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Parasitology

**THE PARASITE FAUNA OF GAR-FISH - *BELONE BELONE* (L.)  
 FROM PUCK BAY  
 PARAZYTOFAUNA BELONY - *BELONE BELONE* (L.)  
 Z ZATOKI PUCKIEJ**

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From 1966 to 1967 the author carried out an investigation on the helminth fauna of gar-fish *Belone belone* (L.) from Puck Bay of the Baltic. It was established, the next species parasitise in gar-fish: *Diplostomum spathaceum* (Rud.), *Tylodelphys* sp., *Scolex pleuronectis* Müll., *Contracaecum aduncum* (Rud.), *Cuculanus truttae* (Fabricius), *Pomphorhynchus laevis* (Zoega), and *Neoechinorhynchus rutili* (Müll.). With exception of *Pomphorhynchus laevis* (Zoega) they were not found in gar-fish yet, but they occur commonly in the other Polish fishes.

The present work comprises the results of examination of gar-fishes for helminth parasites. Only a little information exists in Polish literature concerning the parasites of this fish species in Polish territorial waters of the Baltic Sea. The internal parasites were studied by J. Grabda (in press), but she found only one species of acanthocephalan - *Pomphorhynchus laevis* (Zoega). The researches of Prost (1967), carried on gar-fishes from Puck Bay, concerned exclusively monogeneans. This author did not find any parasite of this group in 176 fishes examined. Wagener (1909) found no parasites in this fish species in the territories immediately neighboring to Poland. He gave only a short note that nothing had been found in gar-fish, without precise of information on the number of fishes examined and their origin. Probably the fishes were caught in the environs of Kaliningrad, from where the majority of his materials originated. Engelbrecht (1958) found only the larvae of *Terranova decipiens* and *Cercaria* sp. in gar-fishes from the environs of Greifswald and Kleinen Haff (GDR).

The scarcity of information on the parasites of gar-fish in the southern part of the Baltic Sea has inclined the author to undertake studies on helminth parasites of this fish species.

In our territorial water gar-fish is taken in net seasonally from May to August, and the researches were carried on in this period of the year.

In 1966 examination were made on 70 frozen specimens a total length range from 530 to 781 mm. and weigh from 175 to 440 g; and in 1967 eighty freshly caught fishes from 635 to 810 mm. in length and from 250 to 840 g. in weigh were used for investigations.

In this material 7 species of parasites belonging to Digenea, Cestoda, Nematoda and Acanthocephala were found.

#### DIGENEA

##### 1. Diplostomum spathaceum (R u d o l p h i, 1819)

This species was found in 1967 in 8 fishes out of 80 examined specimens. Single metacercariae occurred in eye lenses.

In Poland this species is a common parasite of many fresh water fishes. In Puck Bay it was found in 8 species of fishes (C i c h o w l a s, 1961) In gar-fish in Poland reported for the first time.

##### 2. Tylodelphys sp.

Single specimen of metacercaria was found in the vitreous body of the eye of one fish.

#### CESTODA

##### 1. Scolex pleuronectis M ü l l e r, 1788

In the intestine of one fish 243 specimens of the larvae were found in 1966. Under this name the larvae belonging to different genera and species of the ordo Tetraphyllidea are ranged. According to Yamaguti (after B y h o v - s k i j, 1962) five types of larvae may be distinguished within it. The author's specimens were found only once in the intestine of a frozen fish, so their structure was not very clear and precise determination was impossible.

#### NEMATODA

##### 1. Contracaecum aduncum (R u d o l p h i, 1802)

Single specimens were found in the intestine of 6 fishes out of 80 specimens examined in 1967. The parasite is common in brackish- and salt water. In gar-fish in Poland reported for the first time.

2. Cucullanus truttae (F a b r i c i u s, 1794)

In 1966 the incidence of infestation amounted to 9% and the intensity was 1 to 2 specimens in the intestine of one fish. In Poland this species was found in salmon trout (*Salmo trutta trutta* L.) (Wierzbicki in Grabda, in press) and in sheat-fish (*Silurus glanis* L.) (E j s y m o n t, 1964).

## ACANTHOCEPHALA

1. Pomphorhynchus laevis (Z o e g a in M ü l l e r, 1776)

This acanthocephalan species dominated over the other parasites of gar-fish. In 1966 the incidence of infestation amounted to 40% and the intensity to 1-6 specimens in a fish. In 1967 the incidence was 15% and the intensity 1-2 specimens. The species occur in marine and freshwater fishes as well. Common in Poland. In gar-fish reported by J. Grabda (in press).

2. Neoechinorhynchus rutili (M ü l l e r, 1780)

This acanthocephalan species was found in 1966 in one gar-fish in a number of 7 specimens. In 1967 this parasite was not found. The species is common in Poland; it occurs in many species of freshwater fishes, sporadically in marine fishes. In gar-fish in Poland reported for the first time.

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PARAZYTOFAUNA BELONY - BELONE BELONE (L.)  
Z ZATOKI PUCKIEJ

S t r e s z c z e n i e

W latach 1966-1967 przebadano 150 ryb o ciężarze 175-840 g i długości (longitudo corporis/longitudo totalis) 51/53-77/81 cm z Zatoki Puckiej. Stwierdzono następujące gatunki pasożytów: *Diplostomum spathaceum* (Rudolphi, 1819), *Tylodelphys* sp., *Scolex pleuronectis* Müller, 1788, *Contracaecum aduncum* (Rudolphi, 1802), *Cucullanus truttae* (Fabricius, 1794), *Pomphorhynchus laevis* (Zoega in Müller, 1776) i *Neoechinorhynchus rutili* (Müller, 1780). Są to gatunki pospolite, występujące w Polsce u różnych gatunków ryb. U belony z wyjątkiem *Pomphorhynchus laevis* notowane w kraju po raz pierwszy.

ПАРАЗИТОФАУНА САРГАНА - BELONE BELONE (L.) ИЗ ПУЦКОГО ЗАЛИВА

Р е з ю м е

В 1966-1967 гг. обследовано 150 экз. рыб 52/53-77/81 см. длины (longitudo corporis/longitudo totalis) и 175-840 гр. веса, из Пуцкого Залива. Были обнаружены следующие виды паразитов: *Diplostomum spathaceum* (Rudolphi, 1819), *Tylodelphys* sp., *Scolex pleuronectis* Müller, 1788, *Contracaecum aduncum* (Rudolphi, 1802), *Cucullanus truttae* (Fabricius, 1794), *Pomphorhynchus laevis* (Zoega in Müller, 1776), *Neoechinorhynchus rutili* (Müller, 1780). Это обыкновенные виды, найденные в Польше и у других видов рыб. Они за исключением *Pomphorhynchus laevis* (Zoega) впервые зарегистрированы в стране у саргана.

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