CENTRAL FOOD TECHNOLOGICAL RESEARCH INSTITUTE, MYSORE – 570 020

OSMO AIR DRIED AMLA (SWEET & SALT)

Introduction

Emblica officinalis or Indian Goose-berry is highly valued for its medicinal properties. Amla Fruit is rich in Vitamin C and Pectin and is an important constituent of 'Triphala', a popular ayurvedic preparation. It inhibits Platelets aggregation and lowers cholesterol levels. It is a tonic, has a haematinic and lipalytic function useful in Scurvy and Jaundice, prevents Indigestion and controls acidity as well as it's a natural source of anti-ageing. It increases all-round immunity in the body against heart and nervous disorders.

Uses

Being rich in poly-phenols it is popularly used as an Astringent or mouth freshner. The fruit is known to have cooling properties and is used in several other preparations like Chutneys, Pickle, Murraba, Spread etc. Osmo air-dried amla is a ready-to-eat product wherein salt/sugar is incorporated into the amla pieces which makes the subsequent drying process less energy intensive and gives a good taste and texture to the finished product. This product has shelf-life upto 8-10 months at ambient temperature and finds varied application as it can be used in place of fresh fruits.

Salient features

- 1. It is a concentrated fruit product with a good nutritive value,
- 2. It is in ready-to-eat form
- 3. The product has a good shelf-life.
- 4. The product has a ready internal market & promising export potential.

Marketing

With the increasing demand for natural and ayurvedic preparations owing to health consciousness and amla fruit being highly valued for its properties the above product have good market potential.

Raw material

Amla fruits, Sugar, Salt, Spices & Preservatives etc.

PROCESS

Amla fruits \rightarrow Washing & Cutting \rightarrow Syruping/Salting \rightarrow Osmotic treatment \rightarrow Draining \rightarrow

Dipping \rightarrow Drying \rightarrow Packing

PLANT & MACHINERY

Major equipments required are Fruit washer, Tray drier, Boiler, Syrup storage tank, Jacketed Kettles, Refractometer, Sealing machine, Platform & Counter scale etc.

PROJECT COST – FIXED COST – WORKING CAPITAL (in Rs. '000) (estimate for a model project)

a)	Land & Land development (500 m ²)		75.00
b)	Building and civil works (75 m^2)		225.00
c)	Plant and machinery		1400.00
d)	Miscellaneous fixed assets		150.00
e)	Pre-operative expenses		150.00
	Total fixed capital		2000.00
	Working capital margin		202.00
	Total Project cost		2202.00
	Means of finance		
	- Promoters contribution	702.00	
	- Term loan	1500.00	

PRODUCTION CAPACITY- (estimate)

Suggested economic capacity: 132 Kg/day of Sweet amla & 24 Kg/day of Salted amlaWorking: 1 shift/day, 150 working days/yearCapacity: 19.8 MT (Sweet amla) & 3.6 MT (Salted amla) /annumOptimum utilization capacity: 70%

TECHNOLOGY/MANUFACTURING PROCESS – Availability

The technology for the manufacture of Osmo air dried amla (Salt & Sweet) has been developed at CFTRI, Mysore, using appropriate equipment for optimal product recovery of right quality. The CFTRI has the necessary expertise to provide technical assistance and guidance for setting up the project. The CFTRI can offer further technical assistance for project implementation under technical consultancy arrangements.

Note: CFTRI does not guarantee the performance of the machine. Indenter may kindly confirm the performance, etc., from the fabricator of the machine, before a decision is taken to purchase the same.