Türk. entomol. derg., 2011, 35 (2): 295-302
ISSN 1010-6960

Orijinal araştırma (Original article)

A new species of *Otiorhynchus* Germar (Coleoptera: Curculionidae) from Turkey

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Summary

Otiorhynchus (*Sulcorhynchus*) *emrei* Avgın & Colonelli sp. n. is described from the Amanos mountains (Hatay), southern Turkey. This is the first record of the subgenus *Sulcorhynchus* Magnano, 1998 outside the Caucasian area.

Key words: Coleoptera, Curculionidae, *Otiorhynchus*, new species, Turkey

Anahtar sözcükler: Coleoptera, Curculionidae, *Otiorhynchus*, yeni tür, Türkiye

Introduction

Among the many materials of Curculionidae collected by the first author in the southern Turkey was found a new *Otiorhynchus* Germar, 1822 of the subgenus *Sulcorhynchus* Magnano, 1998. This subgenus, described by Magnano (1998), was later revised by the same author (Magnano, 1999), who included in it six species, all from the Caucasus. One of them, *Otiorhynchus carcelliformis* Stierlin, 1896 was then moved, without comments, to *Otiorhynchus* subgenus *Eprahenus* Reitter, 1912 by Davidian & Savitsky (2006). Note that the original spelling "carcelliformis" by Stierlin (1896), was misspelled as "carceliformis" by Reitter (1914), who also misidentified it (Magnano, 1999) with the subsequently described *Otiorhynchus pseudocircassicus* Magnano, 1999. *Otiorhynchus carcelliformis*, however, clearly differs from the remaining *Eprahenus* by the weak lateral sulcus of its rostrum, and the rather dense clothing of recumbent scales, so that it still appears better placed to *Sulcorhynchus*, as done by Magnano (1999) because all other members of this subgenus have a more or less evident infero-

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Alınış (Received): 29.12.2010 Kabul ediliş (Accepted): 03.03.2011

lateral sulcus somewhat separating rostrum from head beneath and from rather to very dense vestiture. It can be pointed out once more that the several subgenera of *Otiorhynchus* are very poorly defined at the moment, and that much further study is necessary to achieve a satisfactory arrangement of such a speciose genus, or perhaps probably a complex of closely related genera. Even the new species here described is somewhat different from other *Sulcorhynchus*, nonetheless we are comprising it in this subgenus since it shows the deep sulcus separating head from rostrum beneath and the dense vestiture of recumbent scales, which are the main characters allowing recognition of *Sulcorhynchus* among the close subgenera in the arrangement by Magnano (1998). Perhaps the new species could be included in a separate group of *Sulcorhynchus* peculiar to southern Turkey, a specimen of a similar different taxon from the same area having been seen. However, we wait for the recollection of much more material from that area to formally propose such a group.

Material and Methods

Specimens were collected by the first author.

The nomenclature, particularly of the rostral structures, follows that of van den Berg (1972). Pictures of specimens were taken with a microscope Leica® Z16 APO associated with the program Leica Application Suite® 3.1, and then elaborated with the program Adobe Photoshop® PS4. The total length of specimens is measured dorsally from the front margin of eyes to the elytral apex.

Results and Discussion

***Otiorhynchus* (*Sulcorhynchus*) *emrei* Avgın & Colonnelli n. sp.**

Type series. TURKEY: Hatay (Amanos mountains): Dörtyol, Topaktaş, 36°49′48″N, 36°20′20″E, 1306 m, 17.VI.2008, leg. S.S.Avgın, 1♀ holotype (Biology Department of Osmaniye Korkut Ata University, Turkey) and 1♀ paratype, leg. S.S.Avgın (Colonnelli collection, Rome, Italy).

Holotype: Length: 5.98 mm, maximum width: 2.89 mm. Integument piceous, antenna and tarsi dark red-brown. Dorsal vestiture of round somewhat embricate brownish scales entirely concealing integument, intermingled with yellowish ones to form a nebulose paler irregular pattern on elytra and an indistinct middle line on pronotum flanked by two curved also ill-visible lateral stripes. From each puncture of prothorax originates a half-lifted brown centripetal seta-like scale, and similar elongate slanted scales are arranged on elytral intervals in a not so regular row. Punctures of striae on elytra with minute recumbent slightly spatulate scale. Under side clothed by very dense rather small dark yellowish scales and lifted seta-like ones inserted in punctures. Epistome U-shaped, smooth, not reaching the level of antennal insertion.

Scrobes closed anteriorly, rostrum at their anterior level almost as broad as the minimum distance of the eyes. Epifrons not carinate, with arcuated sides, dorsal margin moderately keeled. Scape thick, weakly curved, gradually and only a little widening from base to apex, coarsely punctured, with recumbent suboval minute scales intermingled with slanted hair-like ones. Funicular segments subconical, 1 and 2 about twice longer than wide, segments 3-6 a little longer than wide, 7 as long as wide. Club fusiform, about as long as the preceding 3 joints. Head twice as wide as long, forming a cone with the rostrum, the cone ending at the base of antennal scrobes. Eyes subdorsal, small, oval, almost flat, circum-ocular groove rather deep. Vertex in lateral view forming a very obtuse angle with the dorsal surface of rostrum. Pronotum about as long as wide, maximum width at the middle, sides strongly rounded, disc quite convex, with rather sparse somewhat elongate small punctures. Elytra elongate-oval, 1.43 times longer than wide, disc flattened, sides moderately rounded, maximum width at the middle. Striae formed by large roundish punctures, distant from each other by approximately one and a half one of their diameter. Interspaces only slightly wider than striae and a little convex. Femora rather strongly clubbed, tibiae almost straight and with slightly bisinuate inner margin, tarsi short. Pro- meso- and metasternum with deep punctures which are larger than those on urosternites, the first two of which are flat, of almost the same length, and are much longer than the third and fourth. The segments of the right antenna beyond the fourth funicular one are missing. Habitus: Figure 1. Spermatheca: Figure 5. Spiculum ventrale: Figure 6.

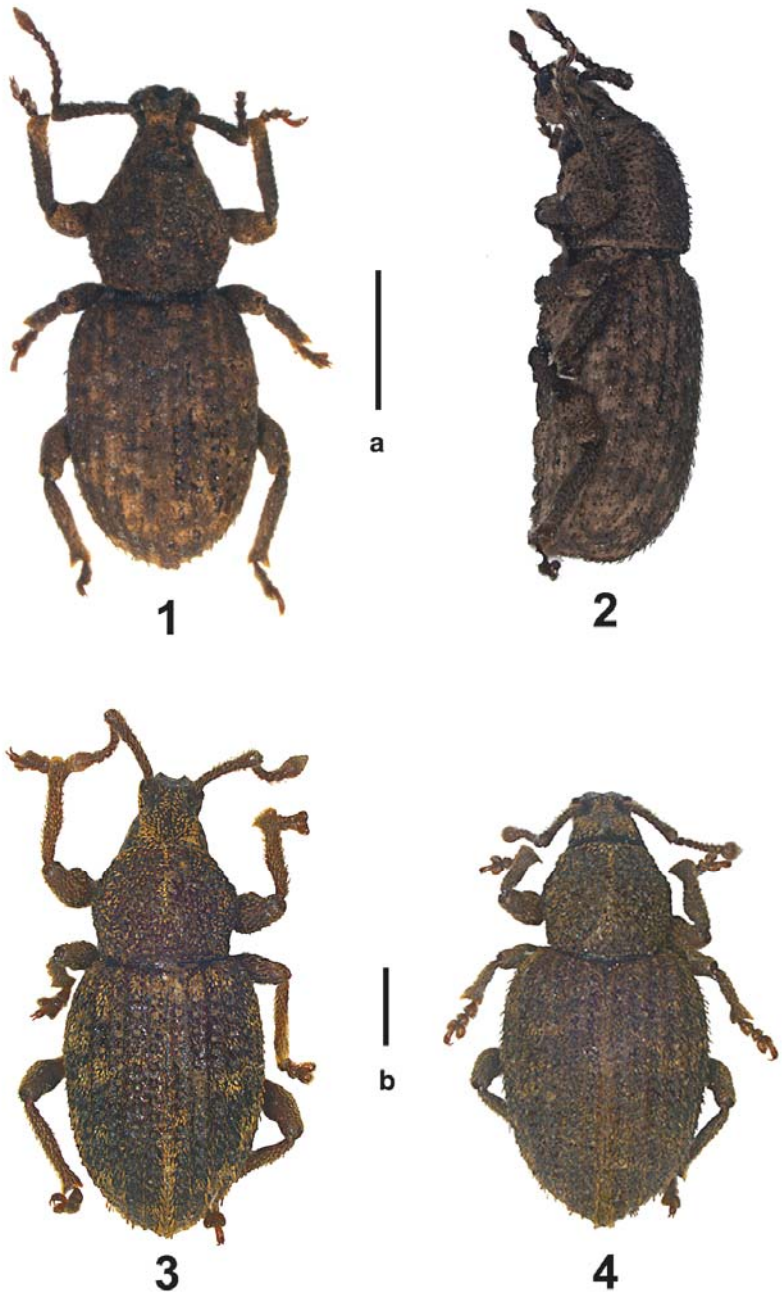
Paratype: Almost identical to the holotype. Side view: Figure 2. Length: 6.00 mm.

Etymology: The new species is dedicated to Prof. Dr. İskender Emre, who has carried out important entomological research in Turkey.

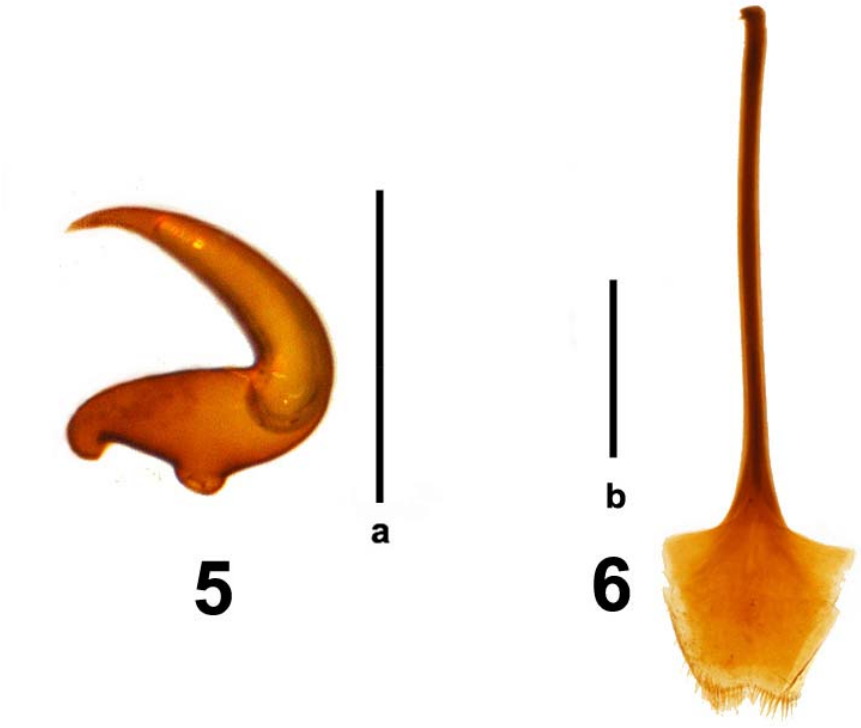
Remarks: *Otiorhynchus emrei* sp. n. is assigned to *Otiorhynchus* (*Sulcorhynchus*) for its similarity with other members of this subgenus, distributed in the Caucasus (Figure, 7). However, it is set apart from other *Otiorhynchus* (*Sulcorhynchus*) because of its large size, punctured pronotum, elongate oval flattened elytra, dense clothing, and only slightly lifted rows of hairlike scales on elytral intervals. The elytra of the new species differ from those of all its congeners being much flattened, oval-elongate and with the maximum width at the middle, instead of being moderately convex apicad of middle, egg-shaped and with their maximum width basad of midpoint (Figures, 1-4). The Caucasian species, close each other, have also granular or sub-granular pronotum, dorsum of rostrum carinate, sometimes very finely, vestiture formed by not tightly adpressed scales so that it is always possible to see the integument, suture convex on apical declivity, eyes more lateral causing the distance between them being much greater than the width of rostrum between antennal insertions. The character of lacking of oblique smooth area at apex of rostrum is shared only with *O. carcelliformis* from Abkhasia, but this species is readily differentiated from

Otiorhynchus emrei by its minutely dentate profemora, transverse groove at base of rostrum, granulate pronotum and smaller size (5 mm). All other *Otiorhynchus* (*Sulcorhynchus*) are quite dissimilar from the new species, and immediately distinguished already by the smooth oblique apical surface on dorsum of rostrum, in addition to their size not exceeding 4.5 mm and their different elytral shape.

Habitat: The two adults of *O. emrei* were collected along a dirty road leading to the mountain over Topaktaş where the vegetation consists of rather dense mixed forest of dominant *Pinus* and rare *Quercus*, in addition to steppic meadows near the sloping plateau above the village. Possibly, *O. emrei* is one of the several species of *Otiorhynchus* whose adults feeds on *Pinus* leaves. The surveyed area lies within the Mediterranean phytogeographical region, where the *Pinus* forests are dominant, with rare patches of maquis and steppic vegetation. From the zoogeographical point of view, the finding of an *O.* (*Sulcorhynchus*) in southern Turkey is remarkable, not only since all other species inhabit the northwestern Caucasus (Figure 7), but also because none of the *Otiorhynchus* species quoted from the area by Lodos et al. (2003) belongs to any subgenus closely related to *O.* (*Sulcorhynchus*).



Figures 1-4. Habitus of: *Otiorhynchus* (*Sulcorhynchus*) *emrei* Avgın & Colonnelli n. sp., holotype in dorsal view (1); *Otiorhynchus* (*Sulcorhynchus*) *emrei* Avgın & Colonnelli n. sp., paratype in lateral view (2); *Otiorhynchus inclinataesetis* Magnano, 1999 from Russia, Karachay-Cherkessia, Mt. Kadjibei; *Otiorhynchus teberdensis* Reitter, 1909 from Russia, Karachay-Cherkessia, surroundings of Teberda, Mt. Malaya Khatipara. Scale bars: a = 2 mm (Figs 1 and 2), b = 1 mm (Figs 3 and 4) (Original).



Figures 5-6. *Otiorhynchus* (*Sulcorhynchus*) *emrei* Avgın & Colonnelli n. sp., holotype. Spermatheca (5) and spiculum gastrale (6). Scale bars: a = 0.5 mm (Fig. 5), b = 0.5 mm (Fig. 6) (Original).

Catalogue

Otiorhynchus (***Sulcorhynchus***) Magnano, 1999

Type species: *Otiorhynchus circassicus* Reitter, 1888

carcelliformis Stierlin, 1896 ..... Georgia (Abkhazia)

circassicus Reitter, 1888 ..... Russia (Karachay-Cherkessia)

emrei Avgın & Colonnelli n. sp..... Turkey (Hatay)

inclinataesetis Magnano, 1999..... Russia (Karachay-Cherkessia)

planipennis Magnano, 1999..... Russia (Karachay-Cherkessia)

pseudocircassicus Magnano, 1999 ..... Russia (Karachay-Cherkessia)

Otiorrhynchus carcelliformis [incorrect spelling] Stierlin: Reitter, 1914 [misidentification]

teberdensis Reitter, 1909..... Russia (Karachay-Cherkessia)

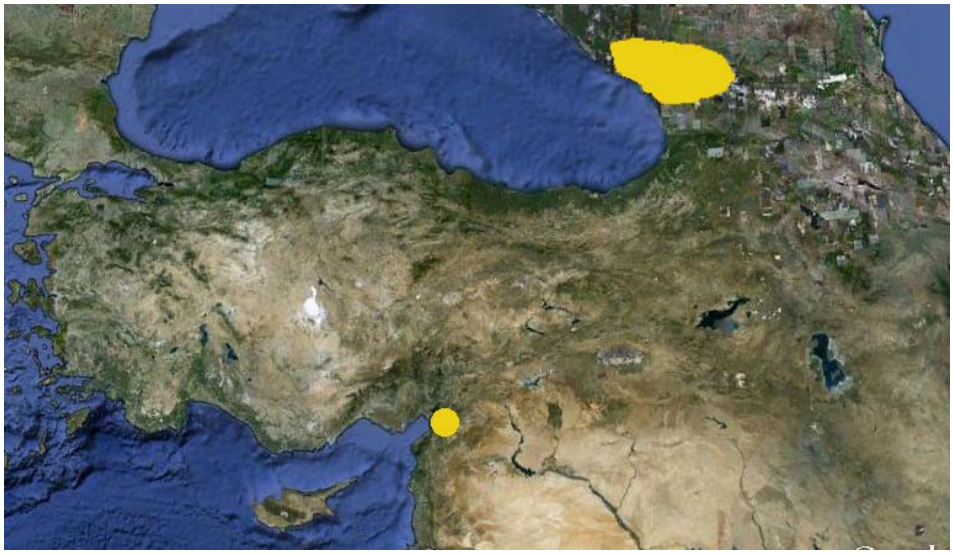


Figure 7. Distribution of the Caucasian species of *Otiorhynchus* (*Sulcorhynchus*) (yellow area), and of *Otiorhynchus* (*Sulcorhynchus*) *emrei* Avgın & Colonnelli n. sp. (yellow dot). Satellite map from Googleearth.

Özet

Türkiye'den *Otiorhynchus* Germar'un yeni bir türü (Coleoptera: Curculionidae)

Otiorhynchus (*Sulcorhynchus*) *emrei* Avgın & Colonnelli sp. n. Türkiye'nin güneyinde yer alan Amanos dağlarından (Hatay) tanımlanmıştır. Bu yeni tür Kafkas bölgesi dışında altcins *Sulcorhynchus* Magnano, 1998'un ilk kaydıdır.

Acknowledgement

We thank Giuseppe CARPANETO and Luca QUATTROCCHI of the Rome University "Roma Tre", and two anonymous revisers for their help in improving this paper.

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