# Aquatic Microfungi Biodiversity in the Highland Lake of Telaga Warna Bogor

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## ABSTRACT

Lake of Telaga Warna situated in highland area of Bogor represents a lake with a mild sorrounding environment. Consequently, the aquatic biodiversity structure of the lake may differ conspicously with that of the the lowland lake. Hence, Lake of Telaga Warna may also contain a high biodiversity.

The objective of this research was to determine the biodiversity of aquatic microfungi in the highland lake of Telaga Warna, and to collect the aquatic microfungi of the highand lake of Telaga Warna.

During dry season it was collected 11 microfungi. During rainy season it was collected 15 microfungi. As much as 24 species of aquatic microfungi were found in Telaga Warna lake. They belong to 9 genus namely: Mucor, Abisidia, Aspergillus, *Penicilliium, Trichoderma, Acremonium,* Chepalosporium, *Monilia,* and Rhizopus. Microfungi Rhizopus stolonifer has the highest growth rate. It attained 90.58 mm diameter within 36 hours, whereas R. cohnii and R. *oryzae* have their diameter 83.21 mm and 88.22 mm, respectively.

Key·words: Microfungi, Telaga Warna

## I. INTRODUCTION

### 1.1. Background

The existence of microorganism in aquatic environment functions as an agent of biodegradation of waste. The microorganisms convert organic substance (dissolved,suspended, or colloid) into a variety of gasses and cell biomass. Biological treatment of waste are actually based on the natural food change occurred in the environment (Molla *et al. 2001;* Sigee, *2005;* Sawyer and McCarty, 1*978).*

The utilization of biological agent particularly microfungi in wastewater biological treatment is not as common as that of bacteria. Similarly, the effort of exploration and exploitation of aquatic microfungi is still also rudimentary. Meanwhile, the potencial source of aquatic microfungi in the tropic either in freshwater or in marine environment is enormous (Coulibaly *et al., 2003;* Fleury, *2007;* Mainwright, *1992).*