



**PARASITES OF THE ROUND GOBY *NEOGOBIUS MELANOSTOMUS* (PALLAS, 1814)
FROM THE BRACKISH LOCALITIES OF SOUTHWESTERN UKRAINE:
INDICATORS OF FISH RAW MATERIAL QUALITY**

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This study provides a comprehensive parasitological assessment of the round goby *Neogobius melanostomus* (Pallas, 1814) from two ecologically contrasting water bodies in Southwestern Ukraine – the brackish Gulf of Odesa (Black Sea) and the freshwater Cuciurgan Reservoir. The main objective was to evaluate parasite-based indicators of fish raw material quality and to explore the potential of parasite communities as bioindicators of environmental condition. During the 2025 warm season, a total of 37 specimens were examined to determine the taxonomic composition, infection indices, community structure, and spatial variation in parasite fauna across the two habitats.

In the Gulf of Odesa, the parasite community was dominated by euryhaline intestinal nematodes (*Dichelyne minutus*) and metacercariae of marine digeneans (*Galactosomum lacteum*), alongside occasional findings of *Cryptocotyle jejuna*, *Proteocephalus gobiorum*, and *Telosentis exiguus*. This infection profile is characteristic of brackish-water systems with complex food webs and pronounced interactions between fish and invertebrate hosts. In contrast, the Cuciurgan Reservoir exhibited a parasite community dominated by the gill ectoparasite *Ergasilus gobiorum*, which accounted for more than 80% of total parasite abundance. Additional taxa included *Bucephalus polymorphus*, *Eustrongylides excisus* larvae, and *Trichodina* sp. The comparison between localities revealed marked differences in community structure driven by salinity, trophic interactions, and ecological gradients.

A noteworthy finding is the confirmed presence of *G. lacteum* in the Gulf of Odesa, which represents the first modern record for this region and extends the known distribution of the species along the northwestern Black Sea coast. Several identified parasites hold economic or sanitary importance, including the gill parasite *E. gobiorum* and zoonotic taxa such as *E. excisus* and *B. polymorphus*. The results demonstrate that the parasitological profiles of the round goby can serve as valuable indicators of fish raw quality, ecological status of aquatic environments, and may be integrated into monitoring and safety assessment systems, including HACCP-based frameworks.

Key words: parasites, *Galactosomum lacteum*, *Ergasilus gobiorum*, raw quality, indicators, Gulf of Odesa, Cuciurgan Reservoir.

Introduction

The round goby (*Neogobius melanostomus* (Pallas, 1814); Actinopterii: Gobiidae) is a typical representative of the Ponto-Caspian fish fauna (Smirnov 1986; Slastenenko 1955–1956; Movchan 2011). Its natural range includes the Black, Azov, Marmara, and Caspian Seas. It also inhabits the lower reaches of their river basins (Movchan 2011; Kvach, Zamorov, and Pupins 2021). In recent decades, this species has formed dense

local populations in various types of water bodies, from brackish bays to freshwater reservoirs. In particular, it has spread up the Dnieper and Dniester rivers (Khudyi 2002; Didenko et al. 2024). Recently, it has become one of the most successful invasive species in Europe (Kvach, Zamorov, and Pupins 2021). As an alien species, it is found in the middle and upper reaches of the rivers of the Black Sea basin, in the Baltic Sea basin rivers, North Sea basin rivers, and the Aegean

Sea. It has also reached the middle and upper Volga River in Russia, the Aral Sea basin, the North American Great Lakes, and the Illinois and St. Lawrence rivers (Kvach, Zamorov, and Pupins 2021). In some regions, round goby and other Ponto-Caspian gobies have significantly affected native fish assemblages, with both positive and negative ecological consequences (Piria et al. 2016).

The high density of this species makes it a traditional fisheries resource in Southern Ukraine and some other parts of the Black Sea; thus, it could be considered a non-traditional raw material for production and processing functional products (Zamorov, and Chernikova 2011; Zamorov et al. 2015, 2019, 2022). Recent stock assessments indicate a significant decline in round goby abundance in the bay compared to historical levels. Previously, recreational catches reached up to one ton per day in certain coastal areas (Zamorov 2022). This contrast reflects a long-term decrease in population density.

Fish parasite fauna is an indicator of ecological conditions and a factor determining the safety and quality of fish products (Sures et al. 2017). The round goby (*N. melanostomus*) is an intermediate host for several parasites of medical and veterinary importance. For example, it is a source of heterophyid metacercariae such as *Pygydiopsis genata* and *Cryptocotyle lingua* (Kvach 2005), which can infect humans (Youssef 1987; Zimmerman, and Smith 1975). There have also been epizootics in ducklings caused by the nematodes *Tetrameres fissispina* and *Streptocara crassicauda*, whose larvae were transmitted by gobiids (Kovalenko 1960).

In recent decades, studies of goby parasites in Ukraine have been conducted in the Middle Dnipro basin (Zaichenko 2014), the Dnieper-Bug Estuary and the adjacent part of the Black Sea (Goncharov 2019), and in the Azov Sea (Sarabev, and Domnich 2001). The comprehensive description and analysis of the parasite fauna is presented in the study by Y. Kvach and M. Ondračková (2020).

The Gulf of Odesa is an important recreational water body in the Ukrainian part of the Black Sea, where commercial fishing is actively practised (Zaitsev 2008). The modern fish fauna of its coastal waters includes about 80 species, many of which are important fishery species (Snigirov et al. 2020). The Cuciurgan Reservoir is a limnetic water body in the Dniester Delta built at the confluence of the Cuciurgan (or Kuchurhan) and Turunchuk rivers. Located on the border between Ukraine and Moldova, it is actively used for fishery, with fish catches in the Ukraine's part ranging from 1.500 to 2.000 tons per year (Shakman, and Bystryantseva 2021). Despite the significant importance of both water bodies for fishing, the fish parasites in the Gulf of Odesa were last studied in 2007 (Kvach 2007), and no studies have been conducted in the Cuciurgan Reservoir.

Thus, the aim of our work was to study the current status of the round goby parasite communities in two contrasting water areas (the Gulf of Odesa: the area of the biological station; Cuciurgan Reservoir) to assess the intensity/prevalence of key species, to identify economically/sanitarially significant taxa, and to discuss the risks of further spread of parasites associated with round goby.

Materials and methods

During the warm season of 2025 (July–August), a total of 37 specimens of the round goby (*Neogobius melanostomus*) were collected and examined. They included 17 specimens from the Gulf of Odesa (46.44113446 N, 30.773269 E) and 20 – from the Cuciurgan Reservoir (46.67449971 N, 29.96620274 E) (Fig. 1). The fish was caught using multimesh gill nets and crayfish traps (3 m, with a mesh size of 6 mm). The fish were transported to the laboratory of the Institute of Marine Biology of the NAS of Ukraine alive in artificially aerated cans in the water taken from the sampling sites. Then, the samples were studied for parasites within two days (Kvach et al. 2016).

The fish were sexed and measured (standard lengths, SL, mm) before dissection. Then, tissues and organs were examined for parasites using Konus Crystal 7– 45× stereomicroscopes (Konus Optical and Sport Systems, Italy). Fins, skin, and gills were observed in Petri dishes with water from the sampling site, while eyes, muscles, and internal organs were examined after compression between two 9×13 cm glass plates. Microparasites were studied alive; monogeneans were preserved in GAP (glycerol-ammonia-picrate) and prepared as semi-permanent preparations according to G. Malmberg (1970); digeneans, cestodes, and nematodes were fixed in hot 4% formaldehyde, stained with iron acetic acid carmine, dehydrated in concentrated ethanol and mounted in Canadian balsam as permanent preparations (Georgiev, Biserkov, and Genov 1986; Cribb, and Bray 2010). Acanthocephalans were stored in 70% ethanol, pressed between two microscope slides, and then mounted in glycerol as temporary preparations for light microscopy; glochidia and crustaceans were preserved in 4% formaldehyde. All parasites were identified to species level where possible, or to the lowest possible taxa using a Leica DM750 light microscope with a Leica Flexacam i5 digital camera (Leica Microsystems, Germany).

The parasitological indices of prevalence (P, %), average intensity (MI), intensity range (IR), and average abundance (A) were calculated for each parasite species (Bush et al. 1997). Species richness (S) was defined as the total number of parasite taxa recorded per locality. For all average parameters, the standard deviation (sd) was calculated. To assess the similarity of parasite communities' composition, the Jaccard similarity index

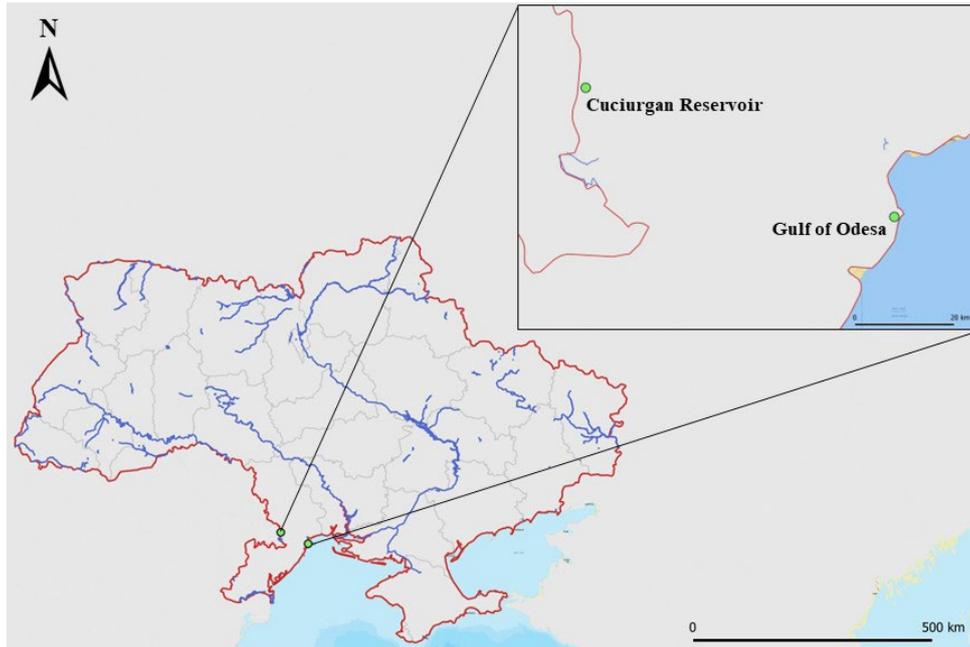


Fig. 1. Geographic location of the sampling sites for *Neogobius melanostomus* in Southwestern Ukraine: the Gulf of Odesa (Black Sea) and the Cuciurgan Reservoir. The inset presents an enlarged view of the coastal sector including both study localities

(J) was calculated among the samples. The relationship between the fish standard length (SL) and the total parasite load ($\sum A$) was evaluated using Pearson's correlation coefficient (r). All statistical analyses were performed in PAST v4.13 (Hammer, Harper, and Ryan 2001), with a significance level set to $p < 0.05$.

Results

Among the 37 studied fish individuals, 18 were males (7 from the Gulf of Odesa and 11 from the Cuciurgan Reservoir) and 19 were females (10 from the Gulf of Odesa and 9 from the Cuciurgan Reservoir). The standard length (SL) was significantly greater in the Gulf of Odesa compared to the limnetic area (Table 1).

Table 1
Sample composition by locality: number of fish, sex ratio, and standard length (SL, mm; mean \pm SD) of the round goby *Neogobius melanostomus* from the Gulf of Odesa and the Cuciurgan Reservoir

Locality	N	♂	♀	SL, mm (m \pm sd)
Gulf of Odesa	17	7	10	117.4 \pm 4.4
Cuciurgan Reservoir	20	11	9	75.2 \pm 13.6

9 parasite taxa related to 6 different groups were recorded: Ciliophora (*Trichodina* sp.), Cestoda (*Proteocephalus gobiorum*), Digenea (metacercariae of *Galactosomum lacteum*, *Cryptocotyle jejuna*, *Bucephalus polymorphus*), Acanthocephala (*Telosentis exiguus*), Nematoda (larval *Eustrongylides excisus*, adult *Dichelyne minutus*), Copepoda (*Ergasilus gobiorum*). One species, metacercariae *G. lacteum*, was first registered in the areas; therefore,

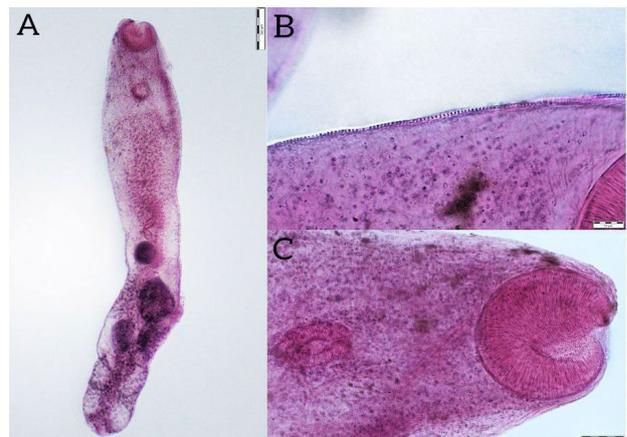


Fig. 2. *Galactosomum lacteum* (Jägerskiöld, 1896), metacercaria: (A) whole mount; (B) tegumental spines; (C) oral sucker. Scale bars: A – 500 μ m; B – 20 μ m; C – 50 μ m

the detailed description of the finding is provided further.

Description of metacercariae of Galactosomum lacteum (Jägerskiöld, 1896)

Metacercariae of *Galactosomum lacteum* (Jägerskiöld, 1896) were identified (Pearson 2008; Culurgioni, D'Amico, and Figus 2007) by several distinctive morphological features: an expanded forebody clearly visible even in fixed specimens, a tubular excretory bladder extending to the posterior margin of the ovary, a two-chambered seminal vesicle, and an asymmetrical parenchymatous ventral sucker bearing lines of spines

within its cavity and an unarmed gonotyl (Fig. 2).

The metacercariae measured 2172 (2079–2315) μm in length and 344 (269–417) μm in width. Cysts were yellowish-brown, elliptical, and enclosed by a transparent wall. After excystation, three specimens were measured. The body was oblong, with the greatest width near the caecal bifurcation; the forebody was slightly flattened, and the hindbody was cylindrical. The oral sucker was round and subterminal, 170 (160–176) μm long and 151 (130–168) μm wide. The prepharynx was 132 (78–186) μm long, and the pharynx – 126 (98–155) μm long and 84 (78–91) μm wide. The ventral sucker was rounded, 254 (229–282) μm long and 211 (183–255) μm wide. Two entire, oval to rounded testes were arranged diagonally in the posterior half of the body: the left testis measured 195 (153–244) μm in length and 138 (118–157) μm in width, and the right testis – 138 (118–157) μm long and 110 (99–125) μm wide. The ovary was 110 (99–125) μm long and located anterior to the testes.

Parasite communities of different water bodies

The species richness of the round goby component communities was $S=5$ in the Gulf of Odesa and $S=4$ in the Cuciurgan Reservoir (total $S=9$). No common species were found.

The nematode *Dichelyne minutus* prevailed in the Gulf of Odesa: its prevalence was $P=58.8\%$, intensity range $IR=1-12$, average intensity $MI=4.50$, average abundance $A=2.65$ (10 fish infected; Table 2). The second most significant were metacercariae *Galactosomum lacteum* ($P=23.5\%$, $IR=1-8$, $MI=4.50$, $A=1.06$; 4 fish). Among the accidental records were *Cryptocotyle jejuna*, *Proteocephalus gobiorum*, *Telosentis exiguus* ($A=0.06$ in all cases). In terms of contribution to the total average abundance (sum of A by taxa = average parasite load 4.29 specimens/fish), *D. minutus* ($\approx 62\%$, $2.65/4.29$) prevailed in the Gulf of Odesa, followed by *G. lacteum* ($\approx 25\%$), *C. jejuna* ($\approx 11\%$), and other taxa totalling $\leq 2\%$.

The parasite fauna in the Cuciurgan Reservoir was dominated by the gill copepod *Ergasilus gobiorum* (9 fish infected; maximum 22 specimens/fish; Table 2). Additional taxa: *Bucephalus polymorphus* (15.0%; 1–4; 2.33; $A=0.35$), *Trichodina* sp. (15.0%; 1–1; 1.00; $A=0.15$), *Eustrongylides excisus* larvae (15.0%; 1–1; 1.00; $A=0.15$). The copepod *E. gobiorum* accounted for $\sim 86\%$ of the total average number (average parasite load – 4.50 specimens/fish) ($3.85/4.50$) with the remaining species accounting for a total of $\sim 14\%$.

The proportion of fish with co-infections (≥ 2 taxa) was higher in the Gulf of Odesa – 35.3% (6/17) compared to 15.0% (3/20) in the Cuciurgan Reservoir. The total parasite load (all taxa combined, specimens/fish) was similar between the two water areas: 4.29 ± 4.62 in the Gulf of Odesa and 4.50 ± 5.84 in the Cuciurgan Res-

ervoir. Approximately, in the Gulf of Odesa, the parasite load increased with standard length ($r \approx 0.41$), while in the Cuciurgan Reservoir a slight negative trend was observed ($r \approx -0.09$).

The seawater area (the Gulf of Odesa) is characterized by the presence of gut nematodes and metacercariae in tissues, while the limnetic area (Cuciurgan Reservoir) is dominated by the gill parasite *E. gobiorum* in combination with trophically transmitted digeneans *B. polymorphus* and nematodes *E. excisus*.

Discussion

Spatial-ecological differences in parasite fauna

The study revealed significant differences in the composition of the parasite fauna in round goby (*N. melanostomus*) between the sea (the Gulf of Odesa) and the limnetic (Cuciurgan Reservoir) water areas. On the first site, eurygaline intestinal nematodes (*D. minutus*) and marine digeneans (*G. lacteum*, *C. jejuna*) prevailed, while in the limnetic ecosystem there were gill ectoparasites (*E. gobiorum*) and trophically transmitted larvae (*B. polymorphus*, *E. excisus*). Similar patterns of spatial differentiation of parasite fauna have previously been noted for the Gulf of Odesa and the Dnipro River basin (Kvach 2007; Zaichenko 2014), which confirm the ecological conditioning of parasite complexes and their sensitivity to salinity gradients. The results obtained are consistent with the concept of ‘parasitological indicator profile of environments’ (Sures et al. 2017) meaning that the relationship between digeneans, nematodes, and crustacean parasites reflects the state of hydrobiological balance and ecological integrity of the water body. Thus, the parasite community of *N. melanostomus* could be considered not only characteristic of the biota, but also a bioindication tool for monitoring programmes.

New findings in the area

In the study, we confirmed the presence of the digenean *Galactosomum lacteum* in the region. Previously, this parasite was recorded only near the Crimean coasts, in the Gulf of Yahorlyk, and in the western part of the Azov Sea (Naidenova 1974; Parukhin, Machkevsky, and Ilchenko 1983; Dominich, and Sarabeev 2000); only one case was noted in 1958 for the Hryhorivka Estuary near Odesa (Chernyshenko 1960). Since that time, no findings were recorded in the Gulf of Odesa and the adjacent areas (Kvach 2005, 2007).

The definitive hosts of the parasite are different species of cormorants, *Phalacrocorax* spp. (Prudhoe 1949; Gyöngy et al. 2024), which form numerous ornithocomplexes in the deltaic zones of Southern Ukraine. The discovery of this species indicates the expansion of the range of *G. lacteum* along the north-western coast of the Black Sea and points to the active circulation

Table 2

The parasite community of the round goby (*Neogobius melanostomus*) from two different localities.
 P – prevalence, %; MI – mean intensity (m±sd); IR – intensity range (minimum-maximum); A – abundance

#	Parasite taxa	Location	Index	Gulf of Odesa	Cuciurgan Reservoir
Ciliophora					
1.	<i>Trichodina</i> spp.	gills, skin	P		15.0
			MI		1.00±0.00
			IR		1–1
			A		0.15
Cestoda					
2.	<i>Proteocephalus gobiorum</i> Dogiel & Bychowsky, 1939	gut	P	5.9	
			MI	1.00±0.00	
			IR	1–1	
			A	0.06	
Digenea					
3.	<i>Bucephalus polymorphus</i> von Baer, 1827	muscles	P		15.0
			MI		2.33±1.25
			IR		1–4
			A		0.35
4.	<i>Galactosomum lacteum</i> (Jägerskiöld, 1896)	muscles/skin	P	23.5	
			MI	4.50±3.04	
			IR	1–8	
			A	1.06	
5.	<i>Cryptocotyle jejuna</i> (Nicoll, 1907)	skin/fins	P	5.9	
			MI	8.00±0.00	
			IR	8–8	
			A	0.47	
Acanthocephala					
6.	<i>Telosentis exiguus</i> (von Linstow, 1901)	gut	P	5.9	
			MI	1.00±0.00	
			IR	1–1	
			A	0.06	
Nematoda					
7.	<i>Eustrongylides excisus</i> Jägerskiöld, 1909	coelom/ muscles	P		15.0
			MI		1.00±0.00
			IR		1–1
			A		0.15
8.	<i>Dichelyne minutus</i> (Rudolphi, 1819)	gut	P	58.8	
			MI	4.50±3.67	
			IR	1–12	
			A	2.65	
Copepoda					
9.	<i>Ergasilus gobiorum</i> Markevich & Sukhnenko, 1967	gills	P		45.0
			MI		8.56±6.24
			IR		1–22
			A		3.85
Species richness				5	4

of parasites associated with fish-eating birds.

Parasites of economic and medical importance

Parasites of round gobies play a dual role – ecological (part of ecosystem) and economic (factors that reduce the quality and safety of fish raw). In the limnetic environment, the below parasites have the most impact:

– *Ergasilus gobiorum* – typical gill ectoparasite, which, at high intensity, causes hypoxia, metabolic dis-

orders, and weight loss in fish (Johnson et al. 2004).

– *Bucephalus polymorphus* – transmitted trophically through bivalve molluscs (*Dreissena polymorpha*); mass infections can affect muscle tissue and be transmitted to predatory species (pikeperch, perch), which is important for fisheries (Kvach, and Mierzejewska 2011).

– *Eustrongylides excisus* – larval nematode with

known zoonotic potential, which may pose a risk to humans eating raw or undercooked fish (Zimmerman, and Smith 1975).

Parasites that affect the marketable condition of fish dominate in the marine and brackish-water environments: *G. lacteum* and *C. jejuna* form pigmented spots on the skin ('black spot disease'), which spoil the appearance of raw materials (Taylor, Latham, and Woolhouse 2001; Kvach 2005).

Round goby as a parasite transmission vector

The round goby has a significant potential for transferring parasites between basins. Its ability to colonise new water areas is accompanied by the transfer of part of the Pontic-Caspian parasite fauna (Kvach et al. 2014). In particular, in the Baltic region and the Great Lakes, it has been shown that the round goby supports the life cycles of trematodes (*Bucephalus polymorphus*, *Cryptocotyle concavum*) even in the absence of other primary hosts (Kvach, and Winkler 2011). For river deltas and estuaries of the Black Sea (in particular, the Dniester River), the goby could act as a 'transit' host between marine and freshwater components of the parasite fauna (Kvach et al. 2019). This is important not only from the ecological point of view but also in terms of sanitary, as invasive populations can contribute to the formation of new zoonotic foci.

Practical importance of the data

The obtained parasitological indices (prevalence, average intensity, and abundance) could be used as bioindicators in fish raw quality control programmes. For marine/brackish sites, it is recommended to implement selective monitoring of muscles and internal organs for metacercariae presence at $P \geq 20\%$ or $A \geq 1.0$. For limnetic localities, macroscopic examination of gills for adult females of *Ergasilus gobiourum* is recommended at $P \geq 40\%$ or $MI \geq 8$, as these copepods are relatively large and readily visible to the naked eye when attached to gill filaments. Such an approach is consistent with Hazard Analysis and Critical Control Points (HACCP) principles and the modern process validation systems (Lima dos Santos 2002).

Thus, the parasite community of the round goby in two contrasting water areas reflects the ecological gradients of the environment, has sanitary and indicator significance, and could be used as a model for assessing the quality of fish raw. The digenean *Galactosomum lacteum* has been recorded in the Gulf of Odesa for the first time, expanding the regional list of parasites of conflict of interests.

of the Gobiidae family.

Conclusion

The present study revealed distinct patterns in the parasite communities of the round goby (*Neogobius melanostomus*) inhabiting two contrasting aquatic systems – the brackish Gulf of Odesa and the freshwater Cuciurgan Reservoir. In the Gulf of Odesa, the dominant parasites were intestinal nematodes (*Dichelyne minutus*) and trematode metacercariae (*Galactosomum lacteum*), while in the Cuciurgan Reservoir, the gill copepod (*Ergasilus gobiourum*) prevailed. These results confirm that the parasite composition in *N. melanostomus* strongly reflects the environmental salinity gradients and trophic structure.

The discovery of *G. lacteum* is the first record of this digenean in round goby from the Gulf of Odesa, and expands the known distribution of the species along the north-western coast of the Black Sea. The presence of parasites of economic and zoonotic importance – *Eustrongylides excisus*, *Bucephalus polymorphus*, *G. lacteum* – emphasizes the need for parasitological monitoring in fisheries and processing chains involving gobiids.

The comparative parasitological indices suggest that both habitats under study maintain relatively moderate infection levels ($\approx 4-5$ parasites per fish), yet differ markedly in infection types and potential risks: tissue-dwelling metacercariae in brackish environments and gill ectoparasitism in freshwater. These "parasitological profiles" can serve as bioindicators of ecological state and as tools for assessing fish raw material quality.

Overall, the study provides an updated dataset on the parasite fauna of *N. melanostomus* in Southern Ukraine, contributes new regional records, and highlights the importance of integrating parasitological data into environmental assessment and fish processing safety strategies.

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Conflict of interests. We declare the absence

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**ПАЗАРИТИ БИЧКА-КРУГЛЯКА *NEOGOBIOUS MELANOSTOMUS* (PALLAS, 1814)
ІЗ СОЛОНУВАТИХ АКВАТОРІЙ ПІВДЕННО-ЗАХІДНОЇ УКРАЇНИ:
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У статті представлено результати комплексного паразитологічного дослідження бичка-кругляка *Neogobius melanostomus* (Pallas, 1814) із двох контрастних за екологічними характеристиками водойм південно-західної України – солонуватої акваторії Одеської затоки Чорного моря та прісноводного Кучурганського водосховища. Мета роботи – оцінити паразитологічні індикатори якості рибної сировини цього масового виду та визначити їхній потенціал як біомаркерів санітарного стану природних біотопів. Упродовж польового сезону 2025 року було досліджено 37 особин риби, для яких встановлено таксономічний склад паразитів, основні індекси зараження, особливості структури паразитарних угруповань та просторові відмінності між морським і лимнічним середовищами.

У Одеській затоці домінували евригалінні ендопаразити – нематода *Dichelyne minutus* та метацеркарії дигеней *Galactosomum lacteum*, а також окремі випадки зараження *Cryptocotyle jejuna*, *Proteocephalus gobiorum* і *Telosentis exiguus*. Інфекційний профіль характеризувався переважанням тканинних та кишкових паразитів, що є типовим для солонуватих біотопів із розвинутою трофічною мережею. У Кучурганському водосховищі провідним видом виявлено веслоногого рачка *Ergasilus gobiorum*, який становив понад 80% загального паразитарного навантаження; додатково траплялися личинки *Bucephalus polymorphus*, *Eustrongylides excisus* та інфузорії *Trichodina* sp. Отримані результати вказують на суттєві просторові відмінності у складі паразитофауни, що відображають градієнти солоності та трофічності у досліджених акваторіях.

Вперше для Одеської затоки підтверджено наявність *G. lacteum*, що розширює сучасні дані про ареал цього виду в Чорноморському регіоні. Деякі виявлені паразити мають економічне значення (*Ergasilus gobiorum*) або потенційну небезпеку для людини та птахів (*Eustrongylides excisus*, *Bucephalus polymorphus*, *G. lacteum*). Показано, що паразитологічні профілі бичка-кругляка можуть застосовуватися як індикатори якості рибної сировини та стану водних екосистем, а також використовуватись у системах контролю відповідно до критеріїв НАССР.

Ключові слова: паразити, *Galactosomum lacteum*, *Ergasilus gobiorum*, індикатори якості, Одеська затока, Кучурганське водосховище.

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