

Seasonal patterns of *Myxobolus* (Myxozoa : Myxosporea) infections in *Barbus callipterus* Boulenger, 1907 (Cyprinidae) at Adamawa - Cameroon

Authors:

Fonkwa Georges^{1,2},
Efole Ewoukem Thomas¹,
Tchuinkam Timoléon²,
Fomena Abraham³ and
Tchoumboue Joseph¹

Institution:

1. Laboratory of Ichthyology and Applied Hydrobiology, Faculty of Agronomy and Agricultural Sciences, University of Dschang, P.O. Box 222, Dschang-Cameroon.

2. Laboratory of Biology and Applied Ecology, Vector Borne Parasitic and Infectious Diseases Unit, Faculty of Science, University of Dschang P.O. Box 67, Dschang-Cameroon.

3. Laboratory of General Biology, Faculty of Science, University of Yaoundé I, P. O. Box 812, Yaoundé-Cameroon.

Corresponding author:
Fonkwa Georges

ABSTRACT:

For a detail understanding of the seasonal patterns of *Myxobolus* infections so as to elaborate control strategies, 305 *Barbus callipterus* specimens were sampled from May 2016 to May 2017 at Mapé River (Adamawa-Cameroon). After classical examination, the prevalence of infection was determined. Ten *Myxobolus* species were identified. Irrespective of the parasite species, fishes were more infected in the dry season (74.93%) than the rainy season (69.72%) without significant difference. Seasons did not significantly influence on the prevalence of parasites in the sizes and sex of various fishes' class. However, *Myxobolus ngassami* was predominantly prevalent in male fishes during the dry season in contrast to the females. Regardless of the organ type and parasite species, the dry season was remarkably more favorable to the infection of organs. Mono and polyinfections occurred during the two seasons and whatever the season, the prevalence of polyinfection's categories dropped with the increasing number of associated parasite species.

Keywords:

Myxobolus, Prevalence, Season, *Barbus callipterus*, Mapé river, Cameroon.