



Ecology of three monogenean ectoparasites of *Barbus camptacanthus* (Teleostei: Cyprinid) from the Koukoum River, Cameroon

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ABSTRACT

Objective: In September 2014, 56 specimens of *Barbus camptacanthus* were captured in the Koukoum River at Makak (Cameroon) in order to study some ecological aspects of their monogenean gill parasites.

Methodology and Results: After host sampling and parasites mounting, determination of various monogenean species was carried out in the laboratory by classical methods. Gill helminthofauna of this fish consisted of *Dactylogyrus amieti*, *D. valeti* and *Dogielius njinei*. The parasite load of core species increased progressively with the size of the fish. The impact of host sex was noticed for *D. amieti* and *Dogielius njinei* parasite load. The infestation rate and the parasite load did not statistically vary with the side of the host. The colonization profile of different gradients varied depending on the parasite species.

Conclusion and Application: The study of the distribution of these organisms has identified the most vulnerable hosts. Such information allows envisaging some protocols for monitoring parasitic infection in intensive fish farming. In hatcheries, much care should be given to fry and young fish since they have not yet developed robust immunological processes that enable them to effectively fight against polyparasitism.

Key words: *Barbus camptacanthus*, gills, monogeneans, distribution, Koukoum River.