Revue suisse de Zoologie (September 2016) 123(2): 303-306 ISSN 0035-418

On the genus *Sunius* Curtis, 1829 of Turkey. IV. A new micropterous species from southwestern Anatolia and additional records (Coleoptera: Staphylinidae: Paederinae)

Sinan Anlaş

Celal Bayar University, Alaşehir Vocational School, TR-45600, Alaşehir, Manisa, Turkey.
E-mail: sinan.anlas@gmail.com

Abstract: A new species of the genus *Sunius* Curtis, 1829 is described and illustrated from Antalya (Korkuteli, Kızılcadağ) province of southwestern Anatolia: *Sunius kizilcadagicus* sp. n. Additional records of four species of *Sunius* are reported. A total of 37 species are now known from Turkey, 33 of them endemic to that country.

Keywords: Coleoptera - Staphylinidae - Paederinae - Turkey - new species.

INTRODUCTION

The genus *Sunius* Curtis, 1829 includes 135 species in the Palaearctic region. Its highest diversity and percentage of endemism are apparently found in the Mediterranean region, especially in Anatolia. According to recent publications, the genus is represented by 36 species in Turkey, 32 of which endemic to this country (Assing, 2008, 2010, 2011a, b, 2015; Anlaş, 2015a, b, 2016; Schülke & Smetana, 2015).

Assing (2008) recognized 7 groups of species of *Sunius*. One of them is the *S. seminiger* group, which is characterised by more or less reduced elytral length and hind wings, thus with very limited dispersal abilities; most of them are local montane endemics. The Turkish species of the *S. seminiger* group are mainly restricted to western and southern Anatolia (Assing, 2011b).

In this study, a new species is described from Antalya province in southwestern Anatolia, raising the number of species of *Sunius* from Turkey to 37.

MATERIAL AND METHODS

Primary and secondary sexual characters of the species described herein are termed following Coiffait (1984) and Assing (2008). The morphological studies were conducted using a Stemi 2000-C microscope (Zeiss, Germany). For the photographs a digital camera (Zeiss Axiocam ERC5s) was used. Head length was measured from the anterior margin of the frons to the posterior margin of the head, length of pronotum was measured along the median line, elytral length was measured at the suture from the apex of the scutellum to the posterior margin of the elytra. The length of the median lobe of the aedeagus was measured from the apex of the ventral process to the base of the capsule.

The reference specimens for the records in this study are deposited in the following collections:

AZMM – Alaşehir Zoological Museum, Manisa, Turkey (S. Anlaş).

MHNG – Muséum d'Histoire Naturelle, Genève, Switzerland (G. Cuccodoro).

TAXONOMY

Sunius kizilcadagicus sp. n.

Figs 1-8

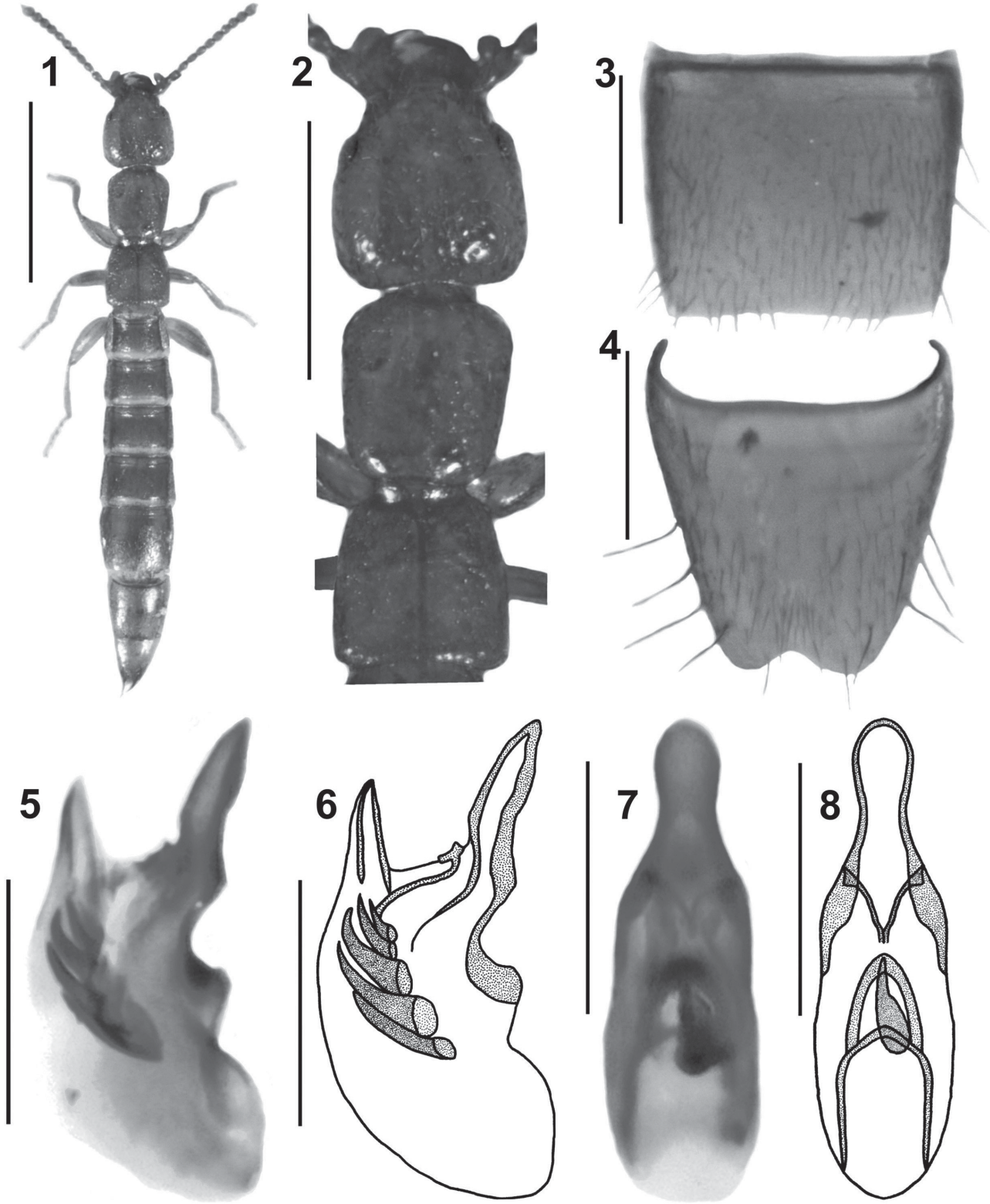
Type material: Holotype; MHNG; ♂, TURKEY, "TR. Antalya province, Kızılcadağ, 1550 m, 03.V.1975, leg. Besuchet & Löbl, #13 [under stones] / Holotypus ♂ *Sunius kizilcadagicus* sp. n. det. S. Anlaş 2016". – Paratypes, MHNG; 1♀; same data as holotype.

Type locality: Turkey, Antalia Province, Korkuteli district, Kızılcadağ, 1550 m.

Description: Small species (body length 3.0-3.4 mm). Habitus as in Fig. 1. Coloration: body uniformly reddish yellow or forebody reddish and abdomen reddish brown; legs pale yellow, antennae reddish.

Head oblong (Figs 1-2), approximately 1.15 times as long as wide; lateral margins subparallel in dorsal view; punctation coarse, well-defined and dense, in mediodorsal area slightly sparser; microsculpture absent;

Manuscript accepted 30.06.2016
DOI: 10.5281/zenodo.155304



Figs 1-8. Details of *Sunius kizilcadagicus* sp. n. (1) Habitus. (2) Forebody. (3) Male abdominal sternite VII. (4) Male abdominal sternite VIII. (5-6) Aedeagus, lateral view. (7-8) Aedeagus, ventral view. Scale bars: 1.0 mm (1); 0.5 mm (2); 0.2 mm (3-8).

eyes small (Fig. 2), not distinctly projecting from lateral outline of head, approximately 1/3 the length of postocular region in dorsal view. Antennae moderately slender, approximately 0.80-0.82 mm long. Pronotum (Figs 1-2) approximately 1.10 times as long as wide and narrower than head; punctation dense and coarse, midline broadly impunctate; microsculpture absent. Elytra short and narrow (Figs 1-2), combined approximately as wide as pronotum, and at suture about 0.75-0.80 times as long as pronotum; punctation finer and denser than that of pronotum and weakly granulose; interstices without distinct microsculpture; hind wings strongly reduced. Abdomen about 1.10-1.15 times as wide as elytra, widest at segments VI-VII; punctation moderately dense and fine; interstices with shallow but distinct microsculpture; posterior margin of tergite VII without palisade fringe.
Male abdominal sternite VII not markedly modified, but posterior margin very weakly concave in middle (Fig. 3); posterior margin of sternite VIII with relatively wide emargination, posteriorly with median cluster of weak pubescence (Fig. 4). Aedeagus (Figs 5-8) approximately 0.40 mm long, with apical portion of ventral process slightly indentate in lateral view and bulging in ventral view; internal sac with series of 5 stout medial sclerites and pair of slender subbasal sclerotized structures connected medioventrally.

Distribution: The new species is known so far only from Kızılcadağ, in western Korkuteli district of northeastern Antalya province, where it was collected under stones at an elevation of 1550 m.

Etymology: The name is derived from the type locality Kızılcadağ.

Comparative notes: The species is distinguished from all its congeners by the different shape of the ventral process of the aedeagus and by the shape of the spines of the internal sac. Based on the similar morphology of the male primary and secondary sexual characters, *S. kizilcadagicus* sp. n. is closely related to *S. brachati* Assing, 2003 (Antalya province), *S. aequus* Assing, 2011 (Isparta province) and *S. ulcerosus* Assing, 2011 (Isparta province). The new species is readily separated from these species as follows:

- from *S. brachati*, by its smaller body size (*S. brachati*: forebody 2.3-3.0 mm), smaller eyes (*S. brachati*: at least ½ times as long as postgenae in dorsal view), larger head (*S. brachati*: head not wider than pronotum), by the lack of tubercule on abdominal sternite VIII (*S. brachati*: tubercule on abdominal sternite VIII small with few setae), by the internal sac bearing sclerotised spines, and by a different shape of the aedeagal ventral process (*S. brachati*: aedeagal ventral process broader in lateral view).
- from *S. aequus* by the different coloration (*S. aequus*: forebody reddish contrasting with dark-brown to blackish-brown abdomen), by the median cluster of sparse pubescence on the posterior portion of abdominal sternite VIII (*S. aequus*: abdominal sternite VIII posteriorly with median cluster of dense pubescence), by the different shape of the apical portion of aedeagal ventral process (*S. aequus*: apical portion of aedeagal ventral process almost straight in lateral view and rather slender in ventral view).
- from *S. ulcerosus*, by the different coloration (*S. aequus*: forebody reddish distinctly contrasting with abdomen dark-brown to blackish-brown), the lack of tubercule on the abdominal sternite VIII (*S. ulcerosus*: abdominal sternite VIII posteriorly with a median subcircular protuberance, the latter with a cluster of denser pubescence), and by the different shape of the apical portion of ventral process of the aedeagus (*S. ulcerosus*: apical portion of ventral process of aedeagus subapically broader in ventral view, and shorter and weakly curved in lateral view).

For descriptions and illustrations of the species above, see Assing (2003, 2011b).

Sunius aculeatus Assing, 2005

Material studied: AZMM; 2♂; Turkey, Muğla, Akdağlar, Boncuk Dağı, ca. 36°48'N, 29°14'E; collection date 11.XI.2015; leg. Anlaş.

Distribution: This species is known only from Boncuk Mountains, in Muğla province of southwest Turkey (Assing, 2005a).

Sunius amanensis Assing, 2005

Material studied: AZMM; 1♂; Turkey, Hatay, Belen pass 5 km N, 36°27'45''N; 36°16'50''E, collection date 10.IV.2008; leg. Yağmur.

Distribution: This is the second catch of this species, which is apparently endemic to the Amanos mountains, province of Hatay of Turkey (Assing 2005b).

Sunius balkarensis Assing, 2001

Material studied: AZMM; 2♂ 1♀; Turkey, Mersin, Çamlıyayla environs, 1700 m, 37°08'N, 34°42'E; collection date 22.VII.2010; leg. Anlaş.

Distribution: This is the second finding of this species, which is apparently endemic to the Bolkar Mountains in Mersin province of southern Turkey (Assing, 2001).

Sunius brevispinosus Assing, 2005

Material studied: AZMM; 1♂ 1♀; Turkey, Kahramanmaraş, Türkoğlu, Aşağı İmalı 2 km W, 37°21'32''N, 36°44'32''E, 900 m; collection date 7.V.2008; leg. Yağmur.

Distribution: The species is known so far only from southwestern Kahramanmaraş province, in central southern Anatolia (Assing, 2005c, 2010).

ACKNOWLEDGMENTS

I am most grateful to my colleagues for making their staphylinid collections available to me. Special thanks to G. Cuccodoro (Genève) for arranging the loan of the type material of the new species.

REFERENCES

Anlaş S. 2015a. On the genus *Sunius* Curtis, 1829 of Turkey I. Two new micropterous species from central western Turkey (Coleoptera: Staphylinidae, Paederinae). *Turkish Journal of Zoology* 39(3): 799-803.

Anlaş S. 2015b. On the genus *Sunius* Curtis, 1829 of Turkey II. Two new micropterous species and additional records from Western Anatolia in Turkey (Coleoptera: Staphylinidae: Paederinae). *Zootaxa* 3986: 493-498.

Anlaş S. 2016. On the genus *Sunius* Curtis, 1829 of Turkey III. Four new species from western Anatolia, Turkey (Coleoptera: Staphylinidae: Paederinae). *Zoology in the Middle East* 62(1): 68-77.

Assing V. 2001. On the Turkish species of *Sunius* Curtis 1829 (Coleoptera: Staphylinidae, Paederinae). *Linzer biologische Beiträge* 33: 195-210.

Assing V. 2003. New species and records of Staphylinidae from Turkey (Insecta: Coleoptera: Staphylinidae). *Entomologische Blätter* 98: 153-177.

Assing V. 2005a. On the Turkish species of *Sunius*. IV. New micropterous species from southwestern Anatolia and additional records (Coleoptera: Staphylinidae, Paederinae). *Linzer biologische Beiträge* 37: 415-423.

Assing V. 2005b. On the Turkish species of *Sunius*. V. New species, additional records, a new synonymy, and an updated key to species (Coleoptera: Staphylinidae, Paederinae). *Beiträge zur Entomologie Keltern* 55: 109-121.

Assing V. 2005c. On the Turkish species of *Sunius*. VI. New micropterous species from central southern Anatolia and additional records (Coleoptera: Staphylinidae, Paederinae). *Beiträge zur Entomologie Keltern* 55: 289-298.

Assing V. 2008. A revision of the *Sunius* species of the Western Palaearctic region and Middle Asia (Coleoptera: Staphylinidae: Paederinae). *Linzer biologische Beiträge* 40: 5-135.

Assing V. 2010. A revision of Palaearctic *Sunius*. XII. New species, new synonymies, and additional records (Coleoptera: Staphylinidae: Paederinae). *Linzer biologische Beiträge* 42: 1045-1061.

Assing V. 2011a. The *Sunius* species of the Palaearctic region (Coleoptera: Staphylinidae: Paederinae). *Linzer biologische Beiträge* 43: 151-193.

Assing V. 2011b. A revision of Palaearctic *Sunius* XIV. Three new species from Turkey and additional records (Coleoptera: Staphylinidae: Paederinae). *Linzer biologische Beiträge* 43: 1159-1168.

Assing V. 2015. A revision of *Sunius.* XV. Six new species from Kyrgyzstan and the Himalaya, and additional records (Coleoptera: Staphylinidae: Paederinae). *Contributions to Entomology* 65: 287-295.

Coiffait H. 1984. Coléoptères staphylinides de la région paléarctique occidentale V. Sous famille Paederinae, Tribu Paederini 2. Sous famille Euaesthetinae. *Nouvelle Revue d'Entomologie, Supplément* 8: 1-424.

Schülke M., Smetana A. 2015. Staphylinidae, pp. 304-1134. *In:* Löbl I. & Löbl D. (eds), Catalogue of Palaearctic Coleoptera. Volume 2. Hydrophiloidea – Staphylinoidea. Revised and updated edition. *Leiden: Brill:* xxvi + 1702 pp.