

# Identification of two gill parasites *Lamproglena compacta* (Copepoda: Lernaeidae) and *Paradiplozoon bliccae* (Monogenea: Diplozoidae) from endemic Aegean chub (*Squalius fellowesii*)

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## Abstract

In this study, the occurrence of gill parasites in the Aegean chub *Squalius fellowesii* (Günther, 1868) of Doğanbaba Creek (Yeşilova-Burdur, Turkey) was investigated. To date, very little is known about fish parasitofauna in this region and new research into parasites and their hosts are still required. The aim of the research was to improve the understanding of parasite communities in a native fish species, therefore 152 *S. fellowesii* were collected by electrofishing between January 2014 and February 2015. Fish gills were examined microscopically for parasites and the pathological changes, induced by parasites, were investigated. Two helminth species – *Lamproglena compacta* (Copepoda: Lernaeidae) and *Paradiplozoon bliccae* (Monogenea: Diplozoidae) were recorded localised on the extremity of the filaments. They caused an irregular appearance of the tissues at the attachment sites. In some cases more than one individual of the same or different species was observed at the same site. Histopathological examination in areas of parasite attachment revealed inflammation, hyperaemia and haemorrhages in the gills and slight hyperplasia. Prevalence, intensity and seasonality of infection, length classes, ages and sex compositions of infected populations were monitored and compared with other studies. To our knowledge, this is the first record of *L. compacta* and *P. bliccae* in Turkey.

## Introduction

Studies of parasite infections in endemic fishes are important for the management and conservation of fish populations in natural water bodies. *Squalius fellowesii*, endemic in Turkey, is a member of Cyprinidae, commonly known

as Aegean chub. It is mainly found in Büyük Menderes, Bakır, Gediz, Eşen and Dalaman River systems (Freyhof, 2014).

Parasitic monogeneans are commonly found on

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