

ABSTRACT

Rahma Dzullia. 2017. Bactericidal Effectiveness Of Frangipani Leaf Extract (Plumeria acuminata W.T.Ait) To Ralstonia solanacearum Causes Wilt Disease In Pepper Plant. Guided by Dr. Hj. Mia Nurkanti, M.Kes. sareng Gurnita, S.Si., M.P.

This research is aimed to know the potential of white frangipani leaves (Plumeria acuminata W.T.Ait) as antibacterial and to know the concentration of white frangipani ethanol extract which is most effective in inhibiting the growth of Ralstonia solanacearum bacteria. This research used laboratory experimental method with Complete Random Design (CRD) design. This research use 5 treatment that is extract of white frangipani (P.acuminata W.T.Ait) leaves ethanol with concentration 10% 25% and distilled as control and 5 repetition. The extraction was performed using a maceration method with 70% ethanol. Antibacterial test using diffusion test and data were analyzed using mann Whitney-Test U then continued with Kruskal-Wallis test. The results of statistical tests showed that ethanol extract P. acumianata W.T.Ait can inhibit R. solanacearum growth with significance value ($p = 0.01 < 0.05$). The highest extract of white frangipani ethanol extract inhibiting R. solanacearum growth was obtained at a concentration of 55%. The results showed that white frangipani leaf extract had antibacterial activity against R. solanacearum in vitro

Key words : antibacterial, P.acuminata W.T.Ait, R.solanacearum