

# EFFECT OF MULTI-SPECIES PROBIOTIC ADMINISTRATION IN COLOSSOMA MACROPOMUM JUVENILE REARING: SUPPLEMENTATION AND BIOREMEDIATION

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## RESUMO

Brazil major probiotics and bioremediators have proven their effectiveness in the cultivation of exotic species. The aim of the study was to evaluate the effects of a commercial multi-species probiotic suitable for shrimp and fish in the feed and as biocontrol in tambaqui rearing through zootechnical performance, water quality, clinical and laboratory alterations and innate immunity evaluations. *Colossoma macropomum* juveniles were used, distributed: Control (C) - without any probiotic addition; Probiotics added to water (G2) - 0.004 g/L of probiotics added to each experimental unit; Probiotics in feed (G3) - 5 g/kg of probiotics added to the feed. The use of probiotics during the tambaqui breeding phase was proven safe. However, the use of multi-species did not result in any complementary benefit when added to the water or to the feed for 60 consecutive days regarding zootechnical performance, water quality and tambaqui health under the applied experimental conditions. The findings demonstrate the need for further *in vitro* and *in vivo* tests regarding microorganism screening and protocols analyses for each culture species, since several factors influence the effects of the administration of probiotics on aquaculture production and health.

**PALAVRAS-CHAVE:** Bacillus, Lactobacillus, Saccharomyces, tambaqui, pisciculture

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