

Preparation of candy from ber - A value addition

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In order to provide value addition and also to preserve ber fruits for longer period, standardized procedure for the preparation of ber was developed. Mature ber fruits (cv. Umran) were selected and washed to remove the dust particles. Then pricking was done and pricked ber fruits were then plunged in boiling water as well as with sodium metabisulphite for 5-10 minute and then in cold water to stop the process of blanching. Effect of blanching on the nutritional parameters was studied. Destoning was carried out and slices were submerged overnight in sugar syrup of 30^o Brix and 0.5 per cent citric acid. Then strength of sugar syrup was increased slowly at a constant rate of 10^o Brix per day till the strength of sugar syrup reaches up to 70^o Brix. Sensory analysis was carried out to find out the overall acceptability of ber candy. Physical and chemical characteristics of ber fruits were also studied. Results showed that candy treated with sodium metabisulphite scored higher than that of blanched with hot water.

Key Words : Ber, Candy, Blanching, NaMS, Citric acid, Sugar syrup, Value addition

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INTRODUCTION

India is one of the few countries in the world where different types of fruits and vegetables are being produced. It is the second largest producer of fruit in the world after Brazil. Ber (*Zizyphus mauritiana* Lamk.) also known as Jujube, is one of the most ancient fruits of India. Ber belonging to the family Rhamnaceae is popularly called the king of arid zone fruits. Ber has been recognized as a useful edible fruit since antiquity in India. Pareek (2001) summarized the references to ber and other jujubes in scriptural sources and these references covered the period from 1000 BC-400 AD. Such historical evidence attests to the recognition of the fruit and its uses; it does not imply domestication. In India, ber is being cultivated on an estimated area of 22,000 hectares. The yield potential varies from one to two quintals per tree per annum (Yamadagni, 1985).

The ber fruit has high sugar content (sucrose, glucose fructose and starch); it is, therefore, high in carbohydrates, which provide energy. The fruits also contain protein with

many essential amino acids like asparagine, arginine, glutamic acid, aspartic acid, glycine, serine and threonine (Bal, 1981). Major interest has focused on vitamin C content and ber pulp is considered a rich source. Content ranges from 70-165 mg/100g (Bal and Mann, 1978). The FAO and WHO recommendation (FAO, 1974) that the daily intake for an adult man should be 30 mg, illustrates the value of ber pulp in the diet. Pulp contains about 70 IU vitamin A/100 g and the β -carotene content ranges from 75-80mg/100g (Bal *et al.*, 1978). The fruit being easily digestible has a laxative effect; the pulp is sweet and rich in flavour. Ber fruits are within the reach of the poor people, hence rightly known as 'Poor man's apple' (Bal and Uppal, 1992). The post harvest loss of fruits is one of the most pressing problems of the fruit industry especially in the tropical countries like India. In addition to the physical losses in quantity, serious losses do occur in the essential nutrients, notably of vitamins, minerals and fruit quality. Since ber is a seasonal fruit, to make it available throughout the year, development of different products like dehydrated, fermented products will be the best alternative. Hence, the present investigation was carried out to provide value addition and to preserve ber fruit by using sugar in the form of candy.

METHODOLOGY

Fresh ber fruits (cv. UMRAN), sugar used in the present work were procured from local market. A fruit impregnated with

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