**Gudmuru**

*Gymnema sylvestre*

**Family: Asclepiadaceae**

Gymnema is a gregarious woody climber, much branched, running over the tops of tall trees. Young stems and branches covered with hairs. Leaves are ovate, 3-5 cm long and up to 3 cm broad, with hairs on both sides; base rounded or heart shaped with 6-13 mm long petiole.

**Common Names:**

- **Sanskrit**: Meshasringi, Sarpadarushtriaka
- **English**: Periploca of the woods
- **Hindi**: Gudmar, Mera-sangi
- **Kannada**: Madhunashini
- **Tamil**: Boda-patra
- **Telugu**: Shiru-kurunja

**Distribution**

The species occurs in all tropical zones of India and is a common climbing plant in central and southern India and on the Western Ghats and in the Goa territory.

**Agro-climatic Requirements**

It requires shade for good growth. It thrives better on humus-rich loamy soils.

**PROPAGATION**

It can be propagated both by seeds as well as vegetative means.

1. **Seed Propagation**

Flowering and fruiting takes place during September-December. Seeds are collected during February-April. In June, seeds mixed with fine sand are directly sown into polybags. The suitable soil medium for polybags is two parts FYM/compost, one part sand and one part clay. About 40 percent germination is reported to occur in duration of 7 to 10 days.
2. Vegetative Propagation

   a) Through cutting: Semi-hardwood, young, terminal shoot cuttings of 15 to 20 cm length are planted either at the place near by a tree or in polybags. The latter is transplanted after sufficient rooting takes place. Cuttings sprout in 6 days and about 60 percent of the cuttings sprout. Planting of cuttings with the onset of rains, is better, provided, care is taken to avoid water logging at the planting site as it is very harmful for this plant.

   b) Through apical shoots: The apical shoots can also be propagated in a mist chamber. They are covered with soil and a light weight is imposed on them. Roots are produced in about 30 to 40 days.

Transplanting and aftercare

Seedlings of about 10 to 15 cm height are transplanted at 2 x 2 m spacing in 45 cm³ pits near by a large tree so as to provide support to this climber. Planting of seedlings and cuttings can be appropriately done with the onset of rains, provided care is taken to avoid water logging.

Plant Protection:
An aphid is observed to attack the apical tender parts of the plant during rainy season.

Input:

<table>
<thead>
<tr>
<th>SLNo</th>
<th>Materials</th>
<th>Per acre</th>
<th>Per hectare</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Seeds (kg)</td>
<td>..</td>
<td>...</td>
</tr>
<tr>
<td>2</td>
<td>Farm Yard Manure (t)</td>
<td>5</td>
<td>10-12</td>
</tr>
<tr>
<td>3</td>
<td>Fertilizer (kg) NPK</td>
<td>100</td>
<td>250</td>
</tr>
</tbody>
</table>

Harvesting and yield:

Leaves that are about 30-40 days old can be plucked for use, and harvesting can be done every three month. However, better yield is obtained after one year of growth

Yield: About 1250 kg of dry leaves can be obtained per hectare once in every three month.

Storage:
Leaves are dried in shade and the dried leaves are packed in polythene bags. The moisture content of the dry leaves should be less than 8% to prevent deterioration.

Cost of Cultivation: Approximate cost of cultivation comes around Rs.25,000/- per hectare.

**Parts used** – Leaves, root

**Medicinal uses:**

The leaves and root is used in the form of powder, paste and decoction to treat inflammation of glands, enlargement of spleen, indigestion, constipation, jaundice, piles, sinusitis, cough, respiratory diseases, and feeling of heaviness in head, urinary stone and malarial fevers.

Root has long been reputed as a remedy for snake-bite, its powder being dusted upon the wound, or made into a paste with water and applied and decoction given internally.

Leaves when chewed deaden the sense of taste of sweets and bitterness of bitter substance. Leaves triturated and mixed with castor oil are applied to swollen glands and to enlargement of internal viscera as the liver and spleen. Powder of the leaves (10-15 gm) is used in diabetes.