TRAB01000634

NATURAL GILL INFECTION OF *Pygocentrus nattereri* FROM SOUTH PANTANAL, BRAZIL, BY *Myxobolus* spp (MYXOZOA: MYXOBOLIDAE)

DA-SILVA, Edinael V.[1*]; PEREIRA-JUNIOR, R.A.[1]; MOURA, Lívia F.[1]; YANO, Anelise A.[1]; AGUILAR, Maria Rosa D.[1]; SILVA, Roberto A.M.S.[2]

[1]*Universidade Federal do Mato Grosso do Sul , Av Rio Branco, s/n, Corumbá, MS, 79300-000*
[2]*Embrapa Pantanal, Rua 21 de Setembro, 1880, Corumbá, MS, 79320-900*
**Endereço do autor de contato:* edinaelbio@yahoo.com.br

Palavras chave: *Myxobolus spp*, *Pygocentrus nattereri,* Myxozoa, Pantanal

The Brazilian Pantanal comprises about 138,000 km^2, which in 2000 was designated by UNESCO as a Biosphere Reserve. The Pantanal Biosphere Reserve comprises the States of Mato Grosso, and Matto Grosso do Sul. It covers the headwaters of the rivers that make up the Pantanal, one of the world's most extensive wetland complexes, internationally known for its large bird, mammal, reptile, fish, insect and amphibian populations. Seasonal inundations shape the floodplain characteristics of the Pantanal. About 1350 species in 52 genera belong to the Myxozoa, an obligate parasitic group forming a separate phylum of multicellular metazoan parasites mainly of teleosts. Invertebrates like oligochaetes, bryozoans and polychaetes serve as secondary hosts. Despite being well-known as fish parasites, Myxozoa was also discovered in trematodes, reptiles and amphibians. Developmental stages were found in waterfowl, in nervous systems of mammalians and myxospores were even detected in human feces. About 260 species of fish are found in the Pantanal. The Myxobolus is the most abundant genus Myxosporidiosis is an infectious disease caused by myxosporean of the Phylum Myxozoa, Class Myxosporea and Order Bivalvulida. Several species have a significant ecological and economic impact on freshwater and marine fish populations. Thirty piranhas (*Pygocentrus nattereri*) were collected for necropsy. Mucus of gill surface and pieces of organs were collected and examined macroscopically and these presenting cysts examined for parasites in wet mounts or stained smears. Fifteen (50%) fishes presented cysts. The smears examination showed the presence of several spores in the secondary lamellae of the gill filaments, identified as Myxobolus spp (Myxozoa: Myxobolidae). Poor water quality and handling stress predisposes fishes to sporozoan infection in Brazil and in the other countries. More intensive studies will be necessary to evaluate the importance of Myxobolus spp infection in the Pantanal.