

GERANIUM



Plant Profile

- Family** : *Geraniaceae*
- English name** : Scented Geranium
- Indian name** : Geranium (Hindi)
Pannir soppu, Pannir patre (Kannada)
Geranium (Tamil)
- Species** : *Pelargonium graveolens* L. Herit
P. radula, *P. fragrance*
Algerian or Tunisian, Reunion or Bourbon
- Varieties** : KKL-1, Sel-8, Hemanti, Bipuli, Kunti

Uses

- **Cosmetics, Perfumery**
 - Geranium is one of the important aromatic plants, yielding an essential oil which is highly priced for its very profound and strong rose like odour.
 - The chief constituent of the oil are geraniol and citronellol
 - The pure geranium oil is almost a perfume by itself and blends well with all other perfumes.

SOIL

- Geranium thrives in well drained soils. The soils which are either saline or alkaline with poor drainage are unsuitable for its cultivation.

CLIMATE

- The crop flourishes in mild climate with low humidity, warm winter and mild summers having annual rainfall ranging 100 to 150 cm.
- It is found growing successfully from an altitude of 1000 to 2100 m.

VARIETIES

Algerian and Reunion are the varieties suitable for heavy and less rainfall areas.

INPUTS

Sl.No.	Materials		Per acre	Per hectare
1.	No. of cuttings		10000	25000
2.	Farm Yard Manure (t)		4	10
3.	Fertilizers (kg)	N	80	200
		P ₂ O ₅ K	14	35
		₂ O	14	35

Note: Nitrogen is applied in 6 equal split doses. The first dose is given as a basal dose and thereafter at bio-monthly intervals.

CULTIVATION

- As there is no seed setting in this crop, it is propagated vegetatively by cuttings.
- To propagate geranium, terminal cuttings of 20 cm length consisting of about 8 nodes are taken from healthy plants. Except for the first 3-4 leaves from the top the rest are trimmed. A slant cut is made with a sharp knife just below 6th to 7th node and dipped in 0.1% Benlate solution for 10 to 20 seconds.
- They are then planted in the nursery beds at 5 cm spacing. Beds are provided with proper shade and watered twice daily for about 3-4 days and once in a day, subsequently. November to January months are best suited for raising the nursery.
- The cuttings will be ready for transplanting in about 2 months from planting. Under mist conditions however, the rooting of cuttings can be accomplished within about 20 days time.

- For transplanting, the rooted cuttings are carefully dug out from the nursery, dipped in 0.1% Benlate solution and transplanted immediately at 60 x 60 cms spacing.

PLANT PROTECTION

Major Insects	:	Termites
Major Diseases	:	Wilt

Schedule

1. To control the without break the following measures are effective.
 - a) Spray the crop with 0.2% Benlate solution two weeks before the harvest. After the harvest, treat the cut ends with the fungicide and repeat the spray after two weeks.
 - b) Minimum irrigation and proper hoeing ensures healthy growth. Over watering increases the incidence the incidence of wilt.
 - c) Sharp sickles are used for harvesting to avoid jerks and pulls. Any damage to the stem near the ground may pave the way for infection.
2. Termites can be easily controlled by mixing into the soil 25 kg Heptachlor per hectare and irrigating the area.

HARVESTING AND YIELD

- The crop is ready for harvest after about 4 months of transplanting. When the leaves begin to turn light green and exhibit a change from lemon like odour to that of rose.
- The green leafy shoots are harvested with a sharp sickle and taken for distillation immediately. The crop is perennial and can give good harvests for about 3-6 years. A total of three harvests in a year can be obtained.
- The yield of fresh herbage per hectare per year from all the three harvests may be about 15 tonnes per hectare which on distillation may yield about 18 kg of oil.
