

Standardization of physical characteristics of recipe for preparation of ready-to-serve beverage (RTS) from Mango (*Mangifera indica* L.) cv. KESAR

M.V. RAMDEVPUTRA¹, D.R. PARADVA, D.R. KANZARIA¹, D.K. KAKADE* AND A.M. BUTANI

Department of Horticulture, College of Agriculture, Junagadh Agricultural University,
JUNAGADH (GUJARAT) INDIA

ABSTRACT

The investigation is on Standardization of recipe for preparation of Ready-To-Serve (RTS) beverage from Mango (*Mangifera indica* L.) cv. Kesar. The experiment comprised of 12 treatments of recipe in Completely Randomized Design with three replications. Among various treatments tried in this investigation, the RTS beverage of 10% blended mango juice with lime and cardamom (10:2:0.006) + 12% TSS + 0.3% acidity retained significantly highest score for colour, taste, flavour, appearance, product setting at bottom and overall acceptance up to fourth month of storage. The sensory rating parameters showed decreasing trend throughout the storage period.

Key words : Mango, Lime, Cardamom, RTS beverage, Colour, Taste, Flavour and acidity

INTRODUCTION

The mango (*Mangifera indica* L.) belongs to family Anacardiaceae, is an important fruit crop of India and subtropical countries of the world. Being a useful and delicious fruit, besides fine taste, its high palatability, sweet fragrance, attractive colour and nutritional value, the fruit is considered to be a good source of vitamin A, B, C and β -carotene, nutritive minerals, digestible sugars and trace elements. Its taste, flavour and aroma are very fascinating to every one. Its kernel contains carbohydrates, carotene, riboflavin, thiamine, protein, fat and calcium also possesses medicinal values. India occupies 1.60 million hectares and produces 11.40 million tones of mango, being the largest producer accounting above 50 per cent of the world production. In Gujarat, mango is cultivated in 0.096 million hectares and production is about 0.77 million tonnes. The area under mango cultivation is increasing steadily, resulting in increased production and likely to create glut in the market during on season, which results meager prices to farmers for their produce as they have no capacity to retain it, being a highly perishable commodity with post harvest life of one week at ambient condition storage (Chadha, 1999), so it needs to be disposed immediately. At the peak harvest season, the availability of the fruits exceeds the demand and the market price becomes very low. Therefore, the value addition of Mango fruits becomes necessary in order to minimize the glut in the market during its peak season of production. The production of new products being necessary for the survival and growth of the processing industry would also

meet new tastes and demand in home as well as the export market. Hence, there is an urgent need to develop some suitable technology for the preparation of Mango beverages that could be economical and made available to a large population. In India, soft drinks have a good demand throughout the year. Looking to the demand of natural beverages, there is a great scope for the preparation of fruit juice and other fruit based beverages. For improving flavour, taste, palatability and nutritive value of mango, lime and cardamom may be blend as these fruits are valued very much for their refreshing juice with nutritional and medicinal properties. Therefore, an investigation on Standardization of recipe for preparation of Ready-To-Serve beverage from Mango (*Mangifera indica* L.) cv. KESAR was conducted with the objectives of standardize the recipe for preparation of RTS beverage of mango and to know the storages behaviour up to four months.

MATERIALS AND METHODS

The experiment on standardization of recipe for preparation of Ready-To-Serve beverage from Mango (*Mangifera indica* L.) cv. KESAR was carried out in the Department of Horticulture, College of Agriculture, Junagadh Agricultural University, Junagadh during the year 2007. The experiment was laid out in a Completely Randomized Design with three repetitions. The experiment comprises of 12 treatments consisting different recipes viz., (T₁) (8% Juice + 10% TSS + 0.3% acidity, (T₂) 10% Juice + 10% TSS + 0.3% acidity, (T₃) 12%

* Author for correspondence. Present Address : National Research Centre for Groundnut (ICAR), Post Box 5, Ivnagar Road, JUNAGADH (GUJARAT) INDIA

¹Grassland Research Station, Junagadh Agricultural University, Dhari, AMRELI (GUJARAT) INDIA