

# Antibacterial Properties of Plantago major's Leaves

Brum, Isabel

Plantago major, commonly known as ribwort plantain is very popular used as a natural home remedies for stomach aches or skin infections. The purpose of this experiment was to prove if it really had antibacterial properties to cure diseases caused by Staphylococcus aureus and Escherichia coli. Extracts of the leaves of Plantago major were prepared in distilled water, boiling distilled water and isopropanol 70% to investigate its antibacterial properties in the aforementioned bacteria. First, the extracts were prepared making different solutions of the leaves of Plantago major and then synthesized the extracts. The extracts were dissolved in dimethyl sulfoxide and were added to the bacteria. The results of this experiment suggest that the extracts were active against Staphylococcus aureus and Escherichia coli at a minimum inhibitory concentration higher than 1,000 µg/mL, which suggest that these extracts were not potent as antibacterial agent when compared to Methicillin. On the other hand, other studies involving other microorganisms and other concentrations are needed to test the potency of these extracts as antimicrobial agents.

**Awards Won:**

