

Central Food Technological Research Institute, Mysore-570 020

1. Name of the process: Technology protocol for export of Alphonso mango by ship

2. Brief description of the process:

The major bottlenecks for export of mangoes from India are non-availability of pre and post harvest technologies for export by ship, inadequate air cargo space and uneconomical and exorbitant air freight charges. Export of mangoes by ship, which facilitates bulk transport, is approximately three times less expensive than by air.

Alphonso mango due to its delicious quality is well accepted by the customers abroad. With a view to boost export trade of fresh Alphonso mangoes from India and to help growers and exporters to overcome the bottlenecks and to facilitate exporters by cheaper mode of transport and to earn monetary returns in the form of valuable forex to our country and growers, the above mentioned process is developed which involves pre and post harvest technology protocols with a handling capacity of 1 ton/hour for export of fresh Alphonso mangoes by ship in reefer containers. This process is the first of its kind in our country.

The appropriate pre and post harvest technology protocols developed in this process include orchard management pre harvest care with spray treatments to control fungal and insect damages to the fruit, optimum stage of maturity for harvest, desapping, handling, packing-house operations such as grading, washing, post harvest dip treatments with suitable and permissible fungicide solution to minimize spoilage, packing in specially designed CFB boxes, pre-cooling, stacking in reefer containers, optimum storage temperature and humidity management inside the reefer container and post transportation ripening conditions.

The above standardized process has resulted in extension of shelf life of Alphonso mangoes to 35 days with desirable and acceptable ripening characteristics.

3. Uses of the process:

The above cost effective protocol is a shot in the arm of exporters in India to export in bulk fresh Alphonso mangoes to Europe, Gulf and South East Asian countries. Adoption of this process will help to boost our share of exports in the world market and also increase forex earnings.

4. Agency of release:

Director, CFTRI
Mysore - 570 020