschirius bendai* sp. nov. is described from Bangladesh. The new species is figured including the male genitalia and differentiated from the nearest species. Three most southeastern species of the genus are keyed.

INTRODUCTION

The scaritine genus *Dyschirius* Bonelli, 1810 in the narrower sense of Fedorenko (1996) comprises 19 species with 5 subspecies; almost all of them were redescribed and keyed in Fedorenko (1996), subsequently Bulirsch (2018) established another species from Nepal. The taxa of this genus are predominantly distributed in the Palearctic region; only two of them marginally occurring also in the northeastern part of the Ethiopian Region. To date only two species (either in single or in very few type specimens) are known from nearby borders of the Oriental Region: *D. tricuspis* Andrewes, 1929 from North India (Uttarakhand) and *D. weigeli* Bulirsch, 2018 from Nepal (Annapurna, Birethanti, 1100 m). A new species described below from Bangladesh is the first taxon known from the Oriental Region.

MATERIAL AND METHODS

The study of dry-mounted specimens, including measurements and examination of microsculpture, was done at a magnification up to 98×. All specimens were measured. Length of body (including closed mandibles) is given with accuracy 0.05 mm, ratios and means are indicated to two decimal places. Label data of all specimens are quoted verbatim except standardized data. Aedeagi were fixed in Euparal on a separate label and placed on the same pin below the beetle.

Macrophotographs were taken by the second author using a Nikon D2X or D800 digital camera, applied to a Nikon Labophot II binocular optical microscope or a Nikon SMZ 1000 stereomicroscope, with diaphragmed lenses.

For comparison, types of the species from the nearest areas were studied, the HT and one PT of *D. tricuspis* Andrewes, 1929 (BMNH) and HT of *D. weigeli* Bulirsch, 2018 (NKME)

as well as several specimens of all known taxa of the genus (including samples of the type material) from diverse museums, very extensive material in the first author's collection, and finally, recently revised material from several other collections.

The following abbreviations are used to indicate the depository of specimens:

BMNH Natural History Museum, London, United Kingdom;

NKME Naturkundemuseum, Erfurt, Germany;

NMPC National Museum, Praha, Czech Republic;

PBPC Petr Bulirsch, private collection, Praha, Czech Republic.

Other abbreviations:

ASP: apical setiferous puncture(s); SP: setiferous puncture(s); BSP: basal (prescutellar) setiferous puncture(s); DSP: dorsal setiferous puncture(s); PHSP: posthumeral setiferous puncture(s); PASP: preapical setiferous puncture(s), HT: holotype(s); PT: paratype(s); L.: length of specimen(s).

RESULTS

Genus *Dyschirius* Bonelli, 1810

Dyschirius bendai sp. nov.

(Figs. 1-4)

Type material. Holotype (♂): Bangladesh, Dhaka / Chowbari, Chokdoi, sands / near river Jamuna, light trap / 24.2567[°N] 89.7860[°E], 13 m / 3.xii.2022, D. Benda lgt., (NMPC). Paratypes: (2 ♂♂, 1 ♀): with the same data as HT, (NMPC, PBPC).

Description. Length 3.00-3.15 mm (in HT 3.05 mm). Dark fuliginous, with green-bronze lustre, in HT legs and most antennomeres black, mouthparts and partially basal antennomeres barely lighter; in PT (all slightly teneral) all appendages slightly lighter.

Head. Anterior margin of clypeus between distinct lateral lobes forming rather small, moderately sharp median tooth, transverse clypeofrontal furrow deep and broad; facial furrows in posterior half slightly, almost directly divergent posteriorly, anteriorly very broad, posteriorly narrowing towards level of posterior margin of eyes. Surface below clypeofrontal furrow vaulted, moderately shiny with indistinct microreticulation. Eyes large, moderately vaulted. Antennomeres 5-10 moniliform.

Pronotum. Strongly convex, 1.11-1.15 (in HT 1.12) times as wide as long, 1.32-1.37 (in HT 1.35) times as wide as head; moderately strongly attenuated anteriorly, broadest posteriorly at midlength; sides regularly, moderately strongly rounded; anterior angles narrowly, posterior ones broadly rounded. Front transverse impression deep, roughly and transversely striate; median line rather deeply and broadly impressed, finer anteriorly; lateral channel fine, reflexed lateral margin extended distinctly below posterior SP. Surface with several irregular wrinkles mixed with sparse micropunctures, anteriorly and on basal inclination with rest of fine reticulation.

Elytra. Ovate, indistinctly concave in basal fourth in lateral view; 1.60-1.65 (in HT 1.60) times long as wide, 1.22-1.28 (in HT 1.27) times as wide as pronotum; base very slightly

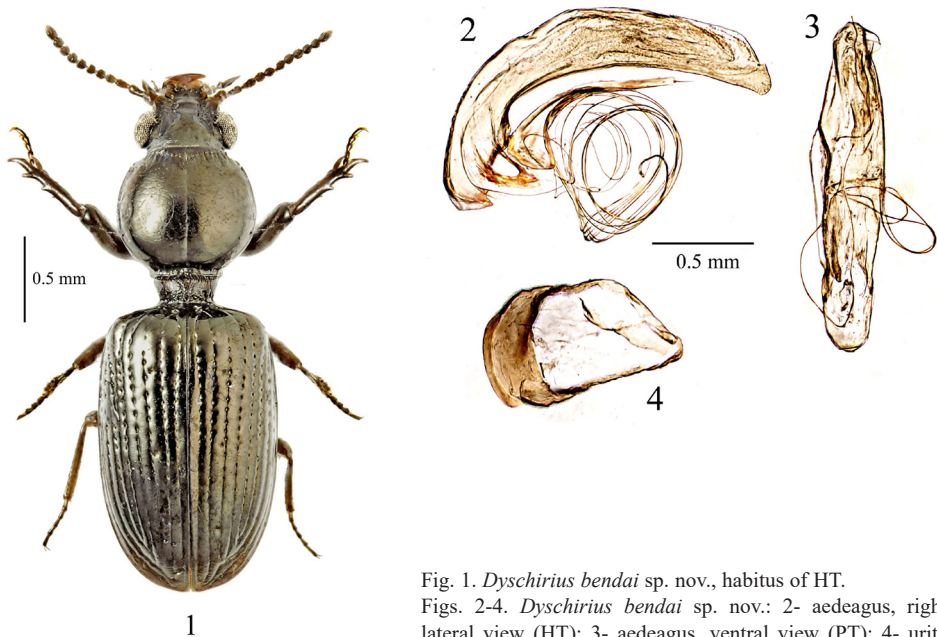


Fig. 1. *Dyschirius bendai* sp. nov., habitus of HT.
 Figs. 2-4. *Dyschirius bendai* sp. nov.: 2- aedeagus, right lateral view (HT); 3- aedeagus, ventral view (PT); 4- urite IX (HT).

sloping to narrowly rounded humeri, latter strongly protruding; sides in basal half slightly convex, broadest above midlength; suture rather slightly depressed at base. Surface of disc shiny, very apex with reticulation. Base bordered, bilaterally with two small, rather sharp tubercles and with distinct BSP, latter deeply connected with stria 1 and superficially with stria 2. Elytral striae 1-8 deep, striae 2-3 weakened and 4-5 deepened basally, 8 shortened basally, striae 2-6 not weakened apically; striae with rough punctures, latter rather dense in basal half, disappearing medio-basally, inner striae, especially striae 4-5 prolonged on basal inclination. Intervals (6)7-8 on apex strongly convex, others apically moderately strongly convex. Three DSP (in interval 3 near stria 3), two PHSP and two ASP (in deep apical stria).

Protibiae. Apical spine slightly curved downwards not inwards, not shorter than moderately curved apical spur; distal marginal tooth large, proximal one smaller, sharp.

Male genitalia. Median lobe of aedeagus as in Figs. 2-3: laterally with lower margin slightly concave and with rather short, broadly rounded apex; at base with filiform, spring-like spiral of several coils; larger paramera long, narrow, with seta at tip; urite IX as in Fig. 4.

Differential diagnosis. *D. bendai* sp. nov. belongs to the *D. humeratus* group sensu Fedorenko (1996), and it is closely related to *D. tricuspis* Andrewes, 1929 from North India. It differs by the body being slightly smaller (body length is about 3.5 mm in *D. tricuspis*) and by having the appendages much darker; by the pronotum being broader (especially compared to the width of the head and the width of the elytra), having rests of reticulation,

by the lateral margin being less convex and having the anterior impression deeper, with the much longer transverse striation.

Name derivation. Patronymic, in honour of Daniel Benda (NMPC), collector of the new species.

KEY TO *DYSCHIRIUS* SPECIES OCCURRING IN SOUTHEASTERN
PART OF GENUS DISTRIBUTION AREA (INDIA, BANGLADESH, NEPAL)

(all these species can be differentiated from the other taxa of *D. humeratus* group, distributed in more north / north-west areas, by comparable deeper elytral striae)

- 1(2) Elytra longer (about 1.7 times as long as broad), elytral base without tubercles. L. 3.35 mm. Nepal.
..... *D. weigeli* Bulirsch, 2018
- 2(1) Elytra shorter (less than 1.66 times as long as broad), elytral base with two pairs of small tubercles. North India and Bangladesh.
- 3(4) Pronotum narrower, less than 1.1 times as broad as long, elytra about 1.4 times as broad as pronotum. Appendages ferruginous. Larger, L. about 3.40-3.55 mm. North India. *D. tricuspis* Andrewes, 1929
- 4(3) Pronotum broader (more than 1.1 times as broad as long, elytra less than 1.3 times as broad as pronotum). Appendages nearly black (in mature specimens). Smaller, L. 3.00-3.15 mm. Bangladesh. *D. bendai* sp. nov.

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