

Effect of dried powder of herbals addition on aonla jam with granulated particles of coconut

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SUMMARY : The experimental work was conducted in the P.G. laboratory, Department of Horticulture, Sam Higginbottom Institute of Agriculture Technology and Sciences (Deemed University), Allahabad, during the year 2008-2009 to prepare and evaluate aonla herbal jam with granulated particles of coconut for TSS, ascorbic acid and overall acceptability. The studies on compositional changes in value-added aonla products such as aonla jam revealed that there was increase in the level of TSS and ascorbic acid during the storage period (eight months). The design was used C.R.D. with ten treatment combinations. The NA-7 cultivar was purposively selected for the study because it has higher recovery with ease in availability of commerce. Fully developed sound aonla fruits were selected. Small pieces of coconut @ 100 were mix in aonla jam. Three levels of each tulsi, cardamom and ginger were used as herbal additives. All the herbal treatments were found better in respect of TSS and ascorbic acid content over control. Highest mean TSS (69.26 per cent) and ascorbic acid content (102.65 per cent) were observed in T₉ (ginger powder @ 150 g). All the sensory parameters were as based on the overall acceptability which was depended on colour, texture, flavour and taste was recorded highest (8.33 score) in T₈ (ginger powder @ 100 g). Precisely, on the basis of results obtained it may be concluded that treatment T₈ (ginger powder @ 100 g) can be used in commercialization of aonla herbal jam with granulated particles of coconut preparation. This recipe may also be advocated for safe storage at ambient temperature up to 8 months.

KEY WORDS : Aonla herbal Jam, Coconut, Tulsi, Ginger, Cardamom, TSS, Ascorbic acid, Storability, Quality

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Fruits and fruits products both are an important supplement to the human diet as they provide almost all the vital components required for normal growth and development of the human body leading to the healthy physique and mind. The edible fruit tissue of aonla (*Emblica officinalis* Geartn.) contains about 3 times as much protein and 160 times as much vitamin C as apple (Barthakur and Arnold,

1991). The fruit contains a chemical substance called leucanthocyanin which retards the oxidation of ascorbic acid. Antioxidant effect of gallic acid, present in aonla fruit is being well acknowledged. Dahiya and Dhawan (2001) reported that the fresh fruit of aonla are very rich source of ascorbic acid (454.40 mg/100g) and appreciable source of total sugar (7.53mg/100g), calcium (14.91 mg/100g), iron (0.62 mg/100g) and phosphorus (11.81 mg/100g) and also has great potential for processing. Singh *et al.* (1996) noted that vitamin 'C' content was in no way lower than that of barbados cherry. A number of the products like jam, squash, candy, dried shreds, powder, tablets, chutney, murabba and preserve may be prepared with ease from aonla fruit. Fresh fruits are highly acidic and astringent make unsuitable for the direct consumption. Therefore, fruits are essentially forced to process into palatable products. Though, preserve is most common of aonla product and has been prepared by various methods. According to the Pathak *et al.* (2003) cultivar Krishna was moderate in keeping quality hence, an ideal variety for preparing candy and juice. NA-6 is an excellent variety for making preserve, candy and jam. NA-7

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