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Comparative Studies On Extraction Techniques Of Virgin Coconut Oil For Selected Varieties

Coconut oil (Cocos nucifera L.) has an essential functional role in the diet. For ages, many regions of the globe have recognised the health and nutritional benefits of coconut oil use. This study compares the extraction techniques of virgin coconut oil for Tiptur Tall and Hybrid varieties. The research findings is to determine whether there are significant differences in the yield recovery and physiochemical parameters such as specific gravity, viscosity, acid value, FFA, peroxide value, iodine value, saponification value, antioxidant activity and triglyceride for hot extracted virgin coconut oil (HEVCO), cold extracted virgin coconut oil (CEVCO), and market sample (MS) were analysed. Among the physicochemical parameters investigated, there was a significant difference ($p \le 0.05$) for the peroxide value, iodine value, saponification value, antioxidant activity and triglyceride of VCO extracted using various procedures of Tiptur Tall and iodine value, saponification value, antioxidant activity and triglyceride of VCO extracted using various procedures of hybrid when compared to market sample although other properties of Tiptur Tall and Hybrid of VCO extracted using various procedures did not change substantially across samples. The main findings indicate that the hybrid variety produces a higher yield of oil about 21.42% than the Tiptur tall variety, regardless of the extraction method used. The conclusions drawn from this study are that the cold extracted virgin coconut oil (CEVCO) for hybrid variety produced the highest yield of comparing with other extraction methods and the triglyceride was found to be about 47.67±0.03% high in Cold extracted Virgin Coconut oil for hybrid variety.

Keywords: Virgin Coconut Oil, Tiptur Tall, Hybrid, Hot Extraction, Cold Extraction, Triglyceride

Primary authors: Dr MS, SHWETHA (JAIN (Deemed-to-be University)); Ms M B, SREEMAHALAKSHMI (JAIN (Deemed-to-be University))

Co-authors: Ms S, DIVYA (JAIN (Deemed-to-be University)); Ms YENUGU, KRISHNA BHUVANA HARSHITHA (JAIN (Deemed-to-be University)); Ms THIPPULURI, NAGA DIXIKA REDDY (JAIN (Deemed-to-be University)); Mr N, NAVEEN (JAIN (Deemed-to-be University))

Presenters: Ms S, DIVYA (JAIN (Deemed-to-be University)); Ms YENUGU, KRISHNA BHUVANA HARSHITHA (JAIN (Deemed-to-be University)); Ms THIPPULURI, NAGA DIXIKA REDDY (JAIN (Deemed-to-be University)); Mr N, NAVEEN (JAIN (Deemed-to-be University))

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