

THE EFFECT of CENTELLA LEAVES EXTRACT as PREBIOTIC for IMPROVING ANTAGONISTIC ABILITIES of *L. acidophilus* to *E. coli* GROWTH *in vitro*

Amalia Rizqi Octerrya

ABSTRACT

This research aimed to determine The Effect of Centella Leaves Extract as Prebiotic for Improving Antagonistic Abilities of *L. acidophilus* to *E. coli* Growth *in vitro*. This research was using five treatment and five repetition. The treatment was divided into five groups (K+, K-, P1, P2, P3). K- (group which was given centella leaves extract only), K+ (group which was given *L. acidophilus* only), P1 (group which was given *L. acidophilus* and 1% of centella leaves extract), P2 (group which was given *L. acidophilus* and 2% of centella leaves extract), P3 (group which was given *L. acidophilus* and 3% of centella leaves extract), then incubated for 24 hours. The result of inhibition zone showed that there was no significant differences between K+ and P1, and K+ and P2, but there was significant differences between K+ and K-, and K+ and P3. Inhibiting process was greater in P3.

Key words : centella leaves extract, *lactobacillus acidophilus*, inhibition zone