

VETIVER



Plant Profile

Family : *Poaceae*
English name : Vetiver
Indian name : Usirah, Sevyah, Sugandhimulah (Sanskrit)
Khas, Khas-Khas (Hindi),
Lavancha (Kannada)
Vettiver (Tamil)

Species : *Vetiveria zizanoides* (Linn.) Nash

Uses

➤ **Baskets, Cosmetics, Drugs, Fodder, Screens or blinds, Soil-binders, Perfumery**

- Vetiver is a densely tufted perennial grass.
- The underground part of the plant consists of numerous fine rootlets of light yellow or grey to reddish in colour, which on distillation yields the vetiver oil of commerce.
- The essential oil is widely used in perfumes, cosmetics and for scenting of soaps.
- From time immemorial, its roots have been employed to make baskets, hand fans and mats, which when hung and sprinkled with water cool the air and emanate a pleasant odour.
- The plant has also gained recognition as one of the best soil binders and is being used to check soil erosion.

SOIL

- The plant is sufficiently hardy and found growing on a wide variety of soils. Light soils, however, should be avoided as the roots obtained produce very low percentage of oil.
- Red lateritic soils with good organic matter are considered ideal as the roots produced in such soils are thick and contain more essential oil.
- It can be grown in saline and alkaline soils also even at a pH range of 8.5 to 10.0.

CLIMATE

- The crop prefers tropical and sub-tropical climate for its proper growth, development and essential oil yield.
- It grows luxuriantly in places with annual rainfall of about 100-200 cm, having a temperature ranging from 21-44°C and with moderately humid climate.
- In places which are otherwise suitable but have scanty rainfall, it can be grown as an irrigated crop for extraction of oil.

VARIETES

Hybrid-7, Hybrid-8, Sugandha, ODV-13, K3-1, K3-2, Kesari, Gulabi and Dharini.

INPUTS

Sl.No.	Materials	Per acre	Per hectare
1.	Plants materials (slips)	30,000	75,000
2.	Farm Yard Manure (t)	4	10
3.	Fertilizers (kg)		
	N	10	25
	P ₂ O ₅	10	25
	K ₂ O	10	25

CULTIVATION

Propagation

- The plant has a bushy nature and forms clumps during its growth period.
- The clump when broken gives a number of small units known as slips.
- These slips are the units of propagation and on planting, they establish as individual plants. While preparing the slips for planting fibrous roots and leaves should be trimmed off.

Planting

- The crop is planted during the months of June-July at the advent of rainy season about 10 cm deep vertically and at a spacing of 45 x 30 cm apart.
- Late planted crop yields coarse roots which yield inferior quality oil.

IRRIGATION AND INTERCULTURE

- In areas, where rainfall is good and well distributed over the year and humidity is high, supplemental irrigation is not necessary. In drier months, 8-10 irrigations will be required to get an optimum yield.
- When once the plants have established and from bushes, weed problem is not severe because of the very nature of the bushes. However, in the newly established plantations, 3-4 weedings until the bushes are formed are necessary.

PLANT PROTECTION

No serious insect pests and diseases have been observed on this crop.

HARVESTING AND YIELD

- The time of harvesting is very important as the yield of roots and oil percentage vary with changes in the environmental conditions. The plants planted July should be harvested after 18 months for getting the maximum oil yield.
- Harvesting is usually done during the dry season from December till February by digging out the bush along with its roots manually. The roots are separated from the leaves, washed and dried under shade before distillation.
- A recovery of about 1% of essential oil is considered satisfactory. The yield of roots may range from 3,000 – 4,000 kg per hectare.

