

Biodiversity of Platyhelminthes Parasites of the Bivalve Mollusc *Donax trunculus* (Bioindicator Species of Pollution in the Gulf of Annaba in the North East of Algeria)

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Parasites of bivalve molluscs are good indicators of pollution and play an important role in regulating population dynamics by influencing their community structure. This work aims to study the parasitism of *Donax trunculus*, an edible bivalve mollusc known in the Gulf of Annaba. The composition of the parasitic fauna was determined from the examination of 360 host individuals collected from three sites in the Gulf, El Battah, a site far from any source of pollution; Echatt, site subject to urban and agrarian pollution and Sidi Salem, site subject to mainly industrial pollution during the four seasons of 2016. The collection of 8794 parasitic individuals divided on different cloths (gonad, digestive gland, mantle), allowed us to reveal the presence of two parasitic species belonging to two families different from digènes trematodes *Bacciger bacciger* (Rudolphi, on 1819) (Fellodistomidae) and *Postmonorchis sp* (Hopinks, on 1941) (Monorchidae). The stocks of parasitological indications in the three sites of study show that species *Postmonorchis sp* records the most important parasitological load (65,55 %) in comparison with *Bacciger bacciger* (16,66 %). The distribution of parasitological indices at the level of the three tissues of *D. trunculus* shows that it is the digestive gland, which records the rate of infestation the most well brought up in comparison with other tissues, and then the

site of Echatt records the most important parasitological loads in comparison with other sites. Statistical results showed a significant difference of the parasitological infra-communities owed probably to spatio-temporal and biotic variations.

Keywords: *Donax trunculus*; Digenean trematode; Annaba Gulf; Parasitic indices.