



Nota breve | Short note

Presence of *Evania appendigaster*, a cockroach parasite, on the island of Boavista, Cabo Verde

Pilar Jurado-Angulo^{1,2,3,*}, Mario García-París³ & Raquel Vasconcelos¹

¹ CIBIO, Centro de Investigação em Biodiversidade e Recursos Genéticos, InBIO Laboratório Associado, BIOPOLIS Program in Genomics, Biodiversity and Land Planning, Campus de Vairão, Universidade do Porto, 4485-661 Vairão, Portugal

² Departamento de Biologia, Faculdade de Ciências da Universidade do Porto, 4169-007 Porto, Portugal

³ Departamento de Biodiversidad y Biología Evolutiva, Museo Nacional de Ciencias Naturales, MNCN-CSIC, c/ José Gutiérrez Abascal, 2. 28006, Madrid, Spain

* Corresponding author e-mail: pilarjurado@cibio.up.pt

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The family Evaniidae comprises a group of wasps known for their parasitic behaviour, targeting the egg capsules (ootheca) of cockroaches (Edmunds 1953). Evanids deposit their eggs within these oothecae, where their larvae develop by consuming the cockroach eggs, ultimately emerging as adults (Lebeck 1991). Morphologically, this group of Hymenoptera is easily recognisable by the distinctive shape of their body. Their compact and small abdomen, along with elongated posterior legs, often give the impression that the rear part of their body is missing (Rey del Castillo 1984).

During a visit to the island of Boavista, Cabo Verde, in January 2023, we made an *ad hoc* observation of an adult specimen of *Evania appendigaster* (L., 1758) (Fig. 1) in the vicinity

of an hotel in Sal Rei, close to Praia do Estoril (16.17353, -22.91489). This is one of the most characteristic species of the family, recognisable by its large size (5.5 to 7.0 mm) compared to other species, black colouration and blue eyes (Fig. 1).

This species of apparent Asian origin, has a cosmopolitan distribution, except for the polar regions, and is believed to have been facilitated in its worldwide spread by human activities and the spread of its cockroach hosts (Morillo & Cazorla 2020). Despite its extensive distribution range, there are no published records of any Evaniidae species in Cabo Verde, although we have found three sightings of *E. appendigaster* on the iNaturalist platform (www.inaturalist.org) from two islands in the archipelago, i.e, Sal and São Vicente. Two

observations were made in Santa Maria, at the southern tip of Sal, while the third was recorded on São Vicente (16.90394, -24.90807) in a residential area near Baía das Gatas. The

present observation constitutes the first published record of an evaniidid in Cabo Verde and the first record of *E. appendigaster* for Boavista.



Fig. 1. *Evania appendigaster* recorded on the island of Boavista in January 2023 (photo by M. García-París).

Evania appendigaster mainly parasitizes the eggs of *Periplaneta americana*, *Periplaneta australiasea*, and *Blatta orientalis*, ubiquitous cockroaches in urban areas (Stange 1978, Fox & Bressan-Nascimento 2006). Therefore, the arrival of *E. appendigaster* in Cabo Verde is likely linked to the introduction of these cockroaches. In the Canaries, *E. appendigaster* is relatively abundant (Rey del Castillo 1983), and it possibly arrived in Cabo Verde with ships carrying cockroaches from those islands.

The impact of *E. appendigaster* in Cabo Verde is presumably low as it mainly

parasitizes invasive and non-native cockroaches. In fact, the species is often used as a biological control of cockroaches (Cameron 1957, Lebeck 1991). Given the expanding distribution of *E. appendigaster* and its role in controlling invasive cockroaches, further monitoring is needed in Cabo Verde to understand its ecological impact (e.g., interactions with the four native cockroach species of three different genera; Báez & Oromí 2005) and its potential benefits in urban pest management.

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