

CHEMICAL STUDIES ON JOJOBA OIL

ABSTRACT

The investigation refers to effecting of extraction methods, kind of solvent, and seed temperature, also extraction time and its effects on Jojoba oil content, and physiochemical properties. Finally the effect of oil on bacterial activity for some spp. and using of oil as antioxidant. The results obtained were: extraction by chloroform and hexane were highly percentage than extraction by petroleum ether. When the extraction time increase, the oil quantity will increase, (5 hrs); and extraction at room temperature (44.4%) give highly percentage than heating pressing (32.8%). Eicosenoic and Decosenoic acids were the two important essential fatty acids in the oil. The oil inhibition for microbial activity to some bacteria strains (*Staphylococcus aureus*, and *Bacillus subtilis*), and it hasn't any effect on fungus (*Aspergillus niger* and *Asp. flavus*). The oil contains vit E. (tocopherol) 21.9 mg/g Jojoba oil seeds must keep in a good storage condition, to prevent fungus contamination. Finally using of Jojoba unsaponifiable matter (0.08) as a natural antioxidant and its effects on refined palm oil rancidity during frying (180°C/5 hrs) showed that the frying oil can be used in a good method for two hours continuously.

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