



A PROJECT REPORT ON
**“POST TODDY TAP INTERVENTION OF FERMENTAION
TO PRODUCE HEALTH DRINK”**

Submitted by:

K Sucharita Kamath	4PA10BT008
Mary Princy	4PA10BT011
Neenumol Mathew	4PA10BT014
Sanuba L	4PA10BT028

In

Partial Fulfillment of the Requirements of the Fourth Year
BACHELOR OF ENGINEERING

In

BIOTECHNOLOGY

As

Prescribed by

Visvesvaraya Technological University, Belgaum

Under the guidance of

**Dr. Krishna Prasad Nooralabettu,
Professor, Department of Biotechnology.**



DEPARTMENT OF BIOTECHNOLOGY

P. A. COLLEGE OF ENGINEERING

(Affiliated to Visvesvaraya Technological University and recognized by AICTE)

Near Mangalore University, Mangalore- 574 153, Karnataka

2013-2014

ABSTRACT

Highly nutritious palm sap becomes fully fermented alcoholic 'Toddy' within six hours and becomes unfit for human consumption due to acetic acid production. We have made an attempt to intervene the fermentation of the freshly tapped palm sap into a highly nutritious palm sap through hurdle effect. Effect of pH, temperature and effectors on the fermentation of freshly tapped palm sap by yeast and lactic acid bacteria was studied to formulate the strategy to post harvest changes in nutritional components. Moist heat at 60°C for 20 min was optimum in maintaining nutritional components of the sap and Potassium sorbate, sodium benzoate, or ethanolic extract of the clove (*Eugenia aromatic*) or cinnamon (*Cinnamomum verum*) at 1% level was effective in reducing both yeast and lactic acid bacteria. An increase in temperature was found to adversely affect the shelf life as well as nutritional components of the palm sap. Present study gives a basis for formulating a strategy produce a non-fermented highly nutritious beverage of commercial importance.