

Occurrence of trypanorhynch cestod (parasite larvae) in blackmouth catshark, *Galeus melastomus* Rafinesque, 1810 (Scyliorhinidae) from Gulf of Antalya, Turkey

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Aim of the study: In the present study, we seek to clarify the status (prevalence and mean intensity) of endo-parasite infection in blackmouth catshark (*Galeus melastomus*) from Gulf of Antalya in Turkey.

Material and Methods: This study was carried out during Sept. and Oct. 2016. Blackmouth catshark samples were collected using troll operations (1st operation date: 26 Sept. 2016, No of fish: 30, TL: 32.65±5.01 cm, W: 142.64±62.57 g, Deep range: 610-640 m, Time: 1 hour, location: N36°41,190-E31°12,920/N36°41,360-E31°09,900' and 2nd operation date: 26 Oct. 2016, No of fish: 10, TL: 34.71±7.94 cm, W: 177.08±101.96 g, Deep range: 610-640 m, Time: 1 hour, location: N36°41,190-E31°12,920) and labelled in separate plastic bags. The mean total length and mean live weight of the examined blackmouth catshark were TL: 33.17±5.83 cm and W: 151.25±74.42 g, respectively. Endo-parasitological examinations, evaluation and identification were conducted utilizing standard techniques. All parasite samples were rapidly removed and stored in a buffered 4% formaldehyde and 90% ethanol solution. In this study the parasitic trypanorhynch cestode larvae were removed from hypaxial muscle tissue (posterior part of the cloak between the lower part of the caudal fin: musculus ventralis lateralis) of blackmouth catshark, *Galeus melastomus*.

Results: After morphological examination all parasite specimens were identified as *Grillotia* sp. Guiart, 1927 (Grillotidae) belong to Trypanorhyncha order. According to the keys to the cestode parasites of vertebrates; some diagnostic specifications were found in similar such as the elongate scolex, two bothridia, inclined apically, sessile, patelliform or cordiform, margins free, and rims thickened features. Moreover the plerocercoid stages of this type of cestodes are commonly found in teleost fishes however, adults occur in chondrichthyes. *Grillotia* sp. recorded as a fish parasite from different localities including Atlantic, Mediterranean, and Pacific and Australia waters. The detailed parasitism status of blackmouth catshark were described as the number of fish N: 40, total length of uninfected fish TL_{ui}: 30.95±2.06 cm, live weight uninfected fish W_{ui}: 26.86±7.56 g, number of infected fish N_i: 7, total length of infected fish TL_i: 43.63±6.60 cm, live weight infected fish W_i: 266.22±130.36 g, total no of cestode N_c: 363, prevalence P: 21.67±11.79%, mean intensity MI: 58.50±20.51. The literature showed that there was no report on cestode infection of blackmouth catshark in Turkish waters. Thus, this is the first documented report on the occurrence of *Grillotia* sp. in blackmouth catshark caught in the Gulf of Antalya, Turkey.

Keywords: Parasites, blackmouth catshark, *Galeus melastomus*, Antalya, Turkey.