

STUDIES ON COPRA DRYING FOR WHITE COCONUT OIL PRODUCTION

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ABSTRACT

Copra is the dried meat, or kernel, of the coconut used to extract coconut oil. Traditional process, high production cost and higher time consumption are the major problems in Sri Lankan milling copra production. Improvement of conventional process is necessary to produce high quality copra within short period of time. The effect of de-shelling on the copra production process was investigated. Coconut nuts were de-shelled and kernels were separated into three sizes as cup, half of the cup and quarter of the cup. Then, drying behaviour of the de-shelled coconut kernel was studied as the moisture reduction against the drying time, which was significantly ($P < 0.005$) affected by the de-shelling process. 32 hours of time period was needed to reach 6% of moisture content at average drying temperature of 55 – 60 °C when nuts were de-shelled. After one month of storage period, free fatty acid, total plate count and yeast and mould content were measured. When concern on quality parameters of each different sizes of kernel, quarter size of kernel showed better keeping quality compared to those of half size and cup size.

Key words: Copra, De shelling, Drying, Moisture Content