

PARASITOFAUNA OF THE HYBRID TAMBACU IN FIVE FISH FARMS FROM THE AMAPÁ STATE, BRAZIL

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In Brazil, hybrid tambacu (*Colossoma macropomum* Cuvier, 1818 x *Piaractus mesopotamicus* Holmberg, 1887) is cultured in North, Southeast and West-Central regions. In 2007, only the State of Amapá produced 35 tons of this hybrid fish. The purpose of this study was to investigate the parasites of the hybrid tambacu in five fish farms from Macapá, Amapá State, Brazil. Hundred and eleven specimens of tambacu measuring from 12 to 51 cm and weighing from 26 to 2410 g were necropsied and analyzed according to methods described in literature.

Of examined fish, 82.9% were parasitized by *Ichthyophthirius multifiliis* Fouquet, 1876 (Ciliophora); *Piscinoodinium pillulare* (Schäperclaus, 1954) Lom, 1981 (Dinoflagellida); *Anacanthorus spatulatus* Kritisky, Thatcher & Kayton, 1979, *Notozothecium janauachensis* Belmont-Jégu, Domingues & Laterça, 2004 and *Mymarothecium viatorum* Boeger, Piasecki & Sobecka, 2002 (Monogenoidea); *Neoechinorhynchus buttnerae* Golvan, 1956 (Acanthocephala); *Cucullanus colossomi* Díaz-Ungria, 1968 (Nematoda) and *Perulernaea gamitanae* Thatcher & Paredes, 1985 (Lernaeidae). Protozoans *I. multifiliis* were dominant and had association with infection by Monogenoidea, but *C. colossomi* were the less prevalent parasites (Table 1). However, the parasites intensity not influenced the relative condition factor of fish. There are differences in parasitic fauna and infection rates among fish farms, due to difference in productivity, fertility and water quality in pond of culture. This was the first record of *N. buttnerae*, *C. colossomi*, *N. janauachensis* and *M. viatorum* for farmed hybrid tambacu in Brazil.

Acknowledgements - To CNPq by financial support (# 578159/2008-2) and grant to M. Tavares-Dias (# 300472/2008-0).

Table 1. Parasitic indexes in hybrid tambacu (N=111) of five fish farms from the Macapá, Amapá State, Brazil. P: Prevalence, SD: Standard Deviation, MRD: Mean relative dominance, MI: mean intensity of infection.

Parasites	P (%)	MI ± SD	Abundance	MRD	Infection site
<i>I. multifiliis</i>	66.7	103,670.0 ± 81,998.9	69,113.3	0.96271	Gills
<i>P. pillulare</i>	9.9	25,199.4 ± 7454.2	2,497.2	0.03478	Gills
Monogenoidea	70.2	244.8 ± 203.6	172.0	0.00239	Gills
<i>P. gamitanae</i>	27.0	25.0 ± 20.4	6.8	0.00009	Mouth and Gills
<i>N. buttnerae</i>	3.6	18.5 ± 25.8	0.7	0.000096	Intestine
<i>C. colossomi</i>	0.9	1.0 ± 0	0.009	0.0000001	Intestine