

**ANTIMICROBIAL ACTIVITY OF *IPOMOEA BATATAS***

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## ABSTRACT

### THE ANTIMICROBIAL ACTIVITY OF *IPOMOEA BATATAS*

A study has being conducted on the *Ipomoea batatas* was obtained from sweet potato farm in Kuala Pilah, Negeri Sembilan. The objective of the study is to determine the antimicrobial activity of *Ipomoea batatas* such as disc diffusion, minimum inhibition concentration and time kill study. The result of the study can be shared as scientific evidence about antimicrobial from this research plant. In addition, it also can be used in medication on hospital and as a healthy food snack. All the explant extraction were screening by using disc diffusion, minimum inhibition concentration and time kill study method against the pathogenic bacteria *Escherichia coli* and *Salmonella* species. The test of disc diffusion method of roots, leaves, stems and petioles extract showed that the leaves extract have a potential to becomes an antimicrobial against pathogenic bacteria. Then were further, tested for minimum inhibition concentration. The results from test showed at the 10 mg/mL concentration of leaves extract can inhibit the growth of pathogenic bacteria. Time kill study are the continues method for minimum inhibition concentration, this method to observed the best time the extract can kill the pathogenic bacteria from 0 hour to 12 hour. From the research *Ipomoea batatas* have the benefit of treating diseases caused by pathogenic bacteria.