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**RESEARCH PAPER** 

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## Standardization of recipe and juice extraction method for preparation of readyto-serve beverage from custard apple (*Annona squamosa* L.)

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## ● ABSTRACT ●

Custard apple (Annona squamosa L.) known as sitaphal is delicious and nutritionally valuable fruit grown at higher elevations (2000 MSL) in tropic. It is highly perishable in nature and available for short period from  $1^{st}$  week of October to third week of November. Being perishable with poor self life it needs quick disposal. Further, short duration of its availability as well as a good harvest during peak season creates a glut in the market. Consequently the growers are compelled to self their produce at low price, which causes economic losses to them. Considering the various point an experiment was conducted for value addition with custard apple fruit in different combinations and was observed that hot method + 15% blended juice of custard apple and lime (3:2) + 15% TSS + 0.2% acidity was found best with respect to colour (off white), taste, over-all acceptance and ascorbic acid.

KEY WORDS : Custard apple RTS, Method, Recipe, Juice extraction

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## • INTRODUCTION •

Custard apple (*Annona squamosa* L.) belong to the family *Anonaceae* are acclimatized to tropical climate where they can withstand heat and drought conditions. It is one of the delicious fruits relished by many for table purposes. Pleasant flavour, mild aroma and sweet taste have a universal acceptance. In Rajasthan it is naturally grown in the forests and on the marginal lands. Custard apple is the main source of income for the tribal people of south Rajasthan, especially, Udaipur, Dungarpur, Banswara, Chittoregarh and Sirohi districts. Annona fruits are very perishable and have a short post harvest life, therefore, they require efficient value addition techniques. Ripe fruits can be stored only for 2-3 days without decay. It is observed that more than 75 % of fruits produced in tribal areas are

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VIRENDRA SINGH, Department of Horticulture, Junagadh Agricultural University, JUNAGADH (GUJARAT) INDIA E.mail : virendrahorti\_2008@yahoo.com wasted due to inefficient storage and value addition techniques and short self life of fruits (personnel observation). During the glut period, tribal sold their produce at thrown away prices of Rs. 1-2 per kg. It is nutritionally valuable consist of 40% pulp having 26.4 per cent TSS, 5 per cent tannin, carbohydrate, vitamin A and ascorbic acid. Further, the value addition of custard apple fruits become necessary to minimize the glut in the market due to short time availability need quick disposal. However, fruit processing industry is dependent only on a few fruit like mango, pineapple and citrus for RTS. However, Ready-To-Serve is a fruit beverage that contains at least 10% fruit juice, 10% total soluble solids and 0.3 per cent acidity is rich in essential minerals, vitamins and other nutritive constituent. It is liked and appreciated by all the ages and acceptable on all occasion. Its nutritive value is much more than the synthetic products, which are available in the market throughout the country. For improving flavour, palatability and nutritive value, blending of two or more juices are used for preparation of RTS. Therefore, the production of new products being necessary for the survival and growth of the processing industry would also meet new tastes and demand in homes as well as the export market. Hence, there is an urgent need to develop some suitable technology for the preparation of custard apple beverages that could be economical and made available to a large population.