

Transportation of harvested cashew apples

Cashews apples should be transported in adequate harvesting crates, which must be shallow in depth to avoid many layers of the apples inside the crates, a fact that could result in smashed fruits, damaged texture and loss of juice.

In general, such a crate should hold up to 8- 9 kg of fruits. Crates should be carefully placed onto the vehicle and never thrown onto it. When stacking crates one must ensure ventilation between them and that the crates should never touch fruits in the other crates immediately below them. Exposing apples to sunlight or high temperatures after harvesting causes them to lose water due to transpiration and increased respiration rate, resulting in reduced life cycle of products.



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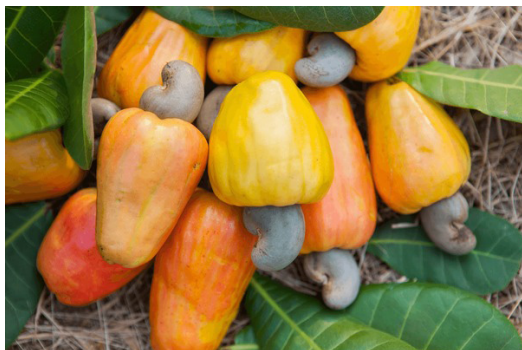


HARVESTING AND POST-HARVEST MANAGEMENT OF CASHEW APPLES





Harvesting and Post-harvest Management of Cashew Apples



Introduction

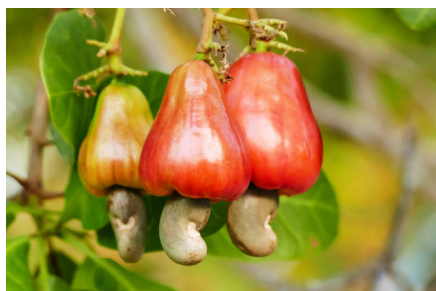
Cashew apple is a tropical fruit which is an important by-product of the cashew nut processing industry. Cashew apple products include juice, syrup, wine, alcohol, dietary fibre extracts, and animal feed. However, inadequate technologies and skills for postharvest handling and value addition have led to a considerable loss of cashew apples. A wide range of products can be made from the cashew apple. These include cashew apple juice, jam, wine, alcohol, vinegar, candies and livestock feeds among others.

Challenges in utilization

Despite being highly nutritious, utilization of the cashew apple has been very limited due to high perishability and its astringent taste. Various methods have, however, been developed to improve the shelf life and sensory properties of the whole cashew apple and its processed products. It is therefore crucial to create awareness and confidence among farmers about cashew apple processing for better economic returns.

Growth and maturity of cashew apples

The growth and maturity of cashew apples involve several stages. In each of the development stages, the nutritional content of the fruit undergoes significant changes. The cashew apple is an edible fruit that grows on the cashew tree, and it starts as a small, greenish-yellow fruit that gradually grows larger and more yellow or red as it matures. As the fruit develops, it accumulates sugars and other nutrients, resulting in taste, texture, and nutritional content changes.



In the early stages of growth, the cashew apple is high in vitamin C, beta-carotene, and other anti-oxidants. The sugar content increases as the fruit matures, becoming sweeter and less acidic. It also becomes a good source of dietary fiber, potassium, and other minerals at this stage. When the cashew apple reaches full maturity, it develops a soft, pulpy texture and a rich, sweet flavour. At this point, it is at its peak nutritional value, with high levels of dietary fibre, anti-oxidants, and minerals such as

potassium, magnesium, and iron. However, after reaching full maturity, the cashew apple starts to deteriorate rapidly and loses its nutritional value. Therefore, harvesting the fruit at the right time ensures maximum nutritional content.

Harvesting of cashew apples from the cashew tree

Cashew apples become useless for consumption 48 hours after detaching from the trees and dropping to the ground. Therefore, fruits must be hand harvested daily. Harvesting should be done during those hours when temperatures are low (either in the morning or in the evening). Harvested apples should be fully ripe, healthy and very firm. In most cases, the cashew apples for processing are harvested when they are still attached to the cashew tree. Care must be taken to ensure that the apples are not bruised during harvesting since their skin is very delicate. Once the fruits are injured, they start deteriorating at a faster rate.

Among the methods used in harvesting cashew apples include hand picking, the use of a long stick with a sickle and a netting basket attached at one end or the spreading of a netting material around the cashew tree canopy at a height of 2 feet from the ground so that as the fruits fall, they do not come into contact with the ground.

