Amauronia szalokii sp.n. (Coleoptera: Dasytidae) and first records of two *Amauronia* species from Turkey

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Abstract

A contribution to the knowledge of the genus *Amauronia* WESTWOOD, 1839 (Coleoptera: Dasytidae: Danaceinae: Amauronioidini) in Turkey is given. *Amauronia szalokii* sp.n. is described as new to science. *Amauronia insignis* MAJER, 1997 and *A. maritima* MAJER, 1997 are recorded from Turkey for the first time. Records of *A. brevicornis* (SCHILSKY, 1897) and *A. subaenea* (WESTWOOD, 1839) for Turkey are summarized.

Key words: Coleoptera, Melyridae s.l., Dasytidae, *Amauronia*, new species, new records, Turkey.

Zusammenfassung

Ein Beitrag zur Kenntnis der Gattung *Amauronia* WESTWOOD, 1839 (Coleoptera: Dasytidae: Danaceinae: Amauronioidini) behandelt die Arten der Türkei. *Amauronia szalokii* sp.n. wird als neu für die Wissenschaft beschrieben. *Amauronia insignis* MAJER, 1997 und *A. maritima* MAJER, 1997 werden das erste Mal für die Türkei gemeldet. Die Verbreitungsangaben von *A. brevicornis* (SCHILSKY, 1897) und *A. subaenea* (WESTWOOD, 1839) für die Türkei werden zusammengefasst.

Introduction

The genus *Amauronia* WESTWOOD, 1839 was re-described and taxonomically revised by MAJER (1997). Heretofore, eight species were recognized as valid, which are distributed in the "Balkans and East-Mediterranean, northwards along the banks of the Caspian Sea" (MAJER 1997). Two species have previously been recorded for Turkey:

Amauronia brevicornis (SCHILSKY, 1897), originally described from the historical Dobruja region, is recorded for Bulgaria, Macedonia, Romania, Turkey and the Ukraine; for Turkey, specimens were reported from "Turcia" (without precise location), from the Istanbul area and from the environment of Babadağ (Denizli province) (MAJER 1997).

Amauronia subaenea (WESTWOOD, 1839), described from the Greek island of Corfu (Ionian islands), is a Balkan Peninsula endemic recorded for Bulgaria, Greece, Macedonia, Romania, European Turkey and probably Serbia; for Turkey, old specimens were reported from the environment of Edirne (MAJER 1997).

In the present contribution one species of *Amauronia* is described as new to science and two species, which were previously known only from Aegean islands or Jordan respectively, are recorded for the first time for Turkey. Altogether there are now five species of *Amauronia* occurring in Turkey.

Material and methods

The type material and vouchers reported herein are dry preserved and housed in the following institutional and private collections:

cDS Coll. Dezsö Szalóki, Budapest, Hungary

cIP Coll. Isidor Plonski, Vienna, Austria

HNHM Hungarian Natural History Museum, Budapest, Hungary

NMW Natural History Museum, Vienna, Austria

ZMUC Zoological Museum, University of Copenhagen, Denmark

All specimens reported below have been determined by the present author with help of the revision by MAJER (1997), which has been found to be a very useful and accurate tool.

The methodology of dissection and mounting of male terminalia has been described in detail elsewhere (PLONSKI 2014, PLONSKI & PUCHNER 2014).

Specimens of the newly described species are provided with a printed red label: "HOLO-TYPUS [or ALLOTYPUS or PARATYPUS respectively] / Amauronia / szalokii / spec. nov. / det. I.S. Plonski 2015".

Descriptive statements and measurements were made using a Leica MZ6 stereomicroscope. Description of colours follows PACLT (1958). Photographs were produced with the equipment listed in PLONSKI & PUCHNER (2014).

Abbreviations of morphometry:

- AL maximum length of antenna
- EL elytral length, measured from the base of scutellum to the apices
- EW maximum elytral width
- HL maximum length of head, measured medially from clypeus to apical margin of pronotum, with both points in the same focal plane
- HW maximum width of head capsule, measured including the compound eyes
- IOW minimum interocular width, measured between the eyes
- PL maximum length of pronotum
- PW maximum width of pronotum

Taxonomy

Determination key for the Turkish species of Amauronia (males only)

The five *Amauronia* species occurring in Turkey can be determined with help of the key given below. However, the joint use with the revision of MAJER (1997) is highly recommended, since the accompanying illustrations of the terminalia are crucial for correct species identification.

1	Pronotum orange reddish.	A. insignis
_	Pronotum black.	2
2	Anterior half of head capsule orange.	A. szalokii sp.n.
_	Head capsule unicolorous black.	



Figs. 1–2: Habitus of *Amauronia szalokii* sp.n.: (1) male from Gamlibel Gecidi (holotype); (2) female from Yozgat (paratype).

3	Integument with deep puncturation.	4
	Integument with fine puncturation.	
4	Pedicel almost filiform, antennomeres IV-VII subangulate	A. subaenea
_	Pedicel subtriangular, antennomeres V-XI moniliform.	A. maritima

Amauronia szalokii sp.n. (Figs. 1-6)

Type locality: Çamlıbel Geçidi [mountain pass circa N 39°57'49", E 36°30'54"], border of Tokat and Sivas provinces, Turkey.

 $\label{eq:transformation} Type \ material: \ Holotype \ \sigma'(HNHM) \ labelled: \ ``TURKEY, \ Prov. \ Tokat, \ Camlibel \ Gecidi, \ 1700 \ m'', \ ``1996.VI.27. \ f \ halocytop \ VI.27. \ f \ halocytop \ Szalóki''. - Allotype \ Q'(cDS) \ with \ identical \ locality \ labels$

as holotype. – Paratypes (4 $\sigma\sigma$, 3 φ): 1 σ and 1 φ (both in cDS) with identical locality labels as holotype; 3 $\sigma\sigma$, 2 $\varphi\varphi$ (2 $\sigma\sigma$, 1 φ in HNHM; 1 σ , 1 φ in cIP) labelled: "TURKEY, vil. Yozgat \ 10 km N Yozgat, \ 10.VI.1989, I.Rozner".

Description: Measurements (in mm): Males (n = 5): Length: 2.13–2.50 (mean: 2.34; holotype: 2.28); AL: 0.88–0.95 (mean: 0.91; holotype: 0.93); HL: 0.45–0.55 (mean: 0.49; holotype: 0.45); HW: 0.65–0.70 (mean: 0.68; holotype: 0.69); IOW: 0.43–0.45 (mean: 0.44; holotype: 0.45); PL: 0.55–0.63 (mean: 0.58; holotype: 0.58); PW: 0.55–0.60 (mean: 0.58; holotype: 0.58); EL: 1.30–1.50 (mean: 1.42; holotype: 1.45); EW: 0.60–0.75 (mean: 0.69; holotype: 0.75). Females (n = 4): Length: 2.55–2.83 (mean: 2.67; allotype: 2.83); AL: 0.85–0.88 (mean: 0.66; allotype: 0.88); HL: 0.53–0.58 (mean: 0.55; allotype: 0.55); HW: 0.66–0.71 (mean: 0.69; allotype: 0.70); IOW: 0.42–0.45 (mean: 0.44; allotype: 0.45); PL: 0.60–0.65 (mean: 0.62; allotype: 0.63); PW: 0.65–0.70 (mean: 0.68; allotype: 0.68); EL: 1.53–1.78 (mean: 1.63; allotype: 1.65); EW: 0.78–0.85 (mean: 0.82; allotype: 0.80).

Indices: Males (n = 5): AL/PL = 1.52-1.61 (mean: 1.58; holotype: 1.61); PW/PL = 0.96-1.00 (mean: 0.98; holotype: 1.00); El/EW = 1.93-2.17 (mean: 2.06; holotype: 1.93). Females (n = 4): AL/PL = 1.31-1.42 (mean: 1.39; allotype: 1.40); PW/PL = 1.08-1.13 (mean: 1.09; allotype: 1.08); EL/EW = 1.79-2.09 (mean: 1.99; allotype: 2.06).

Colour: Antennae: antennomeres I–III orange, IV–V darker than preceding ones, VI–XI black. Head capsule: in males distal half orange, basal half black; in females unicolorous black. Mouthparts in males orange, sometimes darker; in females black to brown, except maxillary palpomere III, whose base is orange. Pronotum and elytra black. Legs orange, except blackish darkened upper- and underside of middle and hind femora, black tibial spurs of middle and hind legs, and tarsi which are sometimes darker on underside.

Structures: Pubescence on head and pronotum dual and bicolorous, consisting of short, adpressed, whitish setae and much longer, erect, black setae. Pubescence on elytra dual and unicolorous, consisting of shorter, reclinate, whitish setae and intermixed longer, sub-erect, whitish setae. Puncturation on head, pronotum, and elytra consisting of deep punctures; intervals between them glabrous and shiny, as large as – or smaller than – the punctures diameter. Antennae: scape clavate; pedicel elongate, rounded; antennomere III elongate, ca. 1.2 times longer than pedicel, cylindrical, slightly broader apically than at base; IV–V elongate, broadest near apex, inner edge somewhat pointed to almost sub-triangular; VI–X sub-moniliform, each segment rounded, but broadest near apex; XI egg-shaped. Head wider than pronotum. Pronotum length and width almost equal in males, slightly broader in females; broadest at mid-length; base and apex straight, sides sub-angulate, converging towards both base and apex. Scutellum semi-circular. Elytra without distinct humeral bulge (because of absent hindwings); sides subparallel in males, sub-arcuate in females; apex of each elytron broadly rounded.

Male terminalia: Sternite VII deeply emarginate (Fig. 3). Sternite VIII broadly crescent, with emargination covered by a membrane (Fig. 4). Spicular fork ovate. Tegmen as shown in Figure 5. Median lobe as shown in Figure 6.

Differential diagnosis: *Amauronia szalokii* sp.n. most closely resembles *A. brenskei* (REITTER, 1884) from Greece in size, colour, and shape of sternites VII and VIII, but can be distinguished easily by the shape of the pronotum (with strongly angulate sides in *A. brenskei*), and tegmen and median lobe of the male (cf. MAJER 1997: figs. 60 and 63 for *A. brenskei*). The median lobe of *A. szalokii* sp.n. more closely resembles that of *A. insignis* MAJER, 1997, but differs in minor details: In lateral view the median lobes' basal



Figs. 3–6: Male terminalia of *Amauronia szalokii* sp.n. (3, 5–6 = holotype; 4 = paratype from Yoz-gat): (3) sternite VII, ventral; (4) sternite VIII, dorsal; (5) tegmen, dorsal; (6) median lobe, lateral.

and apical halves are evenly constricted towards the apex in *A. szalokii* sp.n., while in *A. insignis* the basal half is slightly thicker than the apical half (cf. MAJER 1997: fig. 56 for *A. insignis*, and note the ventral curvature). Furthermore, *A. insignis* has a reddish coloured pronotum and a tegmen of different shape (cf. MAJER 1997: fig. 53), which separate these two species very well.

Distribution: So far only known from two localities in Anatolia (Tokat and Yozgat Provinces), which are circa 145 km apart.

Et y molog y: The species epithet is a patronym. The new taxon is named after Dezső Szalóki, a Hungarian expert of "Malacodermata" from the Carpathian basin.

Faunistics

Amauronia insignis MAJER, 1997

Amauronia insignis MAJER, 1997: 377. - MAYOR 2007: 393 (catalogue).

Type locality: Wadi al Wala (ca. N 31°33'55", E 35°43'47"); Dhiban department, Madaba governorate, Jordan.

 $\label{eq:Material} \begin{array}{l} Material \ examined: 1 \ o' (NMW): ``Prov. Hatay, 24.5. \ Umg[ebung]. \ Belen \ Sogukoluk \ [circa N 36°29'24'', E 36°10'03''; t. H. Schillhammer, pers. comm.]'', ``TÜRKEI – 1987 \ leg. \ Schönmann \ et \ Schillhammer''. \end{array}$

Note on teratology: The right antennomere V is deformed, and the following antennomeres VI–VIII are ankylotic.

D i s t r i b u t i o n : *Amauronia insignis* was heretofore only known from at least three localities in Jordan. The above reported male represents the first record for Turkey and indicates at least a wider distribution in the Levantine region.

Amauronia maritima MAJER, 1997

Amauronia maritima MAJER, 1997: 373. - MAYOR 2007: 393 (catalogue).

Type locality: Lesbos island; North Aegean region, Greece.

Material examined: 1 σ (NMW): "As[ia].min[or]. 19.5.[19]68 \ Umg[ebung]. Izmit [N40°46' E29°55'] \ leg. Wewalka"; 1 σ (HNHM): "TURKEY, Pr. Balikesir, \ Kapidagi, Yarimadasi, \ Cayagzi, 1.V1.2001, \ leg. Gy. Rozner"; 1 φ (ZMUC): "TURKEY: Prov. Izmir \ 25 km SW Bergama, Candarli \ 13.v.1993. Ole Martin leg. \ Zool. Museum, København".

Distribution: *Amauronia maritima* was described based on material from Lesbos, Naxos, and Crete. The above reported material represents the first records for Turkey, and indicates at least a wider distribution in the Turkish Aegean and Marmara regions.

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