

CONTROLLED FERMENTATION OF COCONUT SAP-1 : NATURE AND BEHAVIOUR OF MICROORGANISMS

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Coconut sap is the major base for the liquor industry in Sri Lanka. The sap is allowed to ferment freely in collecting pots under natural conditions and the product is either consumed fresh, bottled and pasteurised or distilled. The fermentation is brought about by wild yeasts and bacteria leading to products of variable characteristics.

The microorganisms at different stages of fermenting toddy were isolated from two geographical regions of the country. Some relevant morphological and physiological characteristics of the isolates were studied.

The patterns of utilization of sugars in the sap and production of alcohol and acids during fermentation by pure cultures and during natural fermentation are presented. Selection of a high alcohol yielding yeast strain on the basis of the above observations and its utilization for controlled fermentation will be discussed.