

Investigation of some properties of compounds extracted from *Pouteriacampechiana* (Lavulu) fruit and seed

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Pouteriacampechiana (Lavulu) is an economically important fruit of the family Sapotaceae. The pulp of sapotaceae fruits are edible and fresh or frozen pulp is used as an ingredient in milkshakes, ice cream and to prepare a number of local delicacies. The color is an important characteristic of foods. Based on the color of the food, first impressions are made. There is a growing interest in the use of natural pigments for food colors as artificial colors have lots of drawbacks. Seed kernel oils of family Sapotaceae are used to treat indigestion, ulcers, toothache, eye and ear diseases and also used as a remedy for sinusitis, asthma, coronary trouble, epilepsy. Lavulu has a golden yellow color pulp. It was extracted with acetone as a solvent. The seed kernel oil was extracted using hydro distillation method. Antibacterial activity of seed kernel oil was examined using the standard disk diffusion method against *Bacillus spp.*, *Escherichia coli*, *Staphylococcus aureus* and *Streptococcus spp.* test organisms. The water with the Tween 20 was used as the negative control and Gentamicin was used as the positive control. The yield of the dried yellow colored compound was 1.6 ± 2 mg/g and it was soluble in oil and also in water in the presence of tween 20 (999 ml water: 1ml tween 20). The yield of kernel oil was 8.4 ± 0.3 mg/g and the density was 0.74 ± 0.07 g/ml. The results of antibacterial assay showed that all bacterial strains were inhibited by lavulu seed kernel oil at different levels and the highest inhibition was observed with *E.coli*. The all strains showed MIC at different levels and the MIC of lavulu seed kernel oil for *Bacillus spp.*, 15 mg/ml, *Escherichia coli*, 40 mg/ml, *Staphylococcus aureus*, 50 mg/ml and *Streptococcus spp.* 60 mg/ml. These results revealed the lavulu seed kernel oil would be a potential source for broad spectrum antimicrobial compound. The yellow colour extracted from lavulu pulp can be used in both oil based and water based foods as a natural pigment.