Testing the Validity of Pau D'arco as an Antimicrobial Agent

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Finding new antibiotics are very important to the survival of humanity. This experiment was conducted to see if the extract from the inner bark of the Pau D'arco tree can hold up to the claims that it possesses antimicrobial properties. Pau D'arco, Ethanol, and Ampicillin were tested against Staph and E. coli in a regulated research institution. 0.1 micro-liters of all substances were impregnated in disks applied to agar plates that were inoculated. The disks were placed in an incubator and observed after 48 hours for clearing. Ethanol at 60% was tested for sensitivity to both organisms as this amount of ethanol was found in the Pau D'arco extract. Testing the effectiveness of Ampicillin on Staphylococcus epidermidis, no clearing appeared showing bacterial resistance to the antibiotic while Ampicillin on E. coli shows true sensitivity. For Ethanol, and Pau D'arco at 50 and 100 percent concentration, the clearing was insufficient to achieve sensitivity according to the zone inhibition values. Although it was established that was the antibiotic resistant organism, yet Pau D'arco had some degree of sensitivity to Staph. However Pau' D'arco failed to meet the criteria for absolute sensitivity. There is hope for Pau D'arco as an antimicrobial agent and I wanted to prove that. Next time, the raw bark will be used to make the extract to test on the microorganisms instead of using ready-made extract that has been processed. This will help the extract to retain the natural potency of the plant which will yield better results.

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