

ABSTRACT

EFFECT OF ANTIBACTERIAL TRADITIONAL APPLE VINEGAR AND APPLE VINEGAR PRODUCTS ON THE GROWTH OF *Staphylococcus aureus* IN VITRO

Candra Dwi Atma

ABSTRACT

The purpose of this study was to know the effect of antibacterial traditional apple vinegar and apple vinegar products on the growth of *Staphylococcus aureus in vitro*. This study used dilution susceptibility test method with two treatments, each treatment using 10 replications. Giving the two treatments were traditional apple vinegar and apple vinegar products with a concentration of 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, and 100%. Bacteria that used in this study was *Staphylococcus aureus*. It was adjusted to Standard Mc Farland 1. This study used Muller Hinton Agar media. The parameters were measured based on the lowest concentration that was not any bacterial growth (Minimal Bactericidal Concentration). The data were analyzed by using t test. The results showed that there were a real difference between traditional apple vinegar and apple vinegar products ($p < 0.05$). Treatment with apple vinegar products showed antibacterial power was more effective than the traditional apple vinegar on the growth of *Staphylococcus aureus*, was the average concentration to kill bacteria (MBC) traditional apple vinegar 63% and apple vinegar products was 40 %.

Key words : Traditional apple vinegar, Appel vinegar products, *Staphylococcus aureus*.