



The second record of invasive beetle species *Ozognathus cornutus* (LECONTE, 1859) (Coleoptera: Ptiniidae: Anobiinae) in Greece

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Abstract: *Ozognathus cornutus* (LECONTE, 1859), a species native to the Nearctic zoogeographical realm, has gradually expanded its range across Europe and the Mediterranean region. This article reports the second recorded locality of this invasive beetle in Greece. In 2023, it was discovered on Lefkas (Lefkada) Island, part of the Ionian Islands in the western region of the country.

Key words: alien species, Eastern Mediterranean, non-native, Anobiidae, Lefkas

The genus *Ozognathus* LeConte, 1861 belongs to the subfamily *Ernobiinae* Pic, 1912, within the family Ptiniidae Latreille, 1802. This genus comprises 12 species (Zahradník & Mifsud 2005) distributed across North, Central, and South America. Two species of *Ozognathus* have expanded beyond their natural range. The first, *Ozognathus exiguus* (Gorham, 1883), originally from Central America (Guatemala, Lesser Antilles), was introduced to Hawaii (Beardsley & Kumashiro 1988, Nishida 2002, Uchida et al. 2003). The second, *Ozognathus cornutus* (LeConte, 1859), has been introduced to Europe, Africa, Asia, and Australia and is considered an invasive species (Trócoli et al. 2020).

The original range of *Ozognathus cornutus* spans North America (Philips 2002). In the 21st century, the species expanded into the Palearctic region. It was first recorded in Malta, Madeira, and Tunisia (Zahradník & Mifsud 2005). During the same period, it was reported in Spain (Bercedo et al. 2005), France (Allemand et al. 2008), and Italy (Cusimano et al. 2014). By 2014, it had been documented in Sicily (Cusimano et al. 2014), and in 2021, in Sardinia (Bazzato et al. 2021). In 2016, García et al. reported the species from Lanzarote, and in subsequent years, it rapidly colonized other Canary Islands, including La Palma (Viñolas 2017) and Tenerife (Viñolas et al. 2018). It was also found in Portugal in 2022 (Diéguez Fernández) and in Gibraltar (GONHS 2024). The second decade of the 21st century marked the beginning of *O. cornutus* invasion into the eastern Mediterranean Basin. In 2019, it was discovered in Israel, the first report of its presence in Asia (Miłkowski 2019). In the following years, it was recorded in Cyprus (Demetriou et al. 2022) and Greece, specifically on Rhodes (Koutsoukos & Demetriou 2023). In these regions, the species was captured in natural habitats where it thrives on various plant species.

In addition, *Ozognathus cornutus* has been reported in Central and Northern Europe, where it is introduced through plant products such as dried fruit or wood. Such introductions have been documented in Germany (Allemand et al. 2008), Switzerland (Germann & Schmidt 2017), Latvia (Telnov et al. 2016), and the United Kingdom (Stenhouse 2017).

Due to climatic conditions, the species cannot survive in the natural habitats of Central Europe and even less so in Northern Europe. However, it is likely to be increasingly encountered in imported plant products, particularly dried fruit (Miłkowski 2019).

In contrast, *O. cornutus* has adapted very well to the Mediterranean Basin, forming permanent, stable populations that are spreading intensively into new areas (Trócoli et al. 2020). This spread is facilitated by its polyphagous nature, with the species reported to develop on nearly 40 tree and perennial plant species (Trócoli et al. 2020).

Beyond the Palearctic region, *Ozognathus cornutus* has also been introduced in Chile (Honour & Rothmann 2017), Réunion (Zahradník & Pussereau 2022), and Australia (Plant Health Australia 2019).

On June 17, 2023, in the town of Nikiana, located on the eastern coast of Lefkas Island in the Ionian Islands region (Fig. 1), four males and two females of *Ozognathus cornutus* were collected (Fig. 2). The specimens were shaken off a dying branch of *Ficus carica* L., 1753, growing near buildings. Voucher specimens are preserved in the authors' collection.

This marks the second record of this invasive species in Greece and the first in the western part of the country. The initial record in Greece (Koutsoukos & Demetriou 2023) was from Rhodes, near the Turkish coast. *Ficus carica* is a well-known host plant for this species, with prior observations of *O. cornutus* feeding on it in Spain (Bercedo et al. 2005) and Israel (Miłkowski 2019).

Our heartfelt thanks go to Tomasz Czerwiński for photographing the *Ozognathus cornutus* specimens.

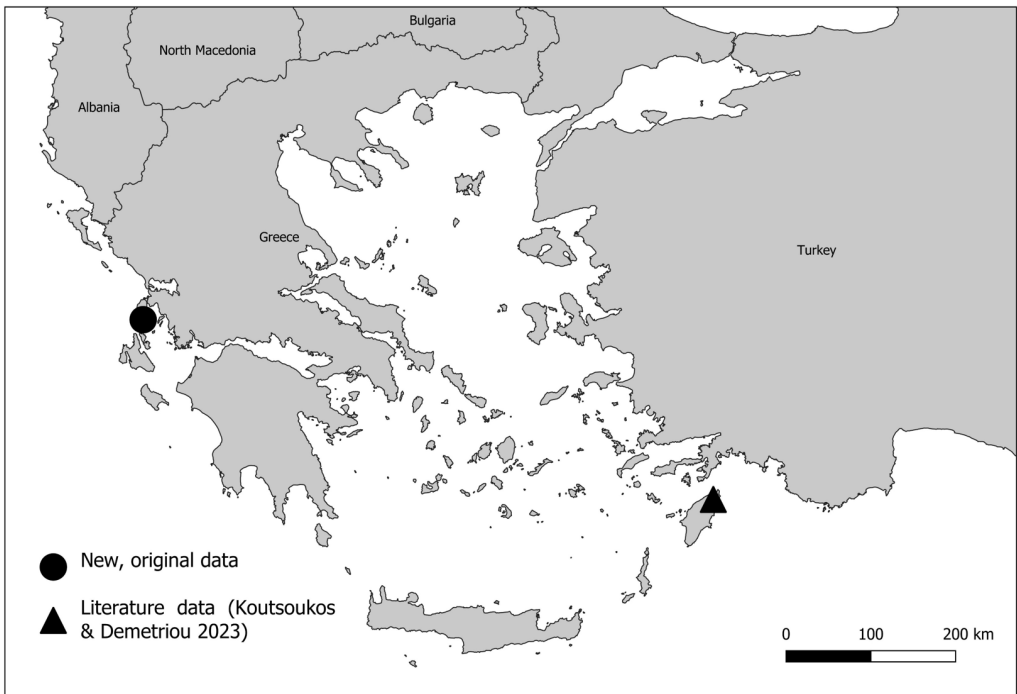


Fig. 1. Distribution of *Ozognathus cornutus* LeConte, 1859 in Greece.

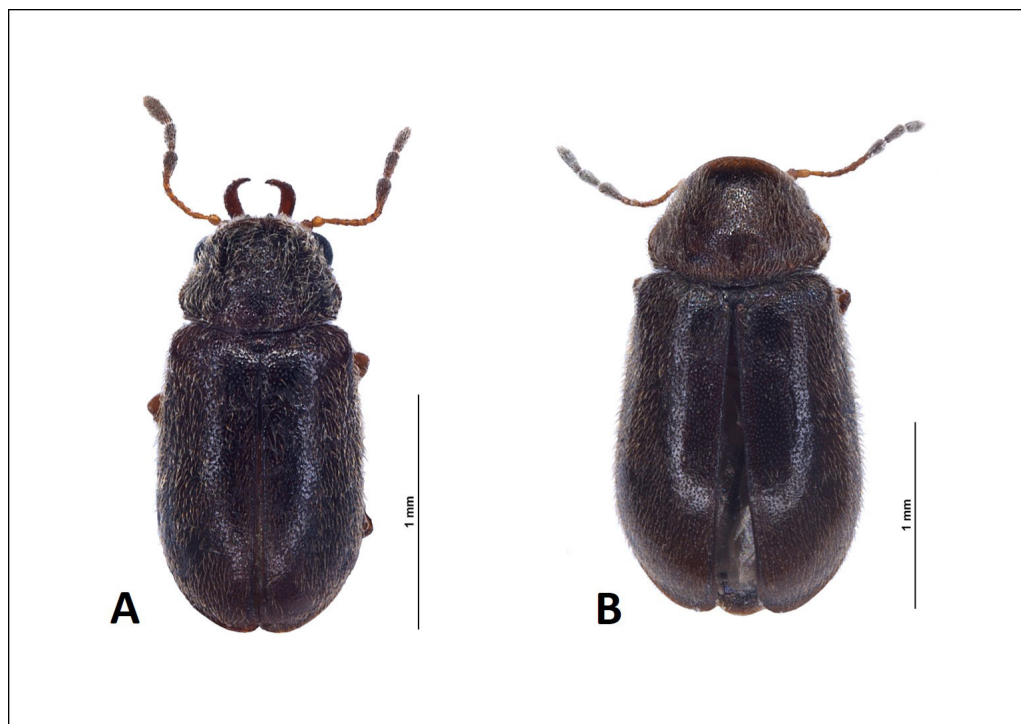


Fig. 2. Habitus of a male (A) and a female (B) of *Ozognathus cornutus* (LeConte, 1859) collected in Nikiana (Lefkas island). Photo by Tomasz Czerwiński.

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STRESZCZENIE

[Drugie stwierdzenie inwazyjnego gatunku chrząszcza *Ozognathus cornutus* (LECONTE, 1859) (Coleoptera: Ptiniidae: Anobiinae) w Grecji]

Pierwotny zasięg występowania *Ozognathus cornutus* obejmuje Amerykę Północną. W XXI wieku nastąpiła ekspansja tego gatunku w Palearktyce, szczególnie w basenie Morza Śródziemnego: Tunezja, Malta, Hiszpania, Portugalia, Gibraltar, Włochy, Wyspy Kanaryjskie, Izrael, Grecja, Cypr. Dodatkowo potwierdzone są zawleczenia gatunku do środkowej i północnej Europy: Niemiec, Szwajcarii, Łotwy czy Wielkiej Brytanii. Gatunek został również zawleczony do Ameryki Południowej – Chile, na Reunion i do Australii. Pierwsze stwierdzenie w Grecji (KOUTSOUKOS & DEMETRIOU 2023) dotyczyło wyspy Rodos u wybrzeży Turcji. W pracy przedstawiono drugie stanowisko tego inwazyjnego gatunku w Grecji. W roku 2023 zebrano 5 osobników (3 samce i 2 samice) z zamierającego figowca na wyspie Lefkas przy zachodnim wybrzeżu Grecji w regionie Wysp Jońskich.