

Study of Eggplant Peduncle for Cure Periodontal Disease and Remove Bad Breath in Countries Lacking Medical Supplies

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Our ancestors used eggplant peduncle to cure gum disease. Periodontal disease is commonly a decayed tooth that has inflammation and the bacteria will advance to a disease. Also, decayed or infected teeth leads to some complications. So I want to prevent periodontal disease cheaply in country using eggplant peduncle and would like to gather discarded eggplant peduncle world wide and recycle them. In addition, I would like to supply the halitosis remover and make pleasant environment. So, I set some purposes. First I contrasted the antibacterial effect on periodontal disease. As a result, the eggplant peduncle is effective against cavity and inflammation. And tested the antibacterial effect with four method of decocting like low-temperature extract, high-temperature, ultrasonic extract and extract with cooling in high temperature. The result is, the low-temperature extract is the most effective. And after then, I investigated what antibiotic substance an eggplant peduncle has. So, I Analyzes the four extracts which are effective to periodontal diseases by liquid chromatography and liquid mass chromatography and I confirm that the substance is Solasonine. Finally, to Verify the effective removal of bad breath, I designed the experiment similar to oral cavity. And spray the same amount of liquid on each medium. Use four different liquids: distilled water, extraction from eggplant peduncle, solution of solasonine, solution of CPC, which is the commercialized substance used to remove bad breath. And I analyze it each methods. As a result, It is more efficient than CPC, which is the commercialized breath freshener.