Formulation and Evaluation of Antibacterial Ointments Infused With Traditional Plants: Extractos de Yerba de Manso, Canela, y Hojas de Arbol de Naranja

Regalado, Estefany (School: Harvest Preparatory Academy)

Antibiotics are the most commonly used type of medicine currently available. Although this medicine is greatly beneficial towards those who need it, the cost of it can be expensive and dangerous especially for those countries that can't afford it and need such medication. This research is aimed to create a cheap antibiotic ointment using traditional plants that are used in Mexican herbal medicine. This research was conducted by the following methods: First orange tree leaves, Yerba de Manso leaves, and cinnamon were collected to create the extracts, by cleaning them off and placing them in a jar with ethanol for a week. To get the pure extract we used a rotary evaporator and as soon as the ethanol was extracted the extracts were tested alone against bacteria. By using the measurements of 10ml of rose water, 6g of coconut oil, 3g of Tacuma butter and 4g of each extract, the ointments were created. The results showed that the extracts worked as antibiotics both alone as extracts and as ointments. Although cinnamon was 96% effective and orange tree leaves were 67% effective, Yerba de Manso showed a significant result of 100% effectiveness as an antibiotic. This research shows an effective and cheap antibiotic ointment that can be used for those that can't afford normal antibiotics.

Awards Won: