

HERBAL TECHNOLOGY CENTRE

Medicinal Plant Program

Towards high quality, safety and efficacious herbal products



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Introduction

Medicinal Plant Programme in Forest Research Institute Malaysia (FRIM) is committed to assist the local herbal and traditional medicine industries through the development of the modern techniques in the production of herbal products. Herbal Technology Centre is one of the excellence centre here that play a major role in supporting the herbal industry. The purpose of this leaflet is to provide information on the technical services offered by HTC to the herbal industry. The service fees listed here are based on the cost of materials & labor charges incurred for carrying out the job.

Objectives

As a reference centre to individual, researchers, institutions & herbs base industries. Performing R&D works, provide services, consultation as well as training incubation centre.

Production Sections

Based on GMP, the management in HTC are divided into 5 sections which comprises:

Section 1: Post-Harvest Technology

Post-harvest processing activities such as washing, drying, grinding & temporary packaging.

Services & charges : Oven - RM 100.00 / 30kg 3 days
Grinding - RM 60.00 / 30kg 1 day

Section 2: Extraction

Plant sample extraction using Extractor or juice extraction using Screw Press. Drying process using either Freeze Dryer or Spray Dryer. Other equipment such as jet mixer, evaporator, homogenizer, vacuum packager, sealer, balance & freezer.

Services & charges : Extractor - RM 300.00 / 1000L 1 day
Screw Press - RM 250.00 / 50kg 1 day
Jet Mixer - RM 250.00 / 500L 1 day
Homogenizer - RM 250.00 / 500L 1 day
Evaporator - RM 300.00 / 100L 1 day
Freeze Dryer - RM 900.00* / 12L 3 days
Spray Dryer - RM 1000.00 / 100L 1 day
* if sample less than 5L, charge will be RM 100.00 / L



Section 3: Milling

Grinding of dried extract into powder form. Milling powdered extract with the specific formulation. Drying of mixed materials for capsule & tablet production.

Services & charges : Granulator - RM 250.00/ 50kg 1 day
Fluid Bed - RM 300.00 / 70kg 1 day
Particle Size Reducer - RM 250.00/ 50kg 1 day
Double Cone Mixer - RM 250.00 / 100kg 1 day



Section 4: Finished Product

Capsule & tablet making using Capsule Filler & Tablet Pressed Machines. Responsible for the packaging of the finished products.

Services & charges : Tablet Pressed - RM 0.12 / capsule (30,000 capsules 1 day)
Capsule Filler - RM 0.10* / capsule (30,000 capsules 1 day)
Counting & Filling - RM 0.01**
Blister Pack - RM 0.25 ***/ blister (2,500 blisters 1 day)
Ink-Jet Printing - RM 0.05 / blister (10,000 blisters 1 day)
Shrink Pack - RM 0.12 / pack (1,500 packs 1 day)
* Capsule size 1 & 2 provided
** Packaging materials (bottles & boxes) not provided
*** Capsule size 1 & 2 only



Section 5: Quality Control

Quality control activities started from raw materials, temporary finished products until finished products based on the developed standard to make sure that these products are safe. Quality & safety testing including heavy metals & steroid testing, stability & chemical markers detection. Quality testing is also provided to the local herbs entrepreneur & to help them in the process of registration with the Ministry of Health Malaysia.

