CENTRAL FOOD TECHNOLOGICAL RESEARCH INSTITUTE, MYSORE - 500 020

DEHULLING OF NIGER SEEDS

1. Introduction:

The dehulled niger seed is finding application in preparation of confectionery. The oil obtained from dehulled niger is light in colour, sweet to taste and pleasant in flavour. It can be used for edible purpose without refining.

Niger seed cake obtained after oil extraction can be utilized in the preparation of high protein energy food formulation. Because of low fibre content in the meal and nutritional superior to the cake from undehulled niger seed, it finds use as a good protein supplement in supplementary foods.

2. Market Potential:

Oil obtained from dehulled niger seed is light in colour with low FFA content. The oil can be used without refining. The cake obtained has high protein and low fibre content and could be used in high protein, traditional foods and supplementary food formulations, since the niger seed is a good source of sulphur containing amino acids. The quality oil fetches high price in the market. The cake will help to improve the nutritional status of the tribal farmers.

3. Raw material:

Niger seeds

4. Process:

Dehulling of niger seeds involves the following steps: Pre-cleaning \rightarrow Hot lye treatment \rightarrow Water washing \rightarrow Dehulling \rightarrow Washing/ Neutralizing \rightarrow Gravity separation \rightarrow Dewatering \rightarrow Drying.

5. Plant and machinery:

Pre-cleaner, destoner, pulper, stirrer, drier, boiler, effluent treatment plant etc. Auxillar – Vibro sieve Bucket elevator etc

6. Project cost: Estimate

Production capacity - 1 Ton / day in 2 shifts No. of Working days - 300 days / annum

1. Land and land development

550 Sq. m

2. Building

200 Sq. m

3. Plant and equipment

Rs.15,07,000