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Five species of *Philometra* Costa, 1845 (Nematoda: Philometridae) newly recorded from marine fishes in Iraq, including the description of *P. arabiensis* sp. n. from the ovary of the shrimp scad *Alepes djedaba* (Carangidae)

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Abstract: Recent examinations of some marine fishes from off the southern coast of Iraq revealed the presence of five species of *Philometra* Costa, 1845 (Nematoda: Philometridae): *Philometra arabiensis* sp. n. (males and females) from the ovary of the shrimp scad *Alepes djedaba* (Forsskål) (Carangidae, Carangiformes), *Philometra psettoditis* Moravec, Walter et Yuniar, 2012 (females) from the body cavity of the Indian halibut *Psettodes erumei* (Bloch et Schneider) (Psettodidae, Pleuronectiformes), *Philometra terapontis* Moravec, Gopalakrishnan, Rajkumar, Saravanakumar et Kaliyamoorthy, 2011 (female) from the ovary of the jarbua terapon *Terapon jarbua* (Forsskål) (Terapontidae, Centrarchiformes), *Philometra* sp. (females) from the ovary of the Arabian blackspot threadfin *Polydactylus mullani* (Hora) (Polynemidae, Carangariformes) and *Philometra* sp. 2 of Moravec et al. (2016a) (females) from the ovary and body cavity of the bartail flathead *Platycephalus indicus* (Linnaeus) (Platycephalidae, Perciformes). *Philometra arabiensis* sp. n. is mainly characterised by the length of spicules (190–243 µm) and gubernaculum (73–99 µm), the gubernaculum/spicule length ratio (1 : 2.33–2.79), the structure of the gubernaculum distal portion and the male caudal end, and the body length of males (1.80–2.73 mm). The present findings of *P. psettoditis* and *P. terapontis* in fishes of the Arabian Gulf represent new geographical records for these parasites.

Keywords: Parasitic nematodes, Dracunculoidea, taxonomy, hosts, Arabian Gulf.

Philometrid nematodes (Philometridae) are common tissue-dwelling parasites of freshwater, brackish-water and marine fishes throughout the world (Moravec 2006). The present knowledge of these important parasites occurring in fishes of the Arabian (= Persian) Gulf was reviewed by Moravec et al. (2021a).

During recent helminthological investigations of some marine fishes in the Arabian Gulf, off the coast near Basrah, southern Iraq, specimens of *Philometra* Costa, 1845 were found in the shrimp scad *Alepes djedaba* (Forsskål) (Carangidae, Carangiformes), the Indian halibut *Psettodes erumei* (Bloch et Schneider) (Psettodidae, Pleuronectiformes), the jarbua terapon *Terapon jarbua* (Forsskål) (Terapontidae, Centrarchiformes), the Arabian blackspot threadfin *Polydactylus mullani* (Hora) (Polynemidae, Carangariformes) and the bartail flathead *Platycephalus indicus* (Linnaeus) (Platycephalidae, Perciformes). Results of their closer examination are described below.

Alepes djedaba often forms large schools, feeds mostly on small planktonic crustaceans and occasionally on small fishes (Carpenter et al. 1997). *Psettodes erumei* feeds on substratum-living animals, mainly fishes (Carpenter et al. 1997). *Terapon jarbua* is omnivorous, feeds on fishes, algae, insects and sand-dwelling invertebrates. *Polydactylus mullani*, recently reported from Iraqi marine waters (Ali et al. 2021), feeds on shrimps and small fishes (Froese and Pauly 2022). *Platycephalus indicus* is mainly piscivorous, sometimes feeding on shrimps, crabs and cuttlefish (Hashemi et al. 2013). All these fish species are utilised as food fishes in Iraq and other countries in the Gulf.

MATERIALS AND METHODS

The fishes examined were caught by trawl net during December 2021 till May 2022. The nematodes recovered were washed in physiological saline and then fixed in hot 5% formalin. For light microscopical examination (LM), they were cleared with glycerine. Drawings were made with the aid of a Zeiss microscope drawing attachment. Specimens used for scanning electron microscopical examination (SEM) were postfixed in 1% osmium tetroxide (in phosphate buffer), dehydrated through a graded acetone series,

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