

SPICE OIL

INTRODUCTION

Spice oils in generally are the steam distilled 'Volatile oils' obtained from the individual spices, rich in characteristic aroma constituents.

Pepper oil is valued for its aroma in fragrance industry. Its fragrance outlets are mainly high-grade perfumes and toiletries. In the flavour industry, it is used principally in foodstuffs, which require a high pepper aroma, often in conjunction with the pepper aroma, often in conjunction with the pepper spice powder or with pepper oleoresin.

- i) Products are being increasingly made use of in processed foods, beverages, perfumery, pharmaceuticals, etc.
- ii) Product offer quality and strength of flavour either as such or in blended form.
- iii) Product requires less storage space and there is no danger of spoilage or loss of strength when properly packed and stored.

RAW MATERIAL

India has the highest area under cultivation of pepper with about 1.68 lakh hectares in the year 1988-89 which is nearly 50% of total area in the world. About 90% of the total area under pepper in India is confined to Kerala. Total production of ginger in the country was about 1,36,000 tonnes during the year 1988-89. During 1988-89 production of cardamom was 4900 tonnes. Kerala is the leading state for cardamom production in India and contributes about 70% of total production.

PLANT AND MACHINERY

Principle equipments: Destoner, Air classifier Weighing balance, Hammer mill, Plate mill Steam distillation still (stainless steel), Oil-water separator, Condenser, Boiler, Vibratory sieve with motor.

Auxiliary equipments: Storage bins with lid, Trolleys, Oil storage tank, SS buckets, handling vessels for raw material handling.

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

Calculated on the basis of raw material mix of cardamom, pepper and ginger 4.5, 72.0 and 58.5 tonnes per annum.

a)	Land & Land development (1500 m ²)	150.00
b)	Building and civil works (240 m ²)	720.00
c)	Plant and machinery	2000.00
d)	Miscellaneous fixed assets	200.00
e)	Pre-operative expenses	200.00
	Total Fixed Capital	3270.00
	Working capital margin	600.00
	Total Project cost	3870.00

Means of Finance

- Promoter's contribution	1417.50
- Term loan	2452.50

PRODUCTION CAPACITY-(estimate)

Suggested economic capacity : 500 kg of spice/shift
Working : 2 shifts/day;
300 working day/annum
Installed capacity : 300 tonnes/annum
Optimum capacity utilization : 70%

TECHNOLOGY / MANUFACTURING PROCESS -AVAILABILITY

The technology for processing of spices into spice oils has been developed at CFTRI, Mysore using appropriate equipment optimal product recovery of right quality. The institute has the necessary expertise to provide technical assistance and guidance for setting up the project and implementation, under technical consultancy arrangements.

For Technology and Technical assistance please contact

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