



## FRESH GINGER PROCESSING TECHNOLOGY

**NIIST , Trivandrum** has come up with a commercially viable generic technology to process fresh spices to make essential oil and spice powders. The technology had won the **NRDC National Technology Day Award – 2003, CSIR Shield for Process Technology 2004** and has been commercialized in 5 States. The following are the salient features of the technology.

**PRODUCTS:** Fresh ginger oil, Cleaned & waxed ginger and ginger powder along with turmeric powder and steam distillation facility for volatile oil of medicinal & aromatic plants

**CAPACITY:** 5 ton fresh ginger/ turmeric / botanicals per day

**INVESTMENT:** Total Project Cost – Rs. 200 lakhs ( Approx)

### STATUS OF THE TECHNOLOGY

The laboratory has set up two commercial scale plants in Manipur and Meghalaya on turn key basis. The laboratory has the capability to either implement the project on a turn key basis or offer consultancy for setting up the facility. The technology has been availed by more than 5 entrepreneurs and it has been extended to other fresh spices like Turmeric, Chilli etc. The technology is generic in nature and can be adapted to any fresh plant material from which essential oil is to be isolated or solvent extracted to get the oleoresin. The laboratory offers process guarantee and will train personnel in the operation of the plant as well as in quality control at its pilot plant.

### COMPETITIVE ADVANTAGES OF THE TECHNOLOGY

The new **patented** technology for the recovery of ginger oil from fresh ginger and other botanicals offer several advantages over the conventional process of recovery of the oil from dried ginger. The major advantages are

- Yield of oil 30 % more than the conventional process
- Processing time reduced to 4 hours instead of 18 hours.
- Reduced energy consumption
- Processing cost around 12 % of the total cost of production
- Superior quality of flavour
- Possibility for byproducts utilization

### SERVICES OFFERED BY THE LABORATORY

- Laboratory will provide a **Bankable Detailed Project Report (DPR)**
- Execute project on a turn key basis
- Offer Engineering Consultancy for setting up the project
- Train personnel for the client in quality control and operation of plant
- Render technical support in marketing of products
- Trouble shooting and technical support after commissioning