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SHORT COMMUNICATION

First record of a praniza larva of the family Gnathiidae (Crustacea, Isopoda) living on *Chromogobius zebratus* (Pisces, Gobiidae) in the eastern Mediterranean Sea

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Abstract

In this study, a praniza larva of a gnathiid isopod was reported for the first time from the eastern Mediterranean Sea of Turkey, Antalya. In particular, it was found on caudal peduncle of the fish *Chromogobius zebratus* (Kolombatovic, 1891).

Keywords: Ectoparasite, Gnathiidae, Turkey, Levantine Sea

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The family Gnathiidae Leach, 1814 (Crustacea, Isopoda) includes about 200 species of marine isopods ascribed to 12 genera and mostly living in shallow waters worldwide (Ota *et al.* 2021). The family is characterized by three larval stages, with each stage having two forms, namely the “praniza” and the “zuphea”. Juvenile gnathiids (the praniza larvae) have a biphasic life cycle and are ectoparasites of fish, observed on gills, nares, fins, body surfaces, eyes, and buccal cavity (Tanaka 2007). After feeding, the praniza larvae dwell in the benthic substrata to moult (Smit and Davis 2004).

During the fieldwork held on 4 June 2021 at Inciralti Beach (36°51.6007' N; 30°43.725' E, Antalya, Turkey), sand and stone samples were collected at 6 m depth. Once back in the laboratory, a fish specimen of about 1.3 cm total length was noted in the samples, with a live praniza larva of about 2 mm on its caudal peduncle (Figure 1). It is also shown in the videos uploaded online:

www.youtube.com/watch?v=6fQI9YvMEx0&ab_channel=insecta.marina. and www.youtube.com/watch?v=QDgdTVr55WE&ab_channel=insecta.marina.

The fish specimen was identified as *Chromogobius zebratus* (Kolombatovic, 1891), whereas the gnathiid larva was detached and photographed using a stereo microscope. Both samples were stored in 4% formalin for preservation and deposited at the Department of Biology, Istanbul University, Istanbul, Turkey (collection number: IUSHM 2021-1464).

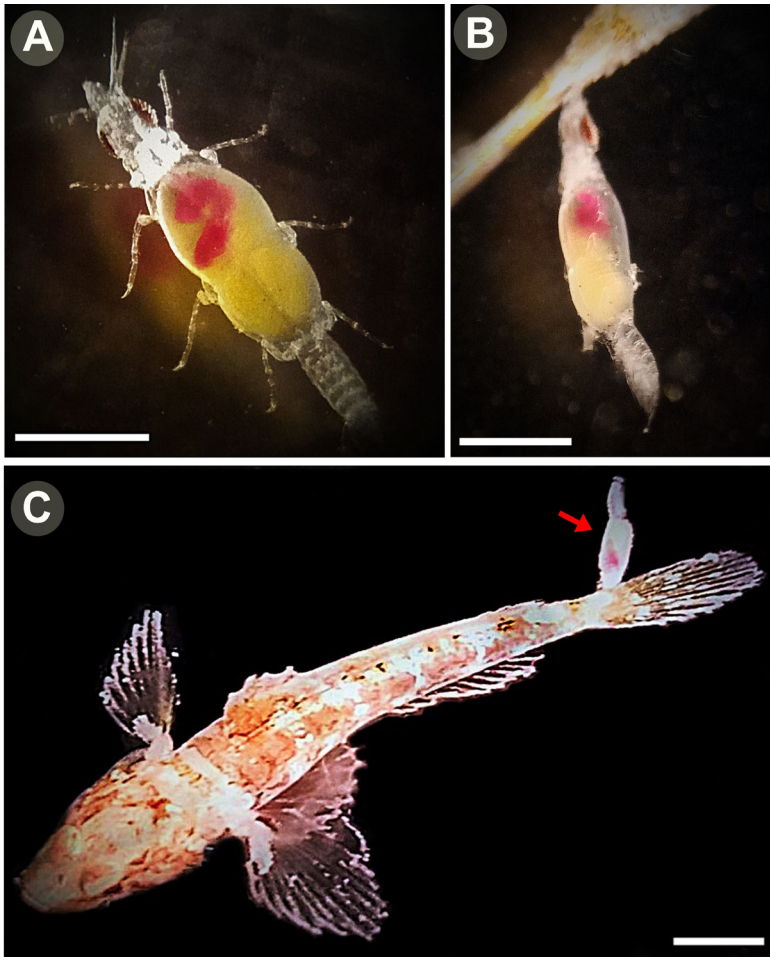


Figure 1. A praniza larva of the genus *Gnathia* attached on the caudal peduncle of *Chromogobius zebratus* A-B Dorsal and lateral view of the praniza larva C. *Chromogobius zebratus* with the *Gnathia* specimen (highlighted by the red arrow)
Scale bars: 1 mm. Photos: F. Durucan

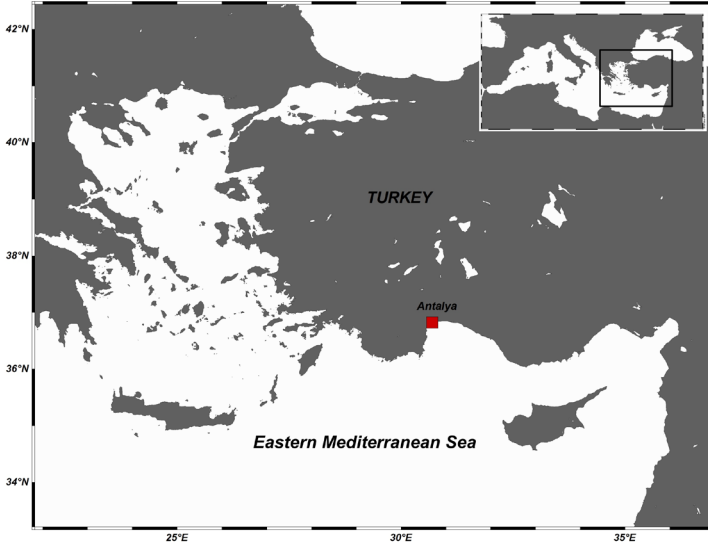


Figure 2. Sampling location of *Chromogobius zebratus* specimen with a gnathiid praniza

Notwithstanding the limitations of the present note, such observation constitute the first report of a praniza larva of a gnathiid isopod on *C. zebratus*. Further studies should aim to improve our knowledge on parasitic isopods along the Turkish coasts, focusing on understudied areas and habitats.

***Chromogobius zebratus* (Pisces, Gobiidae) üzerinde yaşayan Gnathiidae (Crustacea, Isopoda) praniza larvanın Doğu Akdeniz'den ilk kaydı**

Öz

Bu çalışmada, *Chromogobius zebratus* (Kolombatovic, 1891)'un kaudal bölümü üzerinde bulunan, praniza larva evresindeki bir gnathiid isopod, Doğu Akdeniz, Antalya kıyılarından ilk kez rapor edilmiştir.

Anahtar kelimeler: Ektoparazit, Gnathiidae, Türkiye, Levanten Denizi

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