METABOLIT FERMENTASI INFUSA DAUN COKLAT (*Theobroma cacao*) OLEH *Acetobacter-Saccharomyces* DALAM MENGHAMBAT PERTUMBUHAN *Candida albicans*

METABOLITES OF COCOA LEAVES (Theobroma cacao) INFUSA FERMENTATION BY Acetobacter-Saccharomyces IN INHIBITING Candida albicans GROWTH

ABSTRACT

Background. *Oral candidiasis that caused by Candida albicans is the significant symptom of the severity of disease with incidence around 50%-95%. The treatment of Oral candidiasis has been done by far is using topical or systemic antifungal. A systemic drug can cause side effects. Thus, it is needed to explore the herbal plant in Indonesia. Cocoa, especially the leaves, is predicted has an antifungal function. By fermentation process, the contents will be transformed to be more simple so the antifungal function can be more optimal.* ***Purpose.*** *Test the metabolites of infusa fermentation from cocoa leaves in inhibiting the colonization of C. albicans.* ***Method.*** *This research divided sample into 5 groups and given different treatments. Group A was given nystatin 12,5% as positive control, group B was given metabolites of infusa fermentation from 2,2 gr/l of cocoa leaves, group C was given metabolites of infusa fermentation from 4,4 gr/l of cocoa leaves, group D was given metabolites of infusa fermentation from 8.8 gr/l of cocoa leaves, and group E as negative control. The colony were cross-checked and re-planted on Sabouraud Dextrose Agar.* ***Result.*** *The result is analysed using Kruskall-wallis test and Mann-whitney test, which shows that metabolites of infusa fermentation from 8.8 gr/l of cocoa leaves 50% has an equal ability with the positive control.* ***Conclusion.*** *Metabolites of infusa fermentation from cocoa leaves by Acetobacter-Saccharomyces has a potention as alternative antifungal for patient of Oral candidiasis with the similar ability with nystatin 12.5% in inhibiting C. albicans growth.*

Keywords: *Cocoa leaces, Candida albicans, Fermentation, Acetobacter-Saccharomyces*