ABSTRACT

Curcumin, a yellow pigment from Curcuma longa, is a chief constituent of turmeric and is normally used as a spice and food-coloring agent. This experiment investigated the anti-bacterial potential of a commercially bought Turmeric powder- against Bacillus subtilis, Staphylococcus aureus and Staphylococcus epidermidis. The extract from turmeric powder was tested against the bacteria with the concentrations of 100%, 75%, 50% and 25% curcumin extract. Sensitivity testing, using Kirby Bauer Method, was conducted to determine if there was a significant effect on Bacillus subtilis, Staphylococcus aureus and Staphylococcus epidermidis. Both the concentrations and negative control had no zones of inhibition on the bacteria. In conclusion, the curcumin extracted from turmeric powder do not possess anti-bacterial properties against *Bacillus subtilis*, Staphylococcus aureus and Staphylococcus epidermidis. This is probably due to the bacteria's cell wall characteristics, which may have prevented the extract's particles from diffusing across the medium due to its size. In addition, the adulterants present in the commercially available turmeric powder may also cause the bacteria to become resistant to the extract. Therefore, the curcumin extracted from the commercially available turmeric powder do not possess anti-bacterial properties against Bacillus subtilis, Staphylococcus aureus and Staphylococcus epidermidis..

Key Words: Anti-microbial, Curcumin, Extract, Sensitivity Test, Turmeric