

# Helminth fauna of Simav barbel, *Barbus niluferensis* Turan, Kottelat & Ekmekçi, 2009 An endemic fish from Nilüfer river in Bursa (Turkey): New host and locality records

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## Abstract

This study was carried out from autumn 2015 to summer 2016 to determine the seasonal occurrence of helminth species in *Barbus niluferensis* Turan, Kottelat & Ekmekçi, 2009 endemic to Turkey. Samples were taken at random sites from the river once in every three months. A total of 58 individuals of *B. niluferensis* specimens were collected by electrofishing from the Nilüfer River, Marmara Sea drainage in Bursa province, Turkey. Forty one fish specimens were infected by one or more parasite specimens, belonging to one of four identified parasitic helminth species; *Dactylogyrus carpathicus* (prevalence 58.6%), *D. petenyi* (25.8%) and *D. lenkorani* (24.1%) from the gills, and *Allocreadium isoporum* (39.6%) from the intestine. *D. carpathicus* was the commonest species found on the hosts. A total of 211 specimens of *D. carpathicus* infected 34 of 58 fish examined, having a prevalence and mean intensity of 58.6% and 6.2, respectively. Infection data of the parasite species were determined for seasons, host size and sex. *D. carpathicus* was present through all seasons. The prevalence values varied from 25% to 92.3%, the highest in winter. Fish were divided into two groups according to size; prevalence was higher in hosts of size class I for the three monogenean species, while for *A. isoporum* prevalence was higher in size class II. Higher prevalence and intensity levels were recorded in female, compared to male fish. The present study is the first record of helminth parasites of *B. niluferensis*. In addition, Turkey is a new locality record for *D. petenyi*, while *B. niluferensis* represents a new host record for all isolated helminths, adding to the geographical and host distribution of these studied parasite species.

## Introduction

The genus *Barbus* consists of approximately 800 nominal species of freshwater fish and has a wide geographic distribution throughout Europe, Africa and Asia (Turan et al., 2009). Today seven known valid species belonging to the genus *Barbus* occur in Turkey, of which at

least four species including *Barbus niluferensis*, are endemic to Turkey.

Simav barbel, *B. niluferensis* inhabits swift flowing water, with cobble and pebble beds, but has a very limited distribution being mainly

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