

## ABSTRAK

Widyawati . 2013. **Utilization of Turmeric *Curcuma mango* Val.White Inhibition of Growth of Mold on Whitish *Candida albicans* Cell Wall Damage** and Thesis, Department of Biology, Faculty of Science and Technology of the State Islamic University of Maulana Malik Ibrahim Malang. Supervisor: Dr. Retno Susilowati, M. Si and Dr. H. Munirul Abidin, MA

Keyword : Turmeric White, Whitish, Fungus *Candida albicans*

White turmeric (*Curcuma mango* Val.) Is one of the many traditional medicinal plants in Indonesia. One is the use of turmeric as a cure white vaginal discharge. Whitish marked with sap or white mucus. One cause is the fungus *Candida albicans* vaginal discharge. White turmeric contains secondary metabolites consisting of flavonoids, alkaloids and tannins, which have antimicrobial activity as the mechanism of inhibition of specific.

This study aimed to determine the effect of white turmeric extract (*Curcuma mango* Val.) On the growth of *Candida albicans* fungus. The study was conducted at the Microbiology Laboratory of the University Department of Biology, Faculty of Islamic Saintek (UIN) Maulana Malik Ibrahim Malang in May to June 2013. This is an experimental study using a completely randomized design (CRD) using 5 treatments with 4 replications. The treatment used is the control, the concentration of ethanol extract of turmeric, white 0.1%, 0.5%, 1%, 1.5% and 2%. Fungus used was *Candida albicans*. Research data include inhibition zone and damage to the cell wall. Data were analyzed using ANOVA with further trials Significant Difference (LSD) 1%.

The result showed that the concentration of 0.1% inhibition zone produced by 6 mm, 8 mm by 0.5%, 1.0% at 10 mm, 1.5% resulting inhibition zone of 10.75 and the latter is on concentration of 2% of 12.75. At the highest concentrations result in inhibition zone region widest. This is because the higher concentrations used the more the white matter content in turmeric. Concentrations were highest in the fungus *Candida albicans* cell wall damage is the worst so that when stained with crystal violet pale in comparison with other concentrations.