EFFECTIVENESS OF CELOR (Moringa oleifera L) EXTRACT ON CONTROL OF PATHOGENIC BACTERIA

By: Intan Nurlaeli Adharani
155040014

ABSTRACT

Moringa or often also referred to as a magical plant is one of the plants of the Moringaceae family. Moringa plants have many compounds containing active substances such as flavonoids, saponins, tannins that can act as antioxidants, antipyretics, antibiotics and so forth. Moringa plants have a chance in healing a disease, especially diseases caused by bacterial infections. This study aims to determine the effectiveness of Moringa plants in inhibiting the growth of pathogenic bacteria (Staphylococcus aureus). Antibacterial test was carried out in vitro by the disc diffusion method and with a variant of the concentration of 10%, 20%, 30%, 40%, 50%, 60%, 70% and 80%, then negative controls were also carried out using 96% ethanol solution and positive control using tetracycline 1000 ppm with 3 repetitions. The results showed that in each treatment there were inhibitory zones caused by the administration of Moringa extracts, except for the negative control treatments which did not have inhibitory zones. The greatest inhibition was found at a concentration of 70% with a inhibition zone diameter of 0.89 cm and the smallest inhibition was at a concentration of 30% with an inhibition zone diameter of 0.65 cm. Based on data analysis using the One-Way ANOVA Test it is known that the most effective concentration in inhibiting bacterial growth is at a concentration of 70%.

Keywords: Moringa, Moringa Plant Extract, Staphylococcus aureus bacteria