

Banana

Post Harvest Technology

Grading :

The hands are graded based on the number and size of fingers in each hand. Overripe and injured fruits are discarded at this stage. Banana is sent to the local market as bunches.

Packaging :

For packing and transportation the bunch is padded with banana leaves. A fungicidal paste prepared by the Central Food Technological Research Institute, Mysore is applied to cut ends to prevent stem end rot. After the paste dries, the bunches are put into polythene tubes (175 gauge, 55 cm wide with 1.8 cm with holes 10 cm apart). The bunches should then be stacked vertically or horizontally on the ground added with wilted or dry banana leaves in case there is delay in transportation.

For exports, bananas are removed from the stem and hands and clusters of the bananas are packed in corrugated boxes with perforated polyethylene liners. The curved side of the hands is kept facing upwards making sure that the crown of the upper hands do not damage the banana underneath.

Storage :

In the cold storage, bananas are stored at 13-14°C with 90-95% relative humidity. Under controlled atmospheric conditions, 2-5% oxygen and 2-5% carbon dioxide should be used to supplement temperature and humidity management during transport and storage. Maintaining ethylene concentration below 1 ppm can extend postharvest life of mature green bananas. Mature-green bananas can be stored for up to 3 weeks in ethylene-free air or up to 6 weeks in a controlled atmosphere at 14°C.

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.