A parasitic Platyhelminthe *Flexophora ophidii* Prost & Euzet, 1962 (Monogenea: Diclidophoridae): 58 years later

Bouguerche Chahinez[1], Justine Jean-lou[2] and Tazerouti Fadila[3]

[1] Department of Zoology, Swedish Museum of Natural History, Box 50007, 10405 Stockholm, Sweden
E-mail: Chahinez.Bouguerche@nrm.se
[2] Institut Systématique Evolution Biodiversité (ISYEB), Muséum National d'Histoire Naturelle (MNHN), 57 Rue Cuvier, CP 51, 75005 Paris, France
[3] Université des Sciences et de la Technologie Houari Boumediene, BP 32, El Alia Bab Ezzouar, Alger, Algérie

The Diclidophoridae Cerfontaine, 1895 is a cosmopolitan family of marine monogenean Platyhelminthes, infecting gills, operculum, and gill cavity of teleosts and elasmobranchs. To date, 53 nominate genera are assigned to this family (WoRMS, 2022) with 15 genera belonging to the subfamily Diclidophorinae Cerfontaine, 1895 (Cruces et al., 2017).

Among the Diclidophoridae, *Flexophora* Prost & Euzet, 1962 was erected to accommodate *Flexophora ophidii* Prost & Euzet, 1962, from gills of the snake blenny *Ophidion barbatum* L. off France, northern Mediterranean (Prost & Euzet, 1962). *Flexophora* and its type- and only species, *F. ophidii*, remains poorly known. Limited references to the genus were made in the literature, including in the descriptions of new genera (Zhukov & Mamaev, 1985; Cruces et al., 2017; Mamaev, 1976; Payne, 1986) and a checklist (Euzet et *al*., 1993). The only existing record of the species and the genus is that of the original description, which unfortunately omitted a diagnosis of the genus.

In the course of a parasitological survey of helminths of fishes off the Southern coast of the Mediterranean Sea, we collected representatives of a monogenean similar to *F. ophidii* on gills of *O. barbatum*. The specimens were described here and compared to the original description of the species. Our specimens collected from *Ophidion barbatum* off Algeria showed a morphoanatomy similar to that of *F. ophidii*. However, we have highlighted the presence of a constriction at the level of the pharynx in the anterior part and an additional pair of hamuli at the level of the terminal lappet in our specimens. These two features were neither mentioned nor illustrated in the original description. However, the morphological differences highlighted are subtle and could not be used to differentiate a new species. Hence, with such high resemblances and overlaps in measurements and counts, diclidophorids from *Ophidion barbatum* from off Algeria were considered conspecific with *F. ophidii*. A diagnosis of *Flexophora* was provided for the first time.

References

- Cruces, C. L., Chero, J. D., Sàez, D., Iannacone, J., & Luque, J. L. (2017). *Olivacotyle hemanthiasi* n. gen. n. sp. (Monogenea: diclidophoridae) from the gills of damsel bass *Hemanthias signifer* (garman, 1899) (teleostei: serranidae) in the South American Pacific Ocean. Neotropical Helminthology, 11, 387–394.
- Euzet, L., Combes, C., & Caro, C. (1993) A check list of Monogenea of mediterranean fish. In: Second International Symposium on Monogenea, Montpellier/Sète, 1993.
- Prost, M., & Euzet, L. (1962). *Flexophora ophidii* n. gen. n. sp. un Diclidophoridae (Monogenea) parasite d'*Ophidium barbatum* (L.) (Teleostei). Annales de Parasitologie Humaine et Comparée, 37, 210–215.
- Zhukov, E., & Mamaev, Y. L. (1985). A new member of high monogeneans from gills of *Synodus foetens* from the Gulf of Mexico. Parazitologiya, 19, 250–253.
- Payne, R. (1986). *Lampanyctophilus wisneri* gen. et sp. n. (Monogenea: Diclidophoridae), a gill parasite of *Lampanyctus ritteri* (Myctophidae) from the eastern Pacific and an emended description of *Myctophiphilus sprostonae* (Martin, 1973) comb. n. Proceedings of the Helminthological Society of Washington, 53, 157–161.

Keywords: Monogenea; Parasites; Platyhelminthes; Diagnosis