

**Effect of Aquatic plants, *Ceratophyllum demersum* and *Hydrilla verticillata* on controlling growth of freshwater Filamentous Macro
Algae in Aquarium Tanks**

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by

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Abstract

Algae can positively and negatively effect on aqua culture field because algae are important as food source of fish as well as excess growth of algae results huge problems. This research is conducted to find a way for controlling excess growth of filamentous *Oedogonium* algae growth in fish rearing tanks using two aquatic plants species *Hydrilla verticillata* and *Ceretophyllum demersum*. Preliminary study was conducted initially. In this study alga was put in water that dissolved the Albert fertilizer and *Hydrilla verticillata* and *Ceretophyllum demersum* was added according to the treatment levels. Then the algae weight was measured in every two day time intervals. Nitrate and Phosphate was measured weekly. Based on the results of this preliminary study secondary study was conducted. In secondary study only used *Hydrilla verticillata* because in preliminary study showed best algae controlling ability in *Hydrilla verticillata* treatment tanks. It was conducted to identify whether *Hydrilla verticillata* plant can control the growth of algae in practical situation. In this study 20 zebra fish were put into 60 X 60 cm tanks to maintain research tanks same as fish rearing tanks. According to result of preliminary and secondary study it showed that both plants can control the algal growth but *Hydrilla verticillata* is the best plant between both plants. This research also shows that aquatic plants can control the Nitrate and Phosphate level. The effective plant weight that can be used to control the growth of *Oedogonium* alga was identified. Based on results of the study *Hydrilla verticillata* 1.6 g is better than *Ceretophyllum demersum* and weigt

Key words: *Hydrilla verticillata*, *Ceretophyllum demersum*, Filamentous algae