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**A new species and a new record of *Aphaenostemmus* from southern Turkey  
(Coleoptera: Staphylinidae: Omaliinae)**

V. ASSING

**A b s t r a c t:** *Aphaenostemmus distortus* nov.sp. (Turkey: Antalya) is described, illustrated, and distinguished from other *Aphaenostemmus* species recorded from the West Palaearctic region. *Aphaenostemmus rhodicus* ASSING 2006, which was previously known only from the Greek island Rhodes, is reported from Turkey for the first time. The male sexual characters of *A. rhodicus* and *A. bordei* PEYERIMHOFF 1914 are illustrated for the first time.

**K e y w o r d s:** Coleoptera, Staphylinidae, Omaliinae, *Aphaenostemmus*, Palaearctic region, Turkey, taxonomy, new species, new record.

**Introduction**

The genus *Aphaenostemmus* PEYERIMHOFF 1914, one of the two genera of Aphaenostemmini, was attributed to the Omaliinae by NEWTON & THAYER (1995) and previously comprised six species distributed from the Mediterranean (two species) across the Middle East (one species) to the Himalaya (three species) (ASSING 2006; HERMAN 2001; SMETANA 2004). As far as can be inferred from the few known records, *Aphaenostemmus* species appear to be associated with river beds. Illustrations of the male genitalia have not been published.

Recently, Jürgen Vogel (Görlitz) sent me two species of Staphylinidae from southern Turkey for identification. One of them was readily identified as *Aphaenostemmus rhodicus* ASSING 2006 (new country record). The other, represented by a male and three females in rather poor condition, puzzled me at first. It was only after the dissection of the aedeagus that I realized that these specimens belonged to an undescribed species of the same genus.

**Material and measurements**

The material treated in this study is deposited in the following collections:

cAss..... author's private collection

cVog..... private collection Jürgen Vogel, Görlitz

The morphological studies were conducted using a Stemi SV 11 microscope (Zeiss Germany) and a Jenalab compound microscope (Carl Zeiss Jena). A digital camera (Nikon Coolpix 995) was used for the photographs.

Body length was measured from the anterior margin of the labrum to the abdominal apex, the length of the forebody from the anterior margin of the mandibles (in resting position) to the posterior margin of the elytra, head length along the middle from the anterior margin of the clypeus (without ante-clypeus) to the posterior margin of the head, head width including eyes, elytral length at the suture from the apex of the scutellum to the posterior margin of the elytra, and the length of the aedeagus from the apex of the ventral process to the base of the aedeagal capsule. The "parameral" side (i.e., the side where the sperm duct enters) is referred to as the ventral, the opposite side as the dorsal aspect.

### Description and additional record

#### *Aphaenostemmus distortus* nov.sp. (Figs 1-7)

**Type material:** Holotype ♂: "TURKEY - Antalya, Göynük near Kemer, 36°39'N, 30°31'E, 7.-14.V.2009, Sieber / Holotypus ♂ *Aphaenostemmus distortus* sp.n. det. V. Assing 2013" (cAss). Paratypes: 3 ♀♀: same data as holotype (cAss, cVog).

**E t y m o l o g y :** The name (Latin, adjective: distorted, twisted) alludes to the asymmetric aedeagus.

**D e s c r i p t i o n :** Small species; body length 2.2-2.3 mm; length of forebody 1.1-1.2 mm. Habitus as in Fig. 1. Coloration: head blackish-brown; pronotum dark-brown; elytra yellowish; abdomen dark-brown to blackish-brown, with the apex (posterior margin of segment VII; segments VIII-X) reddish; legs and antennae yellowish.

Head (Figs 2-3) approximately as long as broad, broadest across eyes; punctation rather coarse and dense; interstices with distinct microreticulation. Eyes large, approximately twice as long as postocular region in dorsal view. Antenna (Fig. 4) 0.6-0.7 mm long, distinctly incrassate apicad; antennomere IV approximately as long as broad; V weakly transverse; VI-X increasingly transverse and of gradually increasing width; X approximately 1.5 times as broad as long.

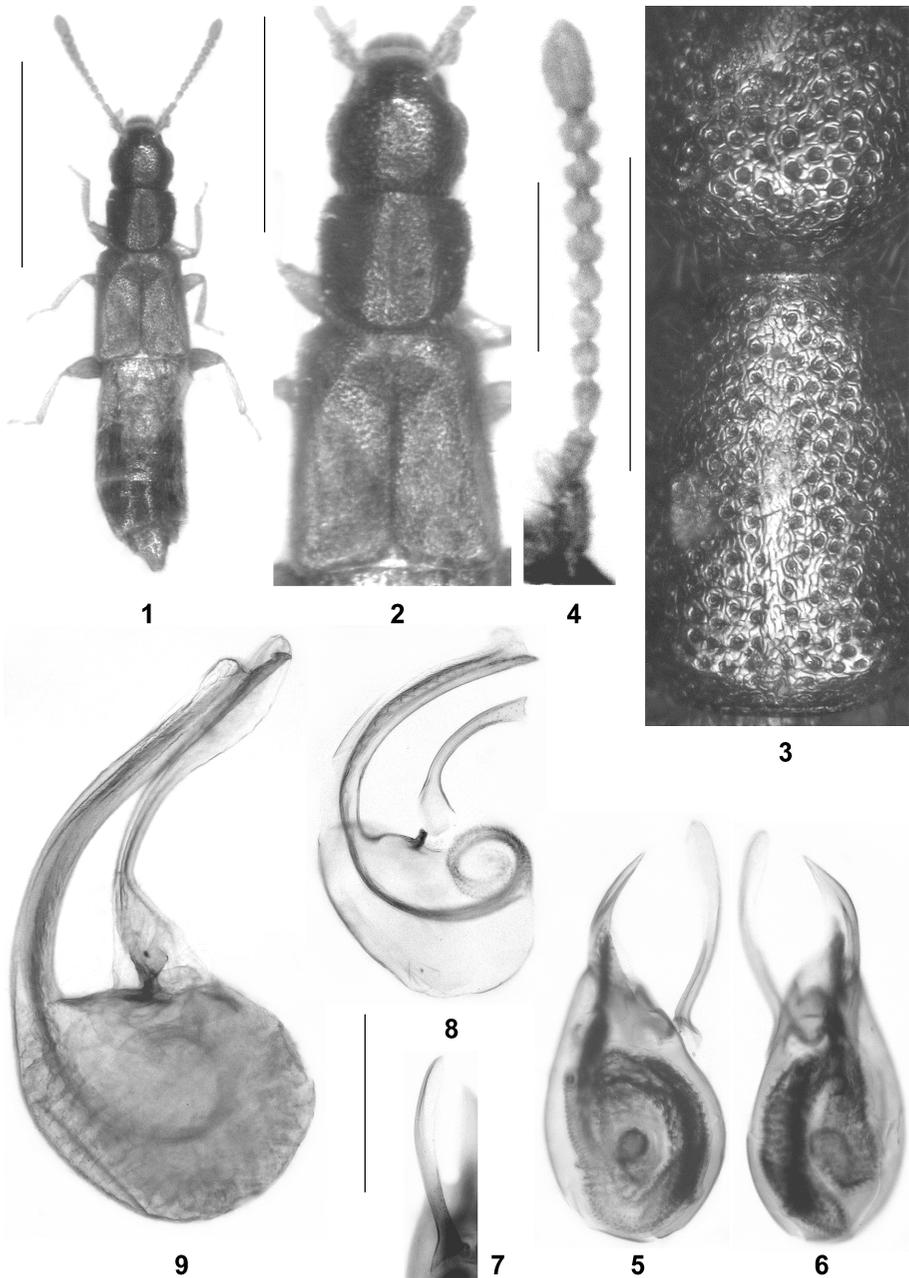
Pronotum (Figs 2-3) weakly transverse, approximately 1.05 times as broad as long and about 1.1 times as broad as head, maximal width in anterior half; punctation finer than that of head; interstices with distinct microreticulation.

Elytra (Fig. 2) long, 1.3-1.4 times as long as pronotum; punctation fine and dense. Hind wings fully developed.

Abdomen narrower than elytra; punctation fine and dense on tergites III-VII, sparser and finer on tergite VIII; interstices with shallow microsculpture and somewhat glossy.

♂: aedeagus (Figs 5-7) approximately 0.45 mm long and distinctly asymmetric; internal sac with dark coiled tube.

**C o m p a r a t i v e n o t e s :** This species is readily distinguished from all its West Palearctic congeners by numerous characters, particularly its much smaller size (other species: body length > 3.2 mm; length of forebody > 1.5 mm), the much shorter and more



**Figs 1-9:** *Aphaenostemmus distortus* nov.sp. (1-7), *A. rhodicus* ASSING (Turkey) (8), and *A. bordei* PEYERIMHOFF (Tunisia) (9): (1) habitus; (2) forebody; (3) postero-median portion of head and median portion of pronotum; (4) antenna; (5, 8, 9) aedeagus in lateral view; (6) aedeagus in ventral view; (7) paramere in ventral view. Scale bars: 1: 1.0 mm; 2: 0.5 mm; 3-9: 0.2 mm.

strongly incrassate antennae (other species: at least antennomeres V-VII oblong), the more pronounced microreticulation on the head and the pronotum, and the morphology of the aedeagus (other species: symmetric; ventral process more strongly curved in lateral view; internal tube much paler and more slender).

**Distribution and natural history:** The type locality is situated in the west of Antalya province, southwestern Turkey. According to the collector, the specimens were hand-netted on the wing at a road margin, not far from a riverbed, during sunset (VOGEL pers. comm.).

### ***Aphaenostemmus rhodicus* ASSING 2006 (Fig. 8)**

**Material examined:** Turkey: 1♂, 1♀, Antalya, Göynük near Kemer, 36°39'N, 30°31'E, 14.V.2009, leg. Sieber (cAss).

**Comment:** This species was previously known only from the Greek island Rhodos (ASSING 2006). The above specimens represent the first record from Turkey. They were collected in the same locality and under the same circumstances as *A. distortus*. The previously unknown symmetric aedeagus is characterized as follows: length 0.39 mm; ventral process very slender, strongly curved in lateral view, and apically acute; parameres short and apically truncate; internal tube long and weakly sclerotized (Fig. 8). The aedeagus of *A. rhodicus* differs from that of the closely related and externally similar *A. bordei* PEYERIMHOFF 1914 from North Africa (Algeria, Tunisia) by distinctly smaller size (*A. bordei*: length 0.65 mm), the smoothly curved ventral process (*A. bordei*: straight in apical half), the simply pointed apex of the ventral process (*A. bordei*: apex with short dorso-apical process), and by the much shorter and apically truncate parameres. The aedeagus of a male of *A. bordei* from Tunisia is illustrated in Fig. 9.

### **Acknowledgements**

I am indebted to Jürgen Vogel, Görlitz, for the generous gift of reference material of *A. distortus* and *A. rhodicus* from Turkey. Benedikt Feldmann, Münster, proof-read the manuscript.

### **Zusammenfassung**

*Aphaenostemmus distortus* nov.sp. (Türkei: Antalya) wird beschrieben, abgebildet und von anderen westpaläarktischen *Aphaenostemmus*-Arten unterschieden. *Aphaenostemmus rhodicus* ASSING 2006, bislang nur von der griechischen Insel Rhodos bekannt, wird erstmals aus der Türkei nachgewiesen. Die männlichen Sexualmerkmale von *A. rhodicus* und *A. bordei* PEYERIMHOFF 1914 werden erstmals abgebildet.

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