



# Article

urn:lsid:zoobank.org:pub:A049B613-1230-4F2A-9733-EAD175642A30

## The genus *Caenocrepis* Thomson (Hymenoptera: Pteromalidae) in the Afrotropical region, with a key to world species

MIRCEA-DAN MITROIU

Faculty of Biology, Alexandru Ioan Cuza University, Bd. Carol I 11, 700506 Iasi, ROMANIA.

E-mail: mircea.mitroiu@uaic.ro

### Abstract

*Caenocrepis* Thomson (Hymenoptera: Pteromalidae) is recorded for the first time in the Afrotropical region and two species, *C. simonae* **sp. nov.** and *C. formidolosa* **sp. nov.**, are newly described from Mozambique and Zimbabwe. A key to the world species of the genus is provided. The two new species show some interesting morphological features such as enlarged clypeal lobes and unusually wide temples, which are not present in any Palaearctic species.

**Key words:** Chalcidoidea, egg parasitoid, new species, Mozambique, Zimbabwe

### Introduction

*Caenocrepis* Thomson is a small genus of Pteromalinae (Hymenoptera: Pteromalidae) with two previously described species, both occurring in the Palaearctic region—*C. arenicola* (Thomson 1878) and *C. bothynoderi* Gromakov 1940. The distribution of *C. arenicola* includes mainly Southern and Central Europe, reaching North Africa, Caucasus and Kazakhstan, whereas *C. bothynoderi* is confined mainly to South-Eastern Europe, and Western and Central Asia (Noyes 2012). The validity of the genus name, as well as the differences between the two species are discussed in detail by Bouček (1958).

Both described species are rather rare or local and develop as egg parasitoids of Curculionidae (Coleoptera), an unusual condition for Pteromalidae. *Caenocrepis arenicola* attacks the eggs of *Pachycerus madidus* (Olivier 1807), whereas *C. bothynoderi* attacks the eggs of *Asproparthenis punctiventris* (Germar 1824) and possibly *Pachycerus segnis* (Germar 1824) (Noyes 2012).

The aim of this paper is to describe the first known Afrotropical species of *Caenocrepis*, and to provide an illustrated key to all known species of the genus.

### Material and methods

*Caenocrepis* Thomson was poorly represented in the museum collections examined, even regarding just the Palaearctic fauna. All available specimens from The Natural History Museum, London (**BMNH**, Suzanne Ryder), The Royal Museum for Central Africa, Tervuren (**RMCA**, Eliane De Coninck), Musée national d'Histoire naturelle, Paris (**MNHN**, Agnès Touret-Alby), Museo Nacional de Ciencias Naturales, Madrid (**MNCN**, Mercedes París) and the author's collection, Alexandru Ioan Cuza University of Iasi (**MICO**) were examined. Information on specimen labels is given ad litteram, followed by the depository in parentheses.

Observations and descriptions were made using a Krüss MSZ5400 stereomicroscope with a maximum magnification of 180×. Images were taken using a Leica M205A automated research stereomicroscope with planapochromate objective connected to a Leica DFC500 high-resolution digital camera. The acquired images were then processed with Helicon Focus® 5.3. Their clarity was further enhanced using Adobe® Photoshop® CS3. Measurements were taken with an eye-piece micrometer.