

Central Food Technological Research Institute, Mysore-570 020

1. Name of the process: Pre and post harvest technology protocols for export of banana var. Dwarf Cavendish by sea

2. Brief description of the process:

Dwarf Cavendish is one of the important varieties of banana grown in India. Dwarf Cavendish (AAA) is also commonly known as Basrai, Bhusawal, Jahaji, Kabuli, Pacha vazhai, Mauritius, Morris, Kuzhi vazhai, Sindhurni, Singapuri. It is a commercial cultivar of Gujarat, Maharashtra, Madhya Pradesh, Bihar, Tamilnadu and Andhra Pradesh. Increased productivity of these states is attributed to high yielding Dwarf Cavendish.

CFTRI has developed pre and post harvest technology protocols for banana var. Dwarf Cavendish to obtain good quality suitable for export by sea. The pre-harvest technology protocols include preharvest spray schedules to control fungal infections and insect infestations during the growth and maturation of the fruit. The post harvest technology protocols include scientific methods of handling, de-latexing, grading, washing, post harvest treatments, pre-cooling, packaging under modified atmosphere packaging (MAP) and also in specially designed CFB boxes, palletizing and stuffing into reefer containers maintained at desired optimum low temperature and post transport ripening management. The technology developed by CFTRI was successfully adopted by some export agencies for export of banana var. Dwarf Cavendish by sea. By using this technology, bananas can be kept in fresh, green and unripe condition upto six weeks. These fruits ripened normally at ambient conditions after treatment with ethylene gas/ ethrel dip treatments and possess very good organoleptic qualities.

3. Application of the protocol:

The above cost effective protocol can be adopted for export of this variety of bananas to Europe, Gulf, SAARC countries and South East Asian countries and thereby boosting the quantum of agricultural exports. Dwarf Cavendish banana is very much liked as a table fruit both nationally and internationally. The ripe fruits are good source of vitamins and minerals.

**PROJECT COST – FIXED COST – WORKING CAPITAL (in Rs.‘000)
(Estimate for a model project)**

a) Land & Building	6500.00
b) Plant and machinery	12000.00
c) Miscellaneous fixed assets	300.00
e) Pre-operative expenses	1200.00
Total fixed capital	20000.00
Recurring expenses on post harvest handling	1800.00

4. Mode of Technology Transfer:

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