

PRODUCTION OF EDIBLE COPRA AND THE EVALUATION OF SHELF LIFE

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Addition

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ABSTRACT

Short the shelf life, high level of residual sulfur dioxide and high production cost are the major problem in Sri Lankan value added (VA) copra. High value Sri Lankan residual sulfur limit is 50 ppm but in most situations it goes up to 100 ppm. So it is necessary to produce high quality copra that having low residual sulfur levels. Another problem in VA is the short shelf life and the changes color within six month period. Hence it is necessary to understand the factors limiting the shelf life. Therefore experiments were conducted to estimate total plate count (TPC), yeast and mould (Y and M) and residual sulfur dioxide levels during storage period, untreated copra, ozone treated copra, glacial acetic acid (GAA) and in the copra produced by using indirectly heated copra dryer. Newly produced 2013 VA copra shows 101.38 ppm residual sulfur dioxide level and 2011 VA 88.4 ppm. Controller and GAA copra gives below 10 ppm residual sulfur dioxide. There was a significant increase in TPC during five month storage period. The Y and M counts not increase significantly in copra and the residual sulfur dioxide levels found to be reduced. Hence TPC can be a factor to limit shelf life of VA copra. GAA copra gives unsuitable brown color. Indirectly heated copra dryer gives economical MS2 copra, 3.1 MT copra in every 3 days and weekly 6.2 MT of copra, copra under any climatic conditions and an additional income from coconut shells but the colour obtained is not suitable for VA copra.

Key Words: value added copra, shelf life, residual sulfur dioxide, total plate count, yeast and mould