

First report of two monogenean parasites (*Calydiscoides* sp. and *Encotyllabe* sp.) from *Lethrinus nebulosus* in the Persian Gulf.

Neda Jafari and Jamileh Pazooki

Faculty of Biological Science, Department of Marine Biology, University of Shahid Beheshti, Evin, Tehran, Iran

Corresponding author: Neda Jafari; e-mail: ne.jafari@gmail.com

KEY WORDS: Platyhelminthes, Monogenea, Persian Gulf, Iranian coast

The family Lethrinidae is present in the north of the Persian Gulf and consists of four species, all members of the genus *Lethrinus* Cuvier, 1829. In this study, we performed a survey of monogenean fauna of *Lethrinus nebulosus* (Forsskål, 1775), locally called she'ri, a commercial marine fish species in south of Iran. Specimens of *L. nebulosus* were caught with trawl net, then taken to the laboratory. Seventy fish were measured and weighed. Gills were extracted and frozen for future examination.

The monogeneans *Calydiscoides* sp. (Diplectanidae) and *Encotyllabe* sp. (Capsalidae) are here reported from *L. nebulosus*.

Members of *Calydiscoides* Young, 1969 are characterized by two lamellodiscs with concentric lamellae which telescope into each other, and are parasites exclusively in fishes of the family Lethrinidae and Nemipteridae in the Indo-Pacific region (1-7). In *L. nebulosus* in New Caledonia, South Pacific, Rascalou & Justine (2007) reported three species

of *Calydiscoides*: *C. difficilis* (Yamaguti, 1953) Young, 1969, *C. duplicostatus* (Yamaguti, 1953) Young, 1969, and *C. terpsichore* Rascalou & Justine, 2007; our specimens unfortunately could not be identified at the species level. A photograph of one of the monogeneans is shown in Fig. 1.

Species of *Encotyllabe* Diesing, 1850 are characterized by thin lateral margins which are turned ventrally. The prohaptor includes a pair of rounded or elliptical, muscular suckers each having a pleated marginal membrane. The opisthaptor has a campanulate disk which is attached to the postero-ventral surface of the body by a long peduncle and is devoid of radial septa, but is equipped with two pairs of hooks and marginal hooklets (8). *Encotyllabe* spp. have already been recorded from the pharyngeal teeth of *Lethrinus* spp. (Justine, 2007), but not identified at the species level. A photograph of this monogenean is shown in Fig. 2.

We found 30 *Calydiscoides* sp. and 5 *Encotyllabe* sp. in gills of *L. nebulosus*. There are not many researches about effects of these parasites on these commercial fish. However a high infection rate may affect the respiratory system. These monogeneans are reported for the first time from the Iranian coast of the Persian Gulf.



Fig. 1. – *Calydiscoides* sp.



Fig. 2. – *Encotyllabe* sp.

REFERENCES

1. YOUNG, P. C. (1969). Some monogenoideans of the family Diplectanidae Bychowsky, 1957 from Australian teleost fish. *Journal of Helminthology*, 43: 223-254.
2. OLIVER, G. (1984). Quelques espèces du Genre *Calydiscoides* Young (Monogenea, Monopisthocotylea, Diplectanidae), parasites de Perciformes du Récif de la Grande Barrière (Australie). *Zoologica Scripta*, 13: 189-193.
3. KRITSKY, D. C., JIMENEZ-RUIZ, F. A., & SEY, O. (2000). Diplectanids (Monogenea : Dactylogyridea) from the gills of marine fishes of the Persian Gulf off Kuwait. *Comparative Parasitology*, 67: 145-164.
4. LIM, L. H. S. (2003). Species of *Calydiscoides* Young, 1969 (Monogenea; Diplectanidae Bychowsky, 1957; Lamellodiscinae Oliver, 1969) from nemipterid fishes off Peninsular Malaysia. *Systematic Parasitology*, 55: 115-126.
5. JUSTINE, J.-L. (2007). Species of *Calydiscoides* Young, 1969 (Monogenea: Diplectanidae) from lethrinid fishes, with the redescription of all of the type-specimens and the description of *C. euzeti* n. sp. from *Lethrinus rubrioperculatus* and *L. xanthochilus* off New Caledonia. *Systematic Parasitology*, 67: 187-209.
6. RASCALOU, G., & JUSTINE, J.-L. (2007). Three species of *Calydiscoides* (Monogenea : Diplectanidae) from five *Lethrinus* spp. (Lethrinidae : Perciformes) off New Caledonia, with a description of *Calydiscoides terpsichore* sp. n. *Folia Parasitologica*, 54: 191-202.
7. JUSTINE, J.-L., & BRENA, P. F. (2009). *Calydiscoides limae* sp. nov. (Monogenea, Diplectanidae) from *Pentapodus aureofasciatus* (Perciformes, Nemipteridae) off New Caledonia. *Acta Parasitologica*, 54: 22-27.
8. KHALIL, L. F., & ABDUL-SALAM, J. B. (1988) The subfamily Encotyllabinae (Monogenea: Capsalidae) with the description of *Alloencotyllabe caranxi* n. g., n. sp. and *Encotyllabe kuwaitensis* n. sp. *Systematic Parasitology*, 11: 139-150.