PATCHOULI

Plant Profile

Family : Lamiaceae
English name : Patchouli
Indian name : Patchouli, Pehpli (Hindi), Patchetene (Kannada), Kadir pachai (Tamil)
Species : Pogostemon patchouli

Uses

- Perfumery, toiletry and tobacco
  - Essential oil is one of the best fixatives for heavy perfumes which imparts strength, character, alluring notes and lasting qualities.
  - It is a perfume by itself and is highly valued in perfume, soaps, cosmetics and flavour industries.

SOIL

- Patchouli is a hardy plant and adopts itself to a wide range of soil conditions.
- However, a deep foamy soil, rich in humus and nutrients, with a loose friable texture and without impervious layer at the bottom is the best for optimum production.
- The pH of the soil from 5.5-6.2 is reported to be the ideal.
CLIMATE

- Patchouli prefers warm and humid climate. The crop can be grown successfully on a fairly heavy and evenly distributed rainfall ranging from 150-300 cm per annum.
- The crop grows well under irrigation in less rainfall areas.
- A temperature of 24-28°C and an average atmospheric humidity of 75 per cent are reported to be deal.
- It grows successfully up to an altitude of 800 to 1000 m above sea level.

VARIETIES

- Johore, Singapore and Indonesia are commonly cultivated. Out of these the first one yields the quality oil whereas the other two give high yield of oil.

INPUTS

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Materials</th>
<th>Per acre</th>
<th>Per hectare</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>No.of plants</td>
<td>10,000</td>
<td>25,000</td>
</tr>
<tr>
<td>2</td>
<td>Farm Yard Manure</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>3</td>
<td>Fertilizers (kg)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>60</td>
<td>150</td>
</tr>
<tr>
<td></td>
<td>P₂O₅</td>
<td>20</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>K₂O</td>
<td>20</td>
<td>50</td>
</tr>
</tbody>
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CULTIVATION

Propagation

- Patchouli is propagated by stem cuttings with 4-5 nodes and about 15-20 cm length.
- The first 2-3 pairs of leaves of the cuttings are carefully removed and planted in the nursery beds at a spacing of 2-3 cm apart.
- They are then hand watered and provided with shade.
- They root in about 4-5 weeks and in about 8-10 weeks they are ready for transplanting. Earthen pots and polythene bags can also be used for raising the nursery stock.
Transplanting

- Transplanting of rooted cuttings is always done during monsoon season to obtain maximum establishment and to minimise the cost of watering.

Pests and Diseases

<table>
<thead>
<tr>
<th>Major insects</th>
<th>Root knot nematode</th>
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<tbody>
<tr>
<td>Major diseases</td>
<td>Leaf blight, root rot and wilt</td>
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Schedule

1. To control the nematode apply Furadon at the rate of 20 kg per ha.
2. To control leaf blight and root rot spray and drench young plants with Contaf at the rate of 10 ml/101.

HARVESTING

- The first cutting can be taken 5 months after planting.
- Subsequent harvests can be taken after every 3-4 months depending upon the care taken to grow the crop for 3-4 years.
- The crop is harvested in cool hours to avoid loss of essential oil and when the leaves have changed the colour but before they turn to yellow or brown.
- Harvesting is done by cutting the young shoots of 25-50 cm in length, which contain at least 3 pairs of matured leaves.

CURING AND YIELD

- After cutting, the stem and leaves are spread out for curing in thin layers on a hard dry surface in sheds, allowing free circulation of air.
- The process of drying normally takes about three days. Proper drying is of great importance for the quality of oil.
- During the process, the material should be frequently turned over in order to promote even and through drying and to prevent fermentation.
- Further, completely dried material is pressed into bales and stored in a cool dry place till distilled.
- A good crop yields about 2 tonnes of dry leaves per annum and about 50-60 kg of oil per hectare.