A study of the family Spercheidae (Coleoptera) from Turkey

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Abstract: The distributional data of all known taxa of the Turkish species Spercheus were summarized. Spercheus emarginatus (Schaller) were recorded for the first time in Turkey and additional locality data were presented for Spercheus senegalensis Laporte. Diagnostic characters of the new record, photographs of their aedeagus and some morphological particulars were provided, as well as a key to the species of the genus from Turkey and adjacent areas.

Key words: Coleoptera, Spercheidae, new record, diagnosis

The family Spercheidae is a homogeneous group of beetles composed of only 1 genus, Spercheus Kugelann. Recent papers (Hansen, 1991; Hebauer, 1997; Archangelsky et al., 2005; Jäch and Balke, 2008) mention that this family has 18 species, most of them from the Ethiopian and Oriental zoogeographic regions.

Until now, only the single African species, Spercheus senegalensis had been recorded in Turkey (Hebauer, 1997). In this paper S. emarginatus is recorded for the first time in Turkey, and additional locality data for S. senegalensis is provided for Mersin province.

Samples were collected from different sites using a sieve, a ladle, and a net with a 1 mm mesh size. The beetles were killed with a 70% alcohol solution, and in the laboratory, a small paintbrush was used to remove clay and muddy substances. The aedeagus was then dissected under a stereomicroscope.

The newly recorded species was described and photographs of the aedeagus showing its diagnostic taxonomic characters were taken (Figures 1-5). The classification follows Hansen (1999, 2004). All known records of Spercheus were mapped (Figure 6).

The following codes are used to indicate where the material is located:
ZMGU Zoological Museum of Gazi University, Ankara, Turkey

NMPC Department of Entomology, National Museum, Praha, Czech Republic

family: SPERCHEIDAE Erichson, 1837

genus: Spercheus Kugelann, 1798

Key of Spercheus of Turkey and adjacent areas

1. Elytra without longitudinal elevate ridges situated along suture .................................................. 2
   - Each elytron with a highly elevate ridge along the suture. Body length 4.0-4.5 mm. ......................... S. senegalensis Laporte, 1832.
2. Large species, body length 5.5-7.0 mm. Lateral margins of pronotum smooth or at most indistinctly serrate. S. emarginatus (Schaller, 1783).
   - Smaller species, body length 3.0-4.0 mm. Lateral margins of pronotum distinctly serrate .............. 3

Spercheus emarginatus (Schaller, 1783)

Diagnosis: 5.5-7.0 mm. Elytra yellowish brown with small black spots; anterior angles of clypeus distinctly angular cavity in male and with rounded cavity in female; Maxillary palpi yellowish red, terminal segment black apically; antennae blackish; legs dark reddish brown (Figures 1 and 2). Female carry the eggs in a bag on the ventral surface of the abdomen (Figures 3 and 4). Aedeagus (Figure 5).

Material examined: Turkey, Afyon province: Çay (Eber Lake), 17.06.2009, 38°36’N, 31°09’E, 973 m, M. Darilmaz coll., 5 males, 2 females (ZMGU). Denizli province: Çivril (Işıklı Lake), 20.06.2009, 38°12’N, 30°02’E, 1118 m, M. Darilmaz coll., 1 male (ZMGU). Edirne province: Edirne env. (flooded meadows and drains close to the bus terminal), 16.06.2001, 41°37’N, 26°37’E, M. Fikáček, J. Hájek & J. Straka lgt., 1 female (NMPC) (Figure 6).

Remarks: S. emarginatus was recorded in Turkey for the first time. It was collected in standing waters with rich submerged vegetation and detritus.

Range: Europe: Austria, Belgium, Bulgaria, Belarus, Croatia, Russia (central European territory, northern European territory, southern European territory), Czech Republic, Denmark, Estonia, France, Great Britain, Hungary, Italy, Latvia, Lithuania, The Netherlands, Poland, Romania, Slovakia, Sweden,
Spercheus senegalensis Laporte, 1832

Material examined: Turkey, Mersin province: Taşucu, 11.07.1996, Jiří Hájek lgt., 4 ex. (NMPC) (Figure 6).

Remarks: S. senegalensis is recorded in Turkey for the second time. It was collected in vegetated irrigation channels with brackish water.

Distribution in Turkey: Mersin province (Erdeimi), Van province (Van Lake) (Hebauer, 1997) (Figure 6).


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Figure 6. Known record of *Spercheus* from Turkey; (●) *S. emarginatus*; (▲) *S. senegalensis*.

References


