The Soursop: A Natural Antibiotic

García, Jorge

The purpose of this research was to study if the Annona muricata plant serves as an antibiotic to control the growth of E. coli, S. aureus, P. aeruginosa, and S. epidermis. If different extracts are prepared with the various parts of the Annona muricata plant, then an effective antibiotic to control the growth of S. epidermis, P. aeruginosa, E. coli, S. aureus can be prepared. The procedure used different parts of the soursop plant (60g of soursop pulp, 60g of leaves, 12.2g of stem and 58.0g of root) to prepare the extracts. Extracts were mixed with sterilized water: (soursop) 100ml, (leaves) 554ml, (stem) 20ml, (roots) and 400ml. Each petri dish was divided in four equal parts and labeled. Bacteria were incubated and inoculated in the corresponding part of the petri dish. After a period of twenty-four hours the control and experimental group cultures were analyzed. The results showed that E. coli and S. aureus were inhibited by the leaf extract with 100% effectiveness. S. epidermis was inhibited by the leaf extract with 66% effectiveness. P. aeruginosa was inhibited by the stem extract with 33% effectiveness. The soursop is a natural antibiotic for the four strains of bacteria used. Data showed that the leaves were the most efficient part of the Annona Muricata plant for bacterial control.

Awards Won: