

On the genus Sunius Stephens, 1829 of Turkey. V. A new micropterous species from central southern Anatolia, with additional records from the western Mediterranean region (Coleoptera: Staphylinidae: Paederinae)

Author: Anlaş, Sinan

Source: Revue suisse de Zoologie, 125(1): 17-20

Published By: Muséum d'histoire naturelle, Genève

URL: https://doi.org/10.5281/zenodo.1196005

BioOne Complete (complete.BioOne.org) is a full-text database of 200 subscribed and open-access titles in the biological, ecological, and environmental sciences published by nonprofit societies, associations, museums, institutions, and presses.

Your use of this PDF, the BioOne Complete website, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at <a href="https://www.bioone.org/terms-of-use">www.bioone.org/terms-of-use</a>.

Usage of BioOne Complete content is strictly limited to personal, educational, and non - commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

BioOne sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.

# On the genus *Sunius* Stephens, 1829 of Turkey. V. A new micropterous species from central southern Anatolia, with additional records from the western Mediterranean region (Coleoptera: Staphylinidae: Paederinae)

# Sinan Anlaş

Manisa 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* Stephens, 1829 is described from the Karaman province of central southern Anatolia: *Sunius tauricus* sp. n. Additional records of seven species and two subspecies of *Sunius* from the western Mediterranean region are reported. A total of 38 species are now known from Turkey, 34 of them are endemic.

**Keywords:** Coleoptera - Staphylinidae - Paederinae - Sunius - Turkey - western Mediterranean - new species.

## INTRODUCTION

The genus *Sunius* Stephens, 1829 comprises 136 species in the Palaearctic region, with its main diversity centre in the Mediterranean countries, especially in Anatolia (Assing, 2008a; Anlaş, 2016a, b; Schülke & Smetana, 2015). A total of 37 species are known from Turkey, 33 of which are endemic to that country (Anlaş, 2016b). In this paper I describe a new species of *Sunius* from central southern Anatolia, rising the diversity of the genus in Turkey to 38 species. Additional records of seven species and two subspecies of *Sunius* from the western Mediterranean region are also reported.

## MATERIAL AND METHODS

Terminology of the primary and secondary sexual characters of the species described herein follows Coiffait (1984) and Assing (2008a). 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 material referred to in this study is preserved in the following collections:

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

HNHM – Hungarian Natural History Museum, Budapest, Hungary (G. Makranczy, O. Merkl)

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

### **RESULTS**

### **Faunistic Records**

# Sunius microphthalmus (Franz, 1979)

**Material examined:** MHNG;  $1 \circlearrowleft$ ,  $1 \hookrightarrow$ ; 08.III.1983; Canary Islands, Hierro, El Golfo, 800-1000 m; leg. Besuchet. – MHNG;  $1 \circlearrowleft$ ; 07.III.1983; Canaries, Hierro, Amoco, 900 m; leg. Besuchet.

**Distribution:** This species is endemic to the El Hierro Island of the Canary Archipelago (Assing, 2008a).

### Sunius brevipennis brevipennis (Wollaston, 1864)

Material examined: MHNG; 1♂, 2♀; 12.III.1983; Canary Islands, Tenerife, Ruigomez, 900 m; leg. Besuchet. – MHNG; 1♂; 14.III.1983; Tenerife, Puerto de la Cruz; leg. Besuchet.

**Distribution:** This subspecies is endemic to Tenerife in the Canary Islands (Assing, 2008a).

Manuscript accepted 12.09.2017 DOI: 10.5281/zenodo.1196005 18 S. Anlaş

### Sunius brevipennis canariensis (Bernhauer, 1928)

**Material examined:** MHNG; 3♂, 2♀; 04.III.1983; Canary Islands, Hierro, La Playes; leg. Besuchet.

**Distribution:** This subspecies occurs only in the Canaries, where it has been found on the islands of Gran Canaria, La Palma, El Hierro and Lanzarote (Assing, 2008a).

## Sunius fernandezi Hernández & Garcia, 1982

**Material examined:** MHNG; 2♂, 1♀; 13.III.1983; Canary Islands, Tenerife, Roque de Caramujo, 2200 m; leg. Besuchet.

**Distribution:** This species occurs only in the Canaries, where it is restricted to the island of Tenerife (Assing, 2008a).

# Sunius ovaliceps (Fauvel, 1878)

Material examined: MHNG; 1♂, 2♀; 10.IX.1969; Portugal, Faro, Aljezur, leg. Senglet. – MHNG; 1♂; XII.1975; Spain, Albacete, Calar del Albumdo, 1400 m; leg. Dehanreng. – MHNG; 1♂, 2♀; 20.V.1960; Spain, Teruel, Noguera, 1550 m; leg. Besuchet. – MHNG; 1♀; 19.V.1960; Spain, Cuenca, Las Torcas; leg. Besuchet.

**Distribution:** This species is known from France, Spain, Algeria, Morocco, Tunisia, and also the Afrotropical region (Assing, 2008a; Schülke & Smetana, 2015).

# Sunius propinquus (Brisout de Barneville, 1867)

Material examined: HNHM; 1♂, 1♀; Italy, Sardinia, Aritzo; leg. Dodero, coll. Fodor. – MHNG; 1♂; 27.VIII.1969; Portugal, Port., Bragança, Moncorvo; leg. Senglet. – MHNG; 1♀; 05.IV.1962; Tunisia, Tunis, Belvidéu; leg. Besuchet.

**Distribution:** This species is known from Europe in Belgium, France, Italy, Portugal, Spain, and Sweden, and from North Africa in Algeria, Morocco, Madeira Archipelago, and Tunisia (Assing, 2008a; Schülke & Smetana, 2015).

# Sunius tronqueti Assing, 2008

Material examined: MHNG; 1♂; 14.V.1960; Spain, Granada, Puerto de la Ragua, 1800 m; leg. Comellini.

**Distribution:** The recently described species was only known to occur in the Sierra Nevada in Spain (Assing, 2008b).

### Sunius algiricus (Coiffait, 1973)

**Material examined:** HNHM; 2♂; Italy, Sardinia, Lula; leg. A. Dodero, coll. Fodor.

**Distribution:** This species was known from southern Italy (Calabria and Sicily) in Europe, and from Algeria and Tunisia in North Africa (Assing, 2008a; Schülke & Smetana, 2015). Thus, this species is here reported from Sardinia for the first time.

# Sunius sardus Assing, 2008

**Material examined:** HNHM;  $1 \circlearrowleft$ ,  $2 \circlearrowleft$ ; 22.IV.1902, Italy, Sardinia, Campeda; leg. A. Dodero, coll. Fodor.

**Distribution:** This species occurs only on the Italian island of Sardinia (Assing, 2008a).

### **TAXONOMY**

# Sunius tauricus sp. n.

Figs 1-8

**Holotype:** AZMM; ♂; 28.V.2016; Turkey, Karaman province, Toros Mts., Ayrancı-Erdemli road, Yüğlük Hill, 2180 m, 37°02'49"N 34°00'26"E; leg. Anlaş, Örgel & Yaman.

**Paratypes:** AZMM, MHNG;  $14 \circlearrowleft \circlearrowleft$ ,  $10 \circlearrowleft \circlearrowleft$ , same data as holotype.

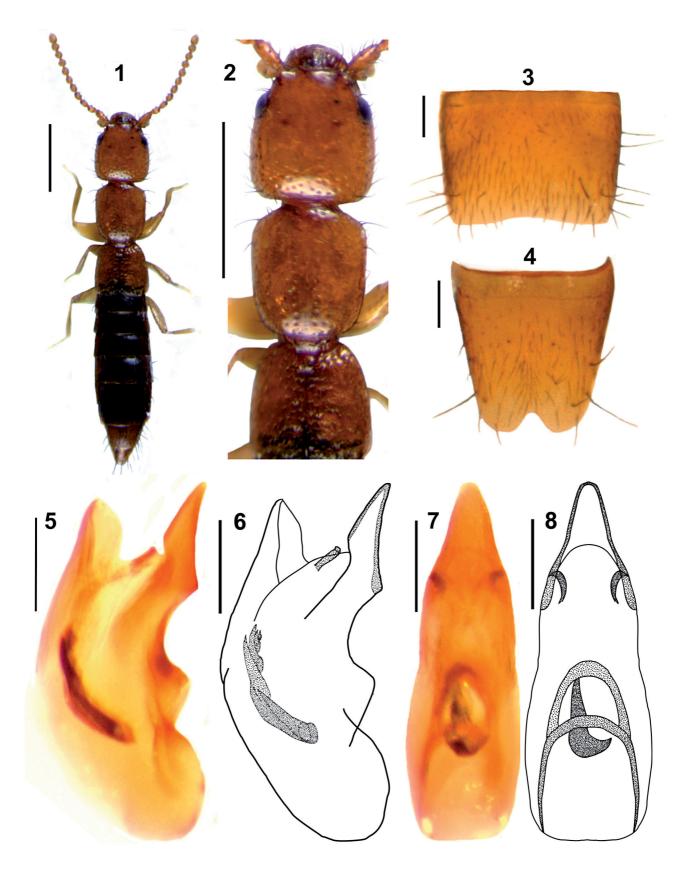
**Type locality:** Turkey, Karaman Province, Toros Mountain, Yüğlük Hill, 2180 m.

**Description:** Small species, body length 2.4-2.7 mm. Habitus as in Fig. 1. Colouration: Forebody uniformly reddish; abdomen dark brown; legs pale yellow; antennae reddish.

Head oblong (Figs 1-2), approximately 1.10-1.15 times as long as wide; lateral margins in dorsal view straight and slightly diverging posteriad; punctation coarse, well-defined, and relatively sparse, in lateral area slightly denser than in medio-dorsal area; microsculpture absent, eyes small (Fig. 2), weakly projecting from lateral outline of head, postocular region in dorsal view approximately three times as long as eyes. Antennae moderately slender, approximately 0.80-0.85 mm long.

Pronotum (Fig. 1-2) approximately 0.90-0.95 times as wide as head, and about 1.05-1.10 times as long as wide; lateral margins subparallel and distinctly diverging posteriad in dorsal view; microsculpture absent; punctation as coarse as that of head, medial line impunctate.

Elytra (Figs 1-2) approximately as wide as pronotum and at suture about 0.75 times as long as pronotum; punctation finer and denser than that of pronotum and head, and weakly granulose; microsculpture indistinct. Hind wings strongly reduced.



Figs 1-8. Details of *Sunius tauricus* 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: 0.5 mm (1-2); 0.1 mm (3-8).

20 S. Anlaş

Abdomen wider than elytra (Fig. 1), approximately 1.05 times as wide as elytra, widest at segments VI-VII; punctation dense and fine; microsculpture shallow; posterior margin of tergite VII without palisade fringe.

Male: Abdominal sternite VII not distinctly modified but posterior margin weakly concave in middle (Fig. 3); posterior margin of sternite VIII with relatively wide emargination, posteriorly with median cluster of very weak pubescence, tubercule absent (Fig. 4); aedeagus approximately 0.35-0.38 mm long, shaped as in Figs 5-8, with apical portion of ventral process slightly dentate in lateral view, base of ventral process in lateral view broadly concave, not deep, and slightly curved, internal sac with a series of six mixed large and small spines.

**Distribution and bionomics:** The new species was collected only once in the Yüğlük Hill, Taurus Mountains, Karaman province, central southern Anatolia, where it was found under stones at an elevation of 2180 m.

**Etymology:** The name is derived from the Toros Mountains, the mountain range where the type locality is situated.

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. The similarity in the male sexual characters suggests that S. tauricus sp. n. is most closely related to S. tuberiventris Assing, S. wunderlei Assing and S. balkarensis Assing (see Assing, 2001). The new species is separated from these species by the lack of tubercule on abdominal sternite VIII (in S. tuberiventris: sternite VIII in posterior median area with subcircular tubercle covered with dense pubescence; in S. wunderlei: sternite VIII with longer pubescence on posterior median tubercle; in S. balkarensis: sternite VIII with slightly smaller tubercle), by the broader and stouter ventral process of the aedeagus in lateral view; by the more shallowly dentate apical portion of the ventral process in lateral view; by the different shape and the series of six spines in the internal sac (in S. tuberiventris: internal sac with row of four relatively small spines; in S. wunderlei: internal sac with four larger spines; in S. balkarensis: internal sac with four larger spines).

### ACKNOWLEDGMENTS

I am most grateful to my colleagues for making their staphylinid collections available to me. Special thanks to Giulio Cuccodoro (Genève) and György Makranczy (Budapest) for arranging the loan of the *Sunius* material. This study was in part supported by the Scientific and Technological Research Council of Turkey (TÜBİTAK, project no. 215Z080).

### REFERENCES

References of taxon authorities not listed here can be found in Assing (2008a).

- Anlaş S. 2016a. 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.
- Anlaş S. 2016b. On the genus *Sunius* Curtis, 1829 of Turkey. IV. A new micropterous species from southwestern Anatolia and additional records (Coleoptera: Staphylinidae: Paederinae). *Revue suisse de Zoologie* 123(2): 303-306.
- Assing V. 2001. On the Turkish species of *Sunius* Curtis 1829 (Coleoptera: Staphylinidae, Paederinae). *Linzer biologische Beiträge* 33: 195-210.
- Assing V. 2008a. 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. 2008b. Four new species and additional records of Palaearctic *Sunius*, with two new synonymies (Coleoptera: Staphylinidae: Paederinae). *Beiträge zur Entomologie, Keltern*, 58(2): 455-470.
- 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.