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**Bidessus species (Coleoptera, Dytiscidae) from Africa,  
with the description of *Bidessus excavatus* n.sp.  
(Contribution to the study of Dytiscidae 27)**

by **O. Biström**

Abstract: *Bidessus excavatus* n.sp. belonging to the species group *B. sharpi* is described from the Central African Republic. New faunistic records are: *B. sharpi* Régimbart from Gambia, *B. complicatus* Sharp from Gabon, *B. glabrescens* Biström from Gambia, *B. toumodiensis* Guignot from Senegal and Central African Republic and *B. sodalis* Guignot from Senegal and Ethiopia.

Recently I received, unfortunately too late to be included in a revision of the species group *Bidessus sharpi* (BISTRÖM 1984), from Dr Michel Brancucci, Basle Museum, Switzerland, some *Bidessus* material which proved to include some faunistically interesting records, together with five specimens belonging to an undescribed species. The description of the new species and a list of the other species are given here. Detailed information from the labels are only given for the interesting finds; for the rest, the country in which the specimens have been collected is mentioned.

**List of species**

***Bidessus*, sp. group *B. sharpi***

Subgroup *B. sharpi*

***Bidessus excavatus* n. sp.**

Fig. 1.

Type locality: Bozo, Central African Republic.

Diagnosis: The new species undoubtedly belongs to the subgroup *B. sharpi* in the sp. group *Bidessus sharpi*. Closest to *B. longistriga* and *B. sharpi*. The new species is distinguished from *B. longistriga* by having apically straight elytral striae (elytral striae apically sinuate in *B. longistriga*). Females of *B. excavatus* are characterized by the characteristic and strongly modified apical sternite (females of other *Bidessus* species in sp. group *B. sharpi* have simple apical sternites). Males of the new species are characterized by the long, straight elytral striae in combination with specific colour pattern on elytra, by coarse and dense punctation between sutural lines and elytral striae, and by the head the

colour of which is generally distinctly darker compared with the main colour of the pronotum. For characteristics and illustrations of the other species in sp. group *B. sharpi*, see BISTRÖM (1984).

Head brownish, in some specimens head anteriorly and posteriorly testaceous. With rather fine and sparse punctation, except posterior to cervical line, impunctate. Frontally and at eyes finely and partly rather indistinctly microsculptured. Vertex and area close to cervical line shiny, lacking microsculpture or with very fine, indistinct microsculpture. Foremargin of head rounded. Head frontally transversally depressed. Antennae with segment 1–4 or 5 testaceous, and segment 5 or 6–11 pale brownish to brownish.

Pronotum testaceous, at anterior margin narrowly brownish, basally between striae blackish to blackish ferruginous (Fig. 1a). Punctation very fine, partly indistinct, sparse, except anteriorly on a narrow area slightly coarser, denser, and basally between striae, punctation coarse, fairly dense. Shiny, not microsculptured. Striae very strongly impressed. Pronotum broadest at posterior corners. Sides of pronotum rounded, anteriorly more strongly curved than posteriorly. Angle between pronotum and elytra rather indistinct.

Elytra black to blackish ferruginous, with testaceous to pale ferruginous markings which are slightly variable (Fig. 1a). Punctation between sutural lines and elytral striae coarse and fairly dense, outside striae and posteriorly somewhat finer. Shiny, not microsculptured. Sutural lines fairly distinct, except posteriorly where they disappear for a rather short distance. Separate punctures visible in sutural lines. Elytral striae long, straight, strongly impressed. Lateral row of punctures very indistinct. Epipleura dark ferruginous to ferruginous, not microsculptured, shiny, almost impunctate.

Ventral side: Prothorax almost totally testaceous, ventral side otherwise black to blackish ferruginous, except apical sternite and area at metacoxal lines, ferruginous to dark testaceous. Prothorax almost impunctate. Metathorax with a few fairly coarse punctures and at each side of midline with a distinct row of fairly coarse punctures. Metacoxal plates with coarse punctures medially. Abdomen with very fine, sparse punctation which is partly lacking, except basally on each side, having transversally placed coarse punctures. Shiny, microsculpture almost totally lacking. Metacoxal lines slightly curved, distinctly divergent.

Legs: Pale ferruginous to testaceous.

Aedeagus: Fig. 1b–d.

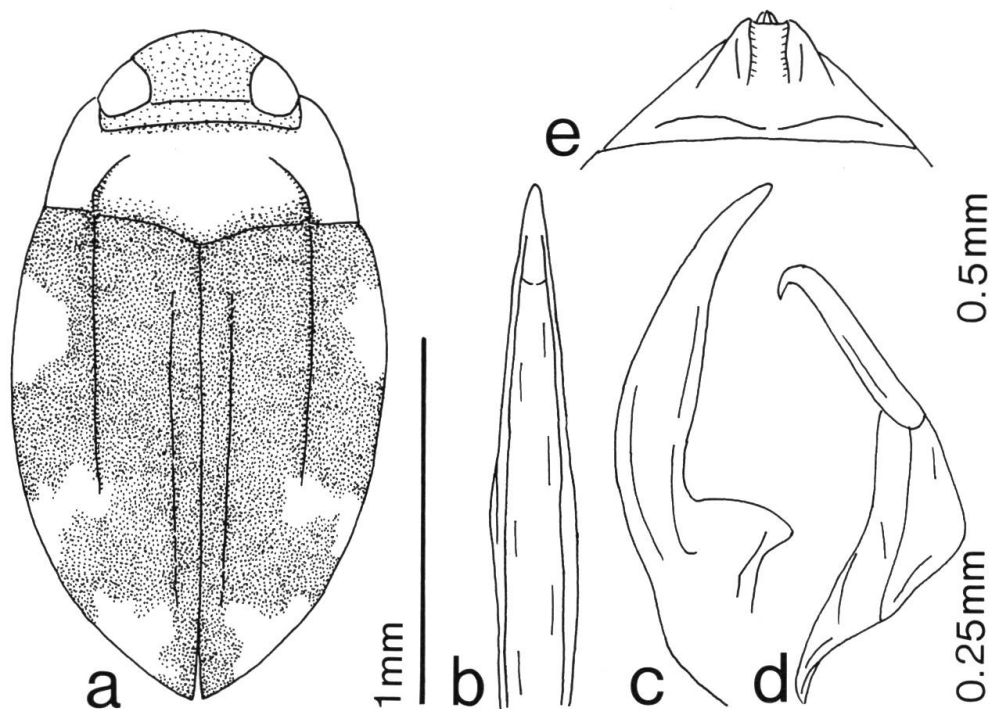


Fig. 1. *Bidessus excavatus* n.sp.: a, habitus. b, penis, dorsal view. c, penis, lateral view. d, paramere. e, female apical sternite. Scale 1 mm, habitus; scale 0.25 mm, genitalia; scale 0.5 mm, sternite.

Female: Apical sternite strongly modified (Fig. 1e).

Length: 1.7 mm, width: 0.9–1.0 mm.

Type material: Holotype ♂ (coll. M. Brancucci) and 2 paratypes (coll. M. Brancucci and Zool. Mus., Helsinki): R. Centre Africaine, Bozo, VII.1981, N. Degallier. 2 paratypes (coll. M. Brancucci and Zool. Mus., Helsinki): Idem, VIII.1981.

Distribution: Central African Republic.

Biology: Unknown.

### ***Bidessus sharpi* Régimbart**

Material studied: Gambia: Abuko Nat. Res., at light, at the Bambo pool 18.30–20.30, 18.XI. 1977, UTM28PCK2181 (4 ex., Zool. Mus., Lund); Riv. Tanji 3 km SW Brufut, at light 19.00–21.00, 28.XI. 1977, UTM28PCK087773 (3 ex., Zool. Mus., Lund); Oil palm and mangrove veg. close to beach about 5 km SSW Gunjur, at light 19.00–22.00, 22.II. 1977, UTM28PCK05-54 (2 ex., Zool. Mus., Lund); Outside Abuko Nat. Res., at water works, at light 18.30–21.00, 4.XI. 1977, UTM28PCK215812 (1 ex., Zool. Mus., Lund).

Senegal: (13 ex., Zool. Mus., Lund).

Ethiopia: (1 ex., coll. M. Brancucci).

Remark: first record from Gambia

**Bidessus complicatus** Sharp

Material studied: Ethiopia: (12 ex., coll. M. Brancucci).

Gabon: Makokou 1–14.V. 1971/Gabon (21 ex., coll. M. Brancucci).

Remark: First record from Gabon.

**Bidessus glabrescens** Biström

Material studied: Gambia: Abuko Nat. Res., at light at the Bambo pool 18.30–20.30, 18.XI. 1977, UTM28PCK2181 (6 ex., Zool. Mus., Lund); Outside Abuko Nat. Res., at water works, at light 18.30–21.00, 4.XI. 1977, UTM28PCK215812 (2 ex., Zool. Mus., Lund); Riv. Tanji 3 km SW Brufut, at light 19.00–21.00, 28.II. 1977, UTM28PCK087773 (2 ex., Zool. Mus., Lund).

Remark: First records from Gambia.

Subgroup *B. ovoideus***Bidessus** sp.?

Material studied: Cameroon: Marais de Santa, 1900 m/Cameroun (1 ex., Muséum de Paris).

Remark: The studied specimen is a female and it probably belongs to a species close to *B. cacozelus*.

**Bidessus toumodiensis** Guignot

Material studied: Senegal: 3 km SSW Toubakouta, 10 km S Ziguinchor, at light 19.00–22.00, 4.III. 1977, UTM28PCJ585782 (1 ex., Zool. Mus., Lund).

Cameroon: (6 ex., Muséum de Paris).

Central African Republic: Bozo, VII.1981 (18 ex., coll. M. Brancucci); Bozo, VIII.1981 (6 ex., coll. M. Brancucci); Bozo, XI.1981 (4 ex., coll. M. Brancucci); Bozo, XII.1981 (coll. M. Brancucci).

Remarks: First record from Senegal and Central African Republic.

**B. sodalis** Guignot

Material studied: Senegal: MPAK 11 km S Ziguinchor, at light 19.00–21.00, 8.XI. 1977, UTM28PCJ6479 (1 ex., Zool. Mus. Lund).

Cameroon: (5 ex., coll. M. Brancucci).

Ethiopia: Env. Addis Abeba, 20.VIII. 1969, lum. UV (3 ex., coll. M. Brancucci).

Remarks: First records from Senegal and Ethiopia.

### **Acknowledgements**

I herewith thank Dr Michel Brancucci who kindly sent the material to me for examination.

### **Reference**

BISTRÖM, O. (1984): *A revision of the species group B. sharpi in the genus Bidessus (Coleoptera, Dytiscidae)*. Acta Zool. Fennica (in press).

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