

Processing and value addition in jackfruit

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SUMMARY : Jackfruit is a typical Indian fruit mainly grown in Maharashtra, West Bengal, Bihar, Assam and the west coast. Fully ripe jackfruit is sweet and has exotic flavour. The bulbs (edible flakes) contain 7.5 per cent sugar on dry weight basis and a fair amount of carotene which is Vitamin-A. Apart from better utilisation of perishable fruit this would also result in considerable value addition. Many products could be made from ripe jackfruit like nectar, jam, pickle, chips and canning etc. Jacalin is the major protein from the jackfruit is useful tool for the evaluation of immune status and also a good source of vitamin A, vitamin C and pectin; jackfruit also helps in alleviating the pancreatic ailments and aid in blood purification. With all these medicinal values and efficient ingredients in value added products the utilization of jackfruit in convenience food has a long way to utilize the jackfruit products with value addition for marketability and to create employment among rural peoples for economic empowerment.

Key Words : Jackfruit, Value addition in jackfruit, Jackfruit powder

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Jackfruit (*Artocarpus heterophyllus* Lam.) is a species of tree in family Moraceae. Jackfruit originated in the Western Ghats region of India and grown wildly many parts of Southern and Southeast Asia, such as Bangladesh, Burma, Sri Lanka, Malasia, Indonesia, Phillippines and Thailand. It is grown extensively in the coastal region of Maharashtra, Assam, West Bengal, Orissa and Bihar. Jackfruit has been in cultivation in India from ancient times. It was probably taken

by Arab traders to the East African coast, and now it has spread throughout the tropics. The jackfruit tree is adapted to humid, tropical and subtropical climates. It is sensitive to frost and cannot tolerate drought. Jackfruit is a lowland tree thriving below altitudes of 1000m. Above this altitude, the fruits are of poor quality and usually cooked before eating. The tree will grow well on almost any type of soil. It prefers a wet environment but cannot tolerate water logging and poor drainage.

The true fruit is normally originated from carpel (ovary) and surrounded by a fleshy perianth, a main bulky portion of the fruit, which has three different regions *i.e.* middle fused region forms the rind of syncarp and the upper free horny region spikes. The lower fleshy edible portion is known as 'bulb'. It has very unique, pleasant aromatic flavor and distinct taste. The ripe fruits and seeds of jackfruit are bestowed with certain chemical and aphrodisiac properties, which are important from health point of view. The nutritive value of jackfruit is shown in Table 1.

Jackfruit has four stages of maturity: tender, slightly grown, unripe and ripe. In the earlier three stages, it is a very good vegetable. It can be converted into hundreds of value-added products, most of them for day-to-day use and a considerable number of them with months-long shell life.

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