

Package of Practices of
Netiver



Published by Institute of Natural Resources, Meghalaya
(under MEGH - Aroma Mission)
Langmaw, Langkyrding, Shillong - 793019
Email : aroma.minr@gmail.com

Institute of Natural Resources, Meghalaya

Package of Practices of Vetiver

Common Name : Khus, Vetiver (*Vetiveria zizanioides* L, Family : Poaceae).

Economic part : Roots

Major constituents : Vetiverone, Vetiverols, Vetivernate

Uses : Perfumery, cosmetics, it can also be used in pan masala, tobacco industries and beverages like cold and soft drinks etc

Varieties : CIM - Sviridhi

Climate and Soil : It can be planted in all types of climates except temperate region. Well drained, sandy loam and red laterite soils of pH 6 - 8 are considered ideal as the roots produced in such soils are thick and contain more essential oil. The crop grows luxuriantly with a rainfall of 100 - 200 cm and a temperature of 30°C - 40°C with moderate humid climate.

Planting : Slips of vetiver can be planted anytime between February and October but April - June considered most ideal time for planting. For rainfed area 45 cm plant to plant and 60 cm row to row spacing should be maintained.



Vetiver plantation



A culm of Vetiver



Separation of slips

Propagation : Vetiver can be propagated through slips of 7 - 8 months mature crop. The top of the slips are cut 25 - 30 cm above ground before planting to prune transpiration loss, thus giving a better chance for survival of the slips, the clumps are dugged and splitted into slips. The roots are chopped before planting leaving 4 - 5 cm length and then planted in pits, 6-8 cm deep made with a pointed stick. Immediately after planting it is necessary to tighten up the soil. Irrigation is required immediately after planting. About 50000 - 55000 slips of vetiver can be planted in one hectare area.

Manuring : In nutrient poor soil manuring is essential to enhance luxurious root growth and oil yield. Application of FYM/Cow dung at 10 ton/ha during ploughing at least one month prior to planting is essential.

Weed Control : Weeding is required at the initial stage of planting i.e 60-70 days after planting to prevent competition for nutrients and moisture. Intercropping with *Mentha piperata* helps to reduce weed growth and retain soil moisture content.

Plant Protection : No serious insect pests attack this crop.



Harvesting : The plants planted in April - May should be harvested after 12-16 months to get the maximum oil yield. Harvesting is usually done during dry season (February - April). Digging can be done manually (if planted in slopy land) or by using a single lane root harvester (if planted in flat land). The roots are then separated from the leaves, washed and dried under the shade for 3 - 4 days or can be distil immediately. Before distillation the roots are cleaned and steeped in water for 12 - 16 hrs.

Yield : Depending upon climate, soil and management practices, root yield vary from 10 - 50 quintal /Ha. The average yield is about 25 - 30 quintal/Ha. In commercial field oil recovery on commercial scale range from 0.5 - 0.8 % i.e 25 - 30 kg/Ha.