

CENTRAL FOOD TECHNOLOGICAL RESEARCH INSTITUTE, MYSORE

MUSTARD POWDER

(Process code CPS -1590)

INTRODUCTION

Mustard seeds are classified among the leading oil crops of the country. India ranks high among the producers of mustard and rapeseed, with an annual production of more than 3.3 million tonnes. Major portion of the seeds is used for extraction of edible oil. Mustard seeds as such are extensively used as a seasoning material for flavour and pungency. Dehusked mustard with its flavour and pungency intact finds use as table mustard. A pasty product prepared from mustard, salt and vinegar is very popular in Western countries. Mustard powder can also be used as condiment in pickles, meat and salad dressings. Indian black mustard known for its flavour and pungency holds good potentialities for export, if it can be processed to a quality product. Product characteristics are:

- i) The process of production is simple.
- ii) Product is clean and good quality
- iii) Product meets the standard specification

No reliable information is available as to the exact quantity being produced. A very few number of firms are making the product. The method as practiced in the industry besides having a low product recovery, has several operational problems. Necessity exists for producing plain mustard powder with simple operations, good product recovery and good quality control.

RAW MATERIAL

Rapeseed and mustard seeds are grown in several states in our country.

State wise area and production figures for the year 1998-99 is given below:

	State	Area (ha)	Production (T)
1.	Andhra Pradesh	4,473	831
2.	Arunachal Pradesh	17,481	12,324
3.	Assam	3,23,407	1,54,477
4.	Bihar	81,954	3,29,100
5.	Gujarat	2,41,600	3,29,100
6.	Haryana	3,77,000	4,77,000
7.	Himachal Pradesh	8,257	2,219
8.	Jammu & Kashmir	52,499	25,775
9.	Karnataka	5,707	1,894
10.	Madhya Pradesh	4,37,800	3,92,900
11.	Maharashtra	4,200	1,200
12.	Manipur	3,000	1,300
13.	Meghalaya	6,700	71,520
14.	Orissa	1,35,540	71,530
15.	Punjab	1,59,000	1,60,000
16.	Rajasthan	15,27,344	14,39,713
17.	Sikkim	7,800	7,000
18.	Tripura	5,354	4,000
19.	Uttar Pradesh	10,79,212	9,31,461
20.	West Bengal	3,78,483	3,27,060
21.	Delhi	4,409	728

PLANT AND MACHINERY

Plate mill, Grader, Classifier, Tripple roll mill, Boiler, Jacketted kettle, Seed cleaner

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

a)	Land & Land development (600 m ²)	60.00
b)	Building and civil works (150 m ²)	375.00
c)	Plant and machinery	875.00
d)	Miscellaneous fixed assets	100.00
e)	Pre-operative expenses	90.00
	Total fixed capital	1500.00
	Working capital margin	115.00
	Total Project cost	1615.00
	Total working capital required at 15% of turnover	460.00
	Means of finance	
	- Promoters contribution	490.00
	- Term loan	1125.00

PRODUCTION CAPACITY-estimate

Suggested economic capacity	: 500 kg/day/shift
Working	: 300 days/annum, 1shift/day
Capacity	: 150 tonnes/annum
Optimum capacity utilization	: 70%

TECHNOLOGY/MANUFACTURING PROCESS – Availability

The technology for processing of mustard into powder form has been developed at CFTRI, Mysore using appropriate equipment for optimal product recovery of right quality. The Institute 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 arrangement.