First record of the weevil Otiorhynchus armadillo (Coleoptera:Curculionidae) in Greece

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SHORT COMMUNICATION

First record of the weevil Otiorhynchus armadillo (Coleoptera:Curculionidae) in Greece

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ABSTRACT
An entimine weevil is recorded for the first time in Greece. Around the year 2000, Otiorhynchus armadillo (Rossi, 1792) was found in the district of Larisa. Images of the species (of the original specimen collected in Greece) and information on its distribution, ecology and biology, are presented.

KEY WORDS: Entiminae, Otiorhynchini, weevil taxonomy, first record, Greece.

Introduction
Curculionoidea is a huge superfamily, containing about 62,000 species worldwide, while the subfamily Entiminae of the family Curculionidae is the largest, with more than 12,000 known species (Oberprieler et al. 2007). The Otiorhynchus-complex, belonging to the tribe Otiorhynchini Schönherr, 1826, contains about 1,500 species and its systematics is very complicated (Magnano 1998). The genus Otiorhynchus Germar, 1822, is well represented in Greece by about 220 species so far. The species of the genus, in the larval stage feed on the roots of their host plants, while as adults feed on the foliage, making round cuts along the leaf edge. The common and widespread species are mostly important pests of some agricultural crops (Çerçi 2016). Most species are polyphagous, apterous and the adults are nocturnal, spending the day hidden in ground crevices or near the root base of their host plants, so that many species are transported by humans with young plants (Wanat et al. 2011). This paper is based on specimens that we collected in Greece, during expedition for entomological research. Specifically, a single specimen of Otiorhynchus armadillo (Rossi, 1792) was found in the district of Larissa, and is deposited at the insect collection of the Laboratory of Crop Protection at the Technological Educational Institute of Thessaly, Larissa, Greece.

Materials and Methods
During June 2000, in a small park, in the area of the village Sykourio, 20 Km NE of Larissa in Central Greece, a single specimen of the genus Otiorhynchus was collected (Fig. 1). The specimen was extracted from the ground surface, without any obvious association with a host plant. Species identification was carried out by the authors, based on determination keys of Reitter (1913) and Stierlin (1861).

Results

Taxonomy
Based on the determination keys the specimen was identified as O. armadillo due
to its entirely black tibiae (including the spines on their edges) (Fig. 1C), the lack of metallic sheen on the yellowish elytral hair (Fig. 1D), and the direction of the two first striae on each elytron (close to elytral suture), which converge at the elytral apex.

**Otiorhynchus armadillo (Rossi, 1792)**

Synonyms. Curculio nigrita Rossi, 1790; Curculio armadillo Rossi, 1792; Curculio sulphurifer Herbst, 1797; Curculio orbicularis Olivier, 1807; Otiorhynchus scabripennis Gyllenhal, 1834; Otiorhynchus obitus Gyllenhal, 1834; Otiorhynchus multipunctatus sensu Stierlin, 1858; Otiorhynchus (Otiorhynchus) latissimus Stierlin, 1861; Otiorhynchus rhaeticus Stierlin, 1862; Otiorhynchus collinus Gredler, 1863; Otiorhynchus (Otiorhynchus) apennis Stierlin, 1883; Brachyrhinus apennis Fauvel, 1885; Brachyrhinus latissimus Fauvel, 1885; Brachyrhinus obitus Fauvel, 1885; Brachyrhinus scabripennis Fauvel, 1885; Otiorhynchus (Otiorhynchus) halbherri Stierlin, 1890; Otiorhynchus ventricola Weise, 1894; Otiorhynchus (s. str.) wellschmiedi Frieser, 1975 (Magnano et al. 2008).

**Discussion**

This specimen is the first record of *O. armadillo* in Greece (Fig. 1). The genus *Otiorhynchus* Germar, 1822, until now, was known to be represented by only two species in Greece: *Otiorhynchus aurifer* Boheman, 1842, a widespread species in the country, and *Otiorhynchus orientalis* Gyllenhal, 1834.

In comparison with the species *Otiorhynchus pseudonothus* Apfelbeck, 1897 (= salicicola Heyden, 1908), not known from Greece, the striae do not converge. This difference between these two species is well presented by Fägerström et al. (2010). In another similar species, *O. aurifer*, the edges of tibiae (including the spines) are light brown to orange, and there is metallic sheen on the elytral hair. It should also be noted that *O. armadillo*, can be confused with the very similar *Dodecastichus heydeni* Stierlin, 1861 (especially with its females, where also the elytral shape is very similar to *Otiorhynchus*), known only from Epirus in Greece (Bahr et al. 2018). However, all *Otiorhynchus* species have ten interstriae on each elytron instead of twelve in *Dodecastichus* species. This character was examined carefully on our specimen under stereoscope.

FIG. 1. *Otiorhynchus armadillo* (♀). A. dorsal view, B. dorsal thorax (turbecles), C. hind leg, D. yellowish hair of elytra

Until now, *O. armadillo* had not been found in Greece, although widespread in Europe and previously recorded from Austria, Croatia, Czech Republic, France, Germany, Hungary, Italy, Poland, Romania, Slovenia, Netherlands, Sweden, Switzerland, United Kingdom (Magnano et al. 2008), Norway (Staverløkk 2010), and recently also from Turkey (Çerçi 2016).

Our study is a contribution to the knowledge of weevils of the genus *Otiorhynchus*, especially to invasive species which can cause serious damage to agricultural plants. Many *Otiorhynchus*
species have extended their geographic range, and concurrently their significance as pests in horticulture increased over the past years. This may either be a consequence of climatic change and/or increased spreading of these weevils due to an intensified international movement of horticultural plants and products (Staverløkk 2010).

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Πρώτη καταγραφή του *Otiorhynchus armadillo* (Coleoptera: Curculionidae) στην Ελλάδα

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ΠΕΡΙΛΗΨΗ
Το κολεόπτερο *Otiorhynchus armadillo* (Rossi, 1792) (Coleoptera: Curculionidae) της φυλής Otiorhynchini καταγράφεται για πρώτη φορά στην Ελλάδα, όπου βρέθηκε στην περιοχή της Λάρισας, κατά το έτος 2000. Παρουσιάζονται εικόνες του είδους (από το άτομο που συλλέγηκε στην Ελλάδα), καθώς και πληροφορίες σχετικά με την εξάπλωση, τη βιολογία και οικολογία του.