



Studies on preparation of wine from Banana

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● ABSTRACT ●

The present investigation was carried out with objective to prepare of wine from banana fruit by fermentation using wine yeast *Saccharomyces cerevisiae*. The physico-chemical characteristics of banana fruit pulp were analyzed to judge its suitability for preparation of wine. Process of preparation of banana wine was standardized and prepared wine was analyzed for its physico-chemical and sensorial quality attributes. The results revealed that sparkling wine, acidic in taste (titrable acidity (0.96%) with 8.2 per cent of alcohol content could be successfully prepared by using banana fruit as base raw material. Sensorial quality attributes of banana wine were compared with commercial grape red wine. The sensory evaluated rated banana wine quite acceptable as alcoholic beverage and is comparable with commercially available market wine.

KEY WORDS : Banana, Wine, Value added product, Fruit beverage

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● INTRODUCTION ●

Banana belongs to the genus *Musa* and is a climatic fruit made up of peel and edible pulp that has a high nutritional value. Edible banana are vegetative parthenocarpic berries *i.e.* they develop a mass of edible pulp without pollinate. The fruit develop from interior ovary of the female flower. The ovules shriver early but may be recognized in the mature fruit as minute brown flacks in the central part of the edible pulp (Kojima *et al.*, 1992). India is a second largest producer of fruit in the world. Banana is the most important fruit crop of India having great socio-economic significance. It contributes socio-economic significant. It is estimated that around 26.217 million tons of banana was produced in year 2008-09 (Anonymous, 2009). However, more than 22 per cent of banana is wasted due to improper handling and lack of utilization in development of value added products. A large quantity of marketable surplus fruit is available in all banana growing region which need to be processed and be

converted into value added products (Andre *et al.*, 2004). The pulp peel ratio increases during the development of fruit, from 1:1 to 4:1 depending on variety and maturity at harvest (Nigel, 1985). During the storage ripening starch dullness from 20-23 to 1 per cent and the same time the soluble sugar increases from less than 1 to 20 per cent when the mature fruit ripens, the pulp peel ratio increases, partly as a result of water movement from the peel to the pulp associated with an increase of osmotic pressure in the pulp caused by the hydrolysis of starch (Pingyi *et al.*, 2005).

Fruit wines have been made and consumed by man since time immemorial and have been used as therapeutic agents (Mallie and Lipton, 2005). Banana is the most important fruit crop of India having great socio-economic significance. The objectives of this project were to study preparation of wine from banana and also comparative study of physicochemical and sensory quality attributes of banana wine. The present investigation has been undertaken to utilize banana for preparation of wine by using yeast *Sacchromyces cervesiae*, to study the physico-chemical characteristics of banana wine and to study the sensory attributes of banana wine.

● MATERIALS AND METHODS ●

The present study was carried out at Department of Chemical Technology, at Dr. Babasaheb Ambedkar

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