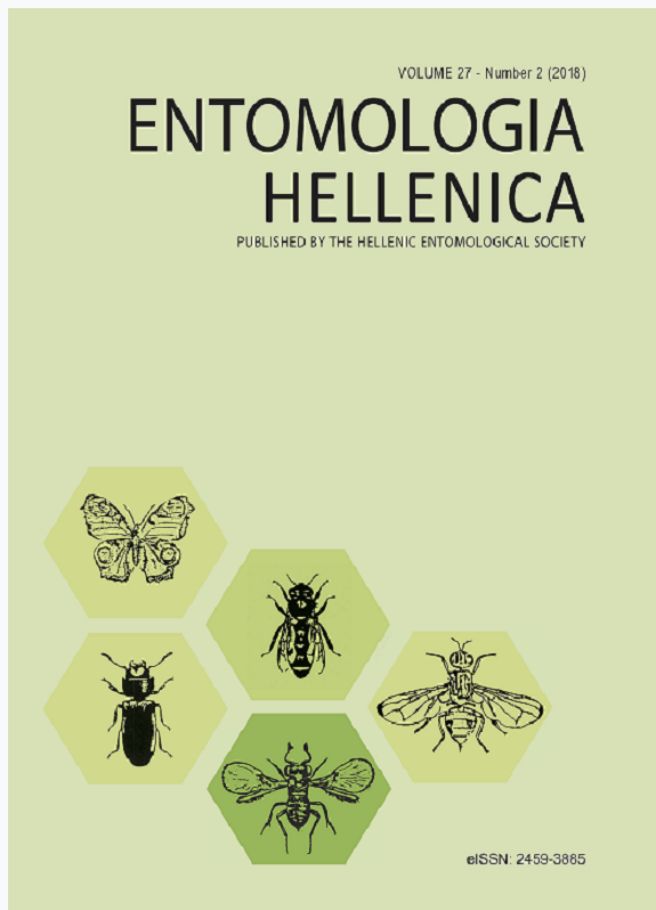


# ENTOMOLOGIA HELLENICA

Vol 27, No 2 (2018)



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

*Athanasios Mpamnaras, Panagiotis Eliopoulos*

doi: [10.12681/eh.19028](https://doi.org/10.12681/eh.19028)

Copyright © 2018, Athanasios Mpamnaras, Panagiotis Eliopoulos



This work is licensed under a [Creative Commons Attribution-NonCommercial-ShareAlike 4.0](https://creativecommons.org/licenses/by-nc-sa/4.0/).

### To cite this article:

Mpamnaras, A., & Eliopoulos, P. (2018). First record of the weevil *Otiorhynchus armadillo* (Coleoptera:Curculionidae) in Greece. *ENTOMOLOGIA HELLENICA*, 27(2), 12–15. <https://doi.org/10.12681/eh.19028>



## SHORT COMMUNICATION

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

A.G. MPAMNARAS AND P.A. ELIOPOULOS\*

*Department of Agricultural Technologists,*

*Technological Educational Institute of Thessaly, 41110 Larissa, Greece*

### 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

\*Corresponding author: [eliopoulos@teilar.gr](mailto:eliopoulos@teilar.gr)

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 obsitus* Gyllenhal, 1834; *Otiorhynchus multipunctatus* sensu Stierlin, 1858; *Otiorhynchus* (*Otiorhynchus*) *latissimus* Stierlin, 1861; *Otiorhynchus rhaeticus* Stierlin, 1862; *Otiorhynchus collinus* Gredler, 1863; *Otiorhynchus* (*Otiorhynchus*) *apenninus* Stierlin, 1883; *Brachyrrhinus apenninus* Fauvel, 1885; *Brachyrrhinus latissimus* Fauvel, 1885; *Brachyrrhinus obsitus* Fauvel, 1885; *Brachyrrhinus 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.

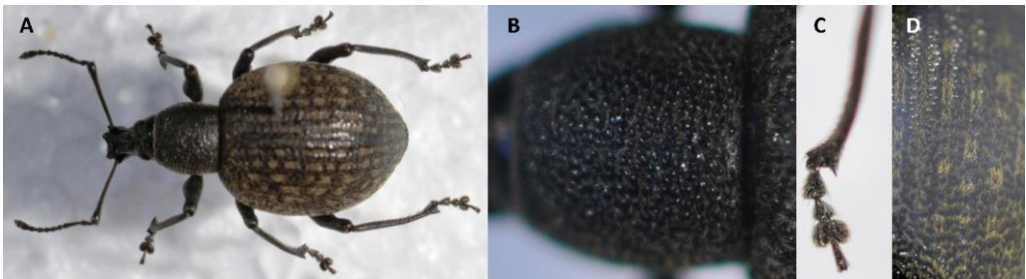


FIG. 1. *Otiorhynchus armadillo* (♀), A. dorsal view, B. dorsal thorax (turbeccles), C. hind leg, D. yellowish hair of elytra

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).

## References

- Bahr, F., H. Winkelmann and C. Bayer. 2018. The Curculionoidea-Fauna of Greece. Available at: <http://curci-gr.site.at/> (Accessed August 2018).
- Barclay, M. 2003. *Otiorhynchus* (s. str.) *armadillo* (Rossi, 1792) and *Otiorhynchus* (s. str.) *salicicola* Heyden, 1908 (Curculionidae: Entiminae: Otiorhynchini) – two European vine weevils established in Britain. The Coleopterist 12: 41–56.
- Çerçi, B. 2016. First records of *Pachyrhinus lethierryi lethierryi* (Desbrochers, 1875) and *Otiorhynchus armadillo* (Rossi, 1792) (Coleoptera: Curculionidae: Entiminae) from Turkey. Biharean Biol. 10: 141–143.
- Fägerström, C., E. Kärnestam and R. Anderson. 2010. Nya och förväntade öronvivelarter (Coleoptera: Otiorhynchini) på prydnadsbuskar i Sverige. Entomol. Tidskr. 131: 37–48.
- Heijerman, T. and S. Hellingman. 2008. *Otiorhynchus armadillo*, een invasieve snuitkever gevestigd in Nederland (Coleoptera: Curculionidae). Ned. Faunist. Meded. 29: 37–48.
- Magnano, L. 1998. Notes on the *Otiorhynchus* Germar, 1824 complex (Coleoptera: Curculionidae). In: E. Colonnelli, S. Louw and G. Osella (eds) *Taxonomy, ecology and distribution of Curculionoidea* (Coleoptera: Polyphaga). Proceedings of a Symposium (28 August, 1996, Florence, Italy); XX International Congress of Entomology, pp. 51–80.
- Magnano, L., T. Heijerman and C. Germann 2008. On the species status of *Otiorhynchus armadillo* (Rossi, 1792) and *Otiorhynchus salicicola* Heyden, 1908 (Coleoptera, Curculionidae, Entimini). Mitt. Schweiz. Entomol. Ges. 81: 155–163.
- Oberprieler, R.G., A.E. Marvaldi and R.S. Anderson. 2007. Weevils, weevils, weevils everywhere. Zootaxa 1668: 491–520.
- Reitter, E. 1913. Bestimmungstabellen der *Otiorrhynchus*-Arten mit ungezähnten Schenkeln aus der palaearktischen Fauna. Wien. Entomol. Z. 32: 25–118.
- Staverløkk, A. 2010. *Otiorhynchus armadillo* (Rossi, 1792) (Coleoptera, Curculionidae), a weevil new to Norway. Norw. J. Entomol. 57: 9–11.
- Stierlin, G. 1861. Revision der Europäischen *Otiorhynchus*-Arten. Berl. Entomol. Zeit. 5, Beiheft: 1–344.
- Wanat, M., P. Bialooki and S. Konwerski. 2011. *Otiorhynchus* subgenus *Arammichnus* Gozis, 1882 in Poland (Coleoptera: Curculionidae). Genus 22: 291–298.

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

Α.Γ. ΜΠΑΜΝΑΡΑΣ ΚΑΙ Π.Α. ΗΛΙΟΠΟΥΛΟΣ

*Τμήμα Τεχνολόγων Γεωπόνων, Τεχνολογικό Εκπαιδευτικό Ίδρυμα Θεσσαλίας, 41110 Λάρισα*

### 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 συλλέχθηκε στην Ελλάδα), καθώς και πληροφορίες σχετικά με την εξάπλωση, τη βιολογία και οικολογία του.