

## Comparative Analysis of the Treatment of Okra Seed and Soy Beans Oil with Crude Enzyme Extract from Malted Rice

**Authors :** Eduzor Esther, Uhiara Ngozi, Ya'u Abubakar Umar, Anayo Jacob Gabriel, Umar Ahmed

**Abstract :** The study investigated the characteristic effect of treating okra seed and soybeans seed oil with crude enzymes extract from malted rice. The oils from okra seeds and soybeans were obtained by solvent extraction method using N-hexane solvent. Soybeans seeds had higher percentage oil yield than okra seed. 250ml of each oil was thoroughly mixed with 5ml of the malted rice extract at 40°C for 5mins and then filtered and regarded as treated oil while another batch of 250ml of each oil was not mixed with the malted rice extract and regarded as untreated oil. All the oils were analyzed for specific gravity, refractive index, emulsification capacity, absorptivity, TSS and viscosity. Treated okra seed and soybeans oil gave higher values for specific gravity, than the untreated oil for okra seed and soybeans oil respectively. The emulsification capacity values were also higher for treated oils, when compared to the untreated oil, for okra seed and soybeans oil respectively. Treated okra seed and soybeans oil also had higher range of values for absorptivity, than the untreated oil for okra seed and soybeans respectively. The ranges of T.S.S values of the treated oil were also higher, than those of the untreated oil for okra seed and soybeans respectively. The results of viscosity showed that the treated oil had higher values, than the untreated oil for okra seed and soybeans oil respectively. However, the results of refractive index showed that the untreated oils had higher values ranges of than the treated oils for okra seed and soybeans respectively. Treated oil show better quality in respect to the parameters analyst, except the refractive index which is slightly less but also is within the rangiest of standard, the oils are high in unsaturation especially okra oil when compared with soya beans oil. It is recommended that, treated oil of okra seeds and soya beans can serve better than many oils that presently in use such as ground nut oil, palm oil and cotton seeds oil.

**Keywords :** extract, malted, oil, okra, rice, seed, soybeans

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