

LEMONGRASS



Plant Profile

Family : *Poaceae*
English name : Lemon grass
Indian name : Lemon grass (Hindi),
Nimbe hullu(Kannada)
Nimma Gaddi (Telugu)
Elumichai-Ennai Pullu (Tamil)

Species : *Cymbopogan flexosus*
C. penduuls
C. khasianus
C. citrates

`Lemongrass Oil' obtained from the leaves and shoot of the Lemongrass plant.

Uses

- **Confectionery, Culinary Purposes, Drugs, Flavoring, Insect repellents, Liquors, Perfumery**
- The lemongrass oil is mainly used in the manufacture of perfume for soaps, hair oils, scents and medicines. It also has the antibacterial properties.
- Ionone prepared from the *Citral* present in lemongrass oil is one of the most important raw materials for the preparation of vitamin `A'. In addition to its use in perfumery, Ionone is used in certain kinds of confectionery and liquors. Ionone can be prepared either directly from the lemongrass oil or from the citral obtained from the oil.

SOIL

- It flourishes in a wide variety of soils ranging from rich loam to poor late rite. In sandy loams and red soils, it requires good manuring.
- Calcareous and water-logged soil should be avoided as they are unsuitable for its cultivation.

CLIMATE

- It requires a warm humid climate with plenty of sunshine and a rainfall ranging from 200-250 cm well distributed all through out the year.
- In area where rainfall is less, it can be grown with supplemented irrigations.

VARIETIES

Sugandhi, Pragathi, Praman, PRL-16, CKP-25, OD-408, RRL-39, Kaveri, Krishna

INPUTS

Sl.No.	Materials		Per acre	Per hectare
1.	No. of slips		10000	25000
2.	Farm Yard Manure (t)		4	10
3.	Fertilizers (kg)	N	200	450
		P ₂ O ₅	40	100
		K ₂ O	50	125

CULTIVATION

Planting

- It can be propagated by seeds as well as vegetatively by slips. For better quality and yield of oil it is recommended to be grown only by slips obtained by dividing well grown up clumps
- Planting is done in the last week of May or in the first week of June
- However, under irrigated conditions planting can be done during any part of the year, except October-November months
- Before planting, the field is thoroughly prepared and laid out into 6 m x 6 m size beds. The soil is incorporated with full dose of phosphorus and potash

- Nitrogen is applied in six equal split doses, the first dose, being at the time of planting, another after one month and the remaining after every harvest.
- Ridges are opened at 60 cms distance. Slips are prepared by clipping all the old roots and removing the leaves completely for planting.
- They are then planted at about half way down the slopes of the ridges at a spacing of 60 cm x 60 cm.

IRRIGATION AND INTERCULTURE

- After planting, if there are no rains, the plots should be irrigated every alternate day for about a month and then once a week depending upon the soil type and weather conditions.
- The field is kept free of weeds till a complete cover of the crop is obtained.

PLANT PROTECTION

No serious insect pests and diseases have been reported to attack this crop.

HARVESTING AND YIELD

- The plants are perennial in nature and can give crop upto 5 years. Harvesting is done by cutting the grass 10 cm above ground level.
- During the first year of planting 30 cuttings and in subsequent years 5 to 6 cuttings are obtained.
- The first harvesting is done in about 90 days after planting and subsequently at 50-60 days intervals.
- The harvested leaves can be stored under shade for three days without much adverse effect to the oil yield or quality of oil.
- They are then chopped into smaller pieces before distillation. We may obtain an herbage yield of 15 tonnes per harvest and a recovery of 0.5% oil from fresh grass.
- The yield of oil from second year onwards would be about 375 kg per hectare.
