

## عنوان مقاله:

Efficacy of *Excoecaria agallocha* on hematological parameters in hybrid tilapia (*Oreochromis niloticus*) after experimental challenge with *Streptococcus agalactiae*

## محل انتشار:

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تعداد صفحات اصل مقاله: 20

## نویسندگان:

A.A. Laith - *School of Fisheries and Aquaculture Sciences, Universiti Malaysia Terengganu, ۲۱۰۳۰ Kuala Nerus, Terengganu Malaysia*

M.A. Ambak - *nstitute of Tropical Aquaculture (Akuatrop), Universiti Malaysia Terengganu, ۲۱۰۳۰ Kuala Nerus, Terengganu Malaysia*

A. Jabar - *Zhejiang University, School of Medicine, Hangzhou, China, ۳۱۰۰۵*

M. Najiah - *School of Fisheries and Aquaculture Sciences, Universiti Malaysia Terengganu, ۲۱۰۳۰ Kuala Nerus, Terengganu Malaysia*

## خلاصه مقاله:

The potential of milky mangrove *Excoecaria agallocha* leaf extracts has been utilized in traditional medicine in various parts of the world. Blood is an important indicator of health and is a pathological mirror of the entire body. Therefore, the effects of *E. agallocha* leaf extract on hematology indices of hybrid tilapia (*Oreochromis niloticus*) were investigated. Experimental fish were randomly divided into seven groups. Groups ۱ to ۵ were fed medicated feed at five different concentrations (۱۰, ۲۰, ۳۰, ۴۰ and ۵۰ mg kg<sup>-1</sup>) of *E. agallocha* leaf extract. Group ۶ was given Flumequine (۲۵ mg kg<sup>-1</sup>) and group ۷ was fed with untreated feed (control) for ۲۸ days before they were intraperitoneally exposed to ۴x10<sup>۵</sup>cfu CFU ml<sup>-1</sup> *S. agalactiae*. The results revealed that the group fed medicated feed at ۵۰ mg kg<sup>-1</sup> was the most effective concentration and showed no significant difference ( $p > 0.05$ ) compared to control and antibiotic groups on blood parameters (red blood cell, globulin, total serum protein, mean cell hemoglobin, and mean cell hemoglobin concentration) with the highest survival rate ۹۹.۶۷% within experimental groups. Overall, our results indicated the potential of *E. agallocha* could prove to be a hematological profile enhancer which can help fish combat bacterial infections. It was concluded that increase in the white blood cell count observed in fish administered with *E. agallocha* leaf extract at ۵۰ mg kg<sup>-1</sup> suggests that *E. agallocha* extract contains agents that could stimulate the production of leucocytes and serve as an immune booster and prevent the risk of anemia.

## کلمات کلیدی:

*Streptococcus agalactiae*, Hematology, Hybrid tilapia, *Excoecaria agallocha*, Survival

## لینک ثابت مقاله در پایگاه سیویلیکا:

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