

Pineapple

Post Harvest Technology

Grading

Grading Standards

After harvesting, the fruits are graded according to size, shape, maturity, and freedom from diseases and blemishes. The cut surface is treated with a suitable fungicide to control fungal decay.

Size	Weight
A	1500 g and over
B	100 - 1500 g
C	800 - 1100 g
D	Less than 800 g
Baby	Approx. 550 g

Packaging

For local markets, fruits are packed in bamboo baskets lined with paddy-straw. The first layer of fruits is arranged in such a way that they stand on their stumps. The second layer of fruits is arranged on the crowns of the first layer fruits. Each basket weights 20-25 kg. For distant markets, fruit are wrapped individually with paddy straw and then packed.

For export purpose the pineapples are packed into fibreboard or wood containers. The fruits are placed vertically or horizontally in container. The interspace between the fruits should be filled with straw and firm lining all around the container. For long-distance transportation, fruits are held at 7°C for 10-20 days.

Storage

When fruits are transported for long distances or to be stored for several days, refrigerated transport is required to slow down ripening process. In tropical areas, partially ripe, healthy and unbruised pineapple could be stored for almost 20 days when refrigerated at 10-13°C with RH 85-90%. Fruits harvested in early stage of ripening are stored at 7-10°C. Exposure of pineapples to temperatures below 7°C results in chilling injury. Controlled atmosphere storage (3-5% O₂ and 5-8% CO₂) delayed senescence and reduced respiration.

Cool Chain

Cool chain is essential during the transport of export quality commodity all the way from the farm to the customer. This helps in maintaining the temperature inside the box at the same low level as in the cold storage.

The various stages of the cool chain are :

1. Coldstore at the farm.
2. Refrigerated truck from farm to the airport
3. Coldstore at the airport.
4. Building up of the pallet in a coldstore at the airport.
5. Loading the aircrafts directly from the coldstore in a short time.
6. Cargo aircraft maintains coldstore temperature in hold.
7. Off loading direct into a coldstore in the receiving country.
8. Refrigerated truck to the customers.