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## **New records and a new species of the genus *Cryptocephalus* GEOFFROY 1762 from Yemen (Coleoptera, Chrysomelidae)**

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**Abstract:** So far, five species of the genus *Cryptocephalus* GEOFFROY were recorded from Yemen. In this study, information about additional three species is given. *Cryptocephalus saudiensis* LOPATIN 1983 and *C. senegalensis* SUFFRIAN 1857 are recorded for Yemen for the first time. A new species, *Cryptocephalus gabbari* nov.spec. from Bajil, Yemen is described.

**Key words:** Cryptocephalinae, *Cryptocephalus*, Palaearctic, Asia, Arabia.

### **Introduction**

In previous studies on the fauna of *Cryptocephalus* GEOFFROY 1762 of Yemen, four species of *Cryptocephalus* s.str. and one species of *Cryptocephalus* subg. *Anteriscus* WEISE were recorded (MEDVEDEV 1996). The communication of undetermined specimens by Dr. Lev Medvedev, Moscow, Russia gave reason to publish new records and describe a new species of *Cryptocephalus*. I am very thankful to my before-mentioned colleague for the possibility to study the specimens from his collection, as well as Dr. Eva Sprecher, Naturhistorisches Museum Basel, for the access to type specimens.

### **Materials and Methods**

The eye length was measured in lateral view, the interocular space in frontal view. Included in this study are specimens located in the following 2 collections. LMPC = Lev Medvedev personal collection, Moskow, Russia; MESC = Matthias Schöller personal collection, Berlin, Germany.

### **Results**

#### ***Cryptocephalus saudiensis* LOPATIN 1983**

*Cryptocephalus saudiensis* LOPATIN 1983: 205

**New for Yemen:** 1♂ (LMPC) Yemen: Al Kadau, ca. 20 km N Bajil, V.2002, light trap. The elytra of the specimen from Yemen has apically a broad black spot only (Fig. 1).

So far known from the type locality in Saudi Arabia (LOPATIN 1983), holotype located in Naturhistorisches Museum Basel, Switzerland.

***Cryptocephalus senegalensis* SUFFRIAN 1857**

*Cryptocephalus senegalensis* SUFFRIAN 1857: 162

New for Yemen: 1♂ (LMPC) Jemen, Medinat al Shir, 07.03.1993

So far known from Saudi Arabia, Egypt, Ethiopia and Senegal (SCHÖLLER 2002).

Characters not mentioned in previous descriptions: The aedeagus of *C. senegalensis* was figured in LOPATIN (1983), here information is added: dorsal central plate present (Fig. 4), orificium wider than central plate, apex ventrally with two semi-transparent areas, "windows" (Fig. 3), three groups of setae are arranged around one window, base of aedeagan lobe ventrally bulked out (Fig. 2).

***Cryptocephalus (Cryptocephalus) gabbari* nov.spec.**

Holotypus (♂, MESC): Yemen: Al Kadau, ca. 20 km N Bajil, 15°14'N 43°17'O, V.2002, light trap.

Paratypus (♂, LMPC): same labelling as holotype.

**Diagnosis**

A yellowish orange species with eyes large and upper lobes close, row of teeth of basal margin of pronotum homogenous and elytra apically with a broad black band. Differs from *C. saudiensis* LOPATIN 1983 in the shape of the aedeagus and in the absence of a humeral spot, and from *C. (Anteriscus) brittoni* BRYANT 1957 in size, puncturation of pronotum, colouration and the shape of the aedeagus.

**Description of holotype**

Habitus. Body medium-sized, shape cylindrical, size [mm]: length 3.2, width of elytra at humeri 1.9, length of pronotum 1.0, width 1.9.

Head. Yellowish orange, vertex black, puncturation dense and coarse, densely covered with white setae, eyes large and upper lobes close, therefore ratio of minimum distance between upper lobes to eye length is 0.8 : 2.7; antenna longer than pronotum i.e. surpassing pronotum by two segments, antennal segments 1-5 yellowish orange, 6-11 brownish orange, 6-11 twice as long as broad; mandibles black.

Thorax. Pronotum orange, glabrous, dull, puncturation fine, dense and shallow, lateral margins not visible simultaneously in dorsal view, frontal, lateral and basal margins yellow, basal margin with a row of 57 black homogenous teeth except for two longer teeth opposite to scutellum; lateral margins with punctures; prothorax broad, apical margin of prothorax with a tooth-like projection, but not covering mouthparts in ventral view; scutellum yellowish orange with apical margin black, apically truncate; elytra glabrous, basal margin of elytra black, elytra with nine rows of punctures which are not pigmented, interstices with a row of micropunctures each, scutellar row not reaching middle of elytra, elytra apically with a broad black band (Fig. 5) which is not reaching the elytral margins, side margins of elytra not visible simultaneously in dorsal view; legs yellowish orange, tibiae simple, first segment of fore tarsus only slightly widened, lobes of third tarsal segment symmetrical, fourth tarsal segment short, claws black, strongly dentate (Fig. 6).

Abdomen. Orange, without modifications, sternites covered with short white setae except for middle which is glabrous; length of aedeagus 1.3 mm, apical part of aedeagus

laterally with wing-like extensions (Fig. 9), tip pointed (Fig. 7), base of aedeagan lobe ventrally bulked out (Fig. 8), internal structures apically covered by membrane.

Variability. The broad black elytral band is reaching the elytral side margins in the paratype.

Etymology. This species is dedicated to my former colleague, the entomologist Dr. Abdul Gabbar Sultan Al-Kirshi, Sana'a, Yemen.

Distribution and biology. So far known from the type locality only. This species is attracted by light.

### Discussion

The *Cryptocephalus*-fauna of Yemen is still insufficiently known. Some species, like *C. saudiensis* are distributed in other parts of Asia, whereas others are probably endemic, or, like *C. senegalensis* were reported both from Yemen and the Afrotropical subregion. Based on the shape of the claws (Fig. 6), *C. gabbari* would have to be placed in the subgenus *Anteriscus* WEISE 1906 of *Cryptocephalus*. *Anteriscus* was described as a subgenus of *Cryptocephalus* by WEISE for a number of Afrotropical species, the generic type species is *C. (A.) erili* WEISE 1906 from Lake Victoria. *Anteriscus* was treated by most following authors as a subgenus of *Melixanthus* SUFFRIAN 1854, because of the appendiculate claws. For this subgenus, a revised diagnosis is needed. However, based on the morphology of the aedeagus which is lacking a dorsal central plate I decided not to place *C. gabbari* in *Anteriscus*.

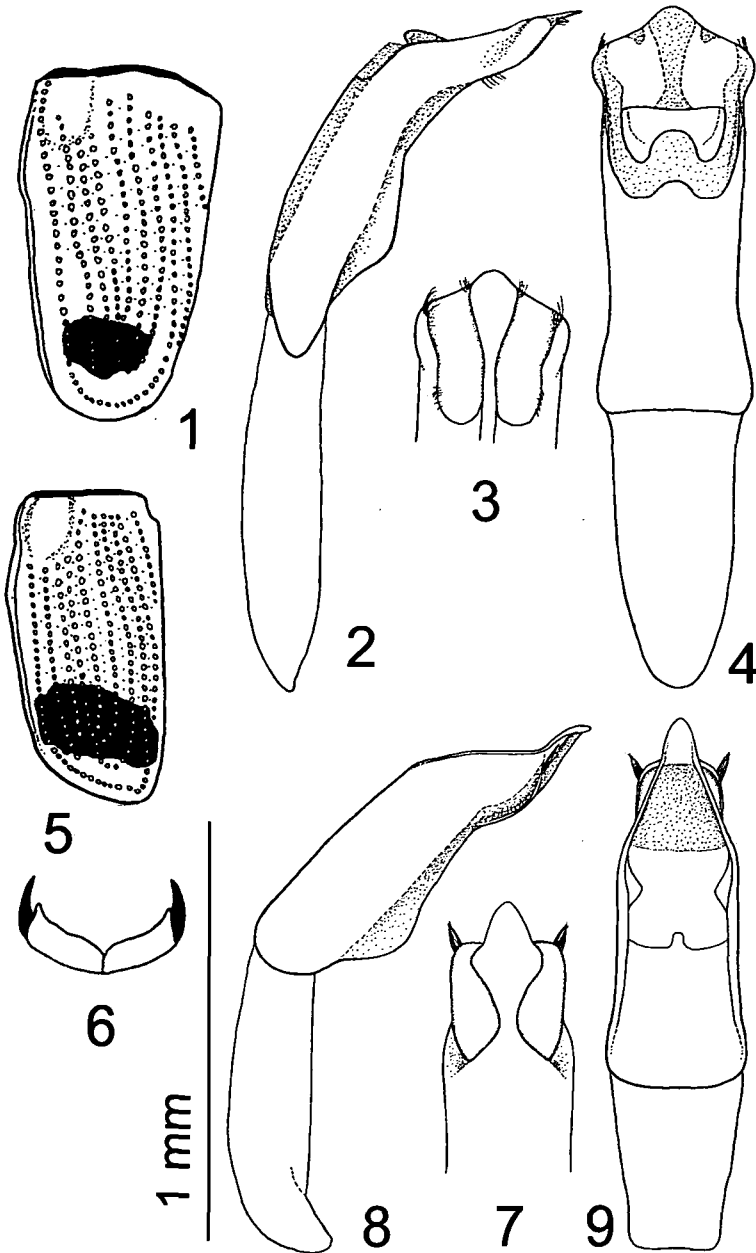
### Zusammenfassung

Zu den fünf aus dem Jemen bekannten Arten der Gattung *Cryptocephalus* GEOFFROY werden drei hinzugefügt. *Cryptocephalus saudiensis* LOPATIN 1983 und *C. senegalensis* SUFFRIAN 1857 werden erstmals aus dem Jemen nachgewiesen. Eine neue Art, *Cryptocephalus gabbari* nov.spec. aus Bajil, Jemen, wird beschrieben.

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**Figs. 1-9:** (1) *Cryptocephalus saudiensis* LOPATIN 1983, elytral pattern; (2) *Cryptocephalus senegalensis* SUFFRIAN, aedeagus lateral; (3) *Cryptocephalus senegalensis* SUFFRIAN, aedeagus ventral; (4) *Cryptocephalus senegalensis* SUFFRIAN, aedeagus dorsal; (5) *Cryptocephalus gabbari* nov.spec., elytra; (6) *Cryptocephalus gabbari* nov.spec., claws fore tarsus; (7) *Cryptocephalus gabbari* nov.spec., aedeagus ventral; (8) *Cryptocephalus gabbari* nov.spec., aedeagus lateral; (9) *Cryptocephalus gabbari* nov.spec., aedeagus dorsal.