

Amrita– *Tinospora cordifolia*

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Introduction

The plant (*Tinospora cordifolia*) grows in tropical regions, belongs to the family Menispermaceae. It is a large climber that grows over trees in forests and sends out aerial roots up to 10 m long. The bark is grey-brown or creamy white, warty, papery thin, and easily peels off. The leaves are ovate and acute, measuring 5–15 cm. When the leaves are young, they are membranous, but as they age, they become more or less leathery. Flowers are yellow, unisexual, and small, measuring less than 2 mm in diameter.

Common Names:

The plant is known as Giloy, Gulancha (Bengali), Guduchi (Hindi), Amrita (Sanskrit), Gado , Galo (Gujarati), Gulvel (Marathi), Duyutige , Teppatige (Telugu), Amrutha balli (Kannada), Shindila kodi (Tamil) and Heartleaf moonseed (English).

Importance and uses:

- Giloy helps in boosting your immunity and fight various virus.
- It helps to purify the blood, fight against bacteria, remove toxins etc.
- Giloy juice works wonders to reduce high blood sugar levels.
- It is helpful in reducing mental stress and anxiety, as it relieves toxins and enhances our memory.
- It also helps in reducing problems like cough , cold and tonsils.
- It is used for diabetes, high cholesterol, stomach upset, gout, lymphoma and other cancers, rheumatoid arthritis (RA), hepatitis, peptic ulcer disease (PUD), fever, gonorrhoea and syphilis.

Chemical constituents :

- The stem contains bitter substances called tinosporine.

Soil and climate:

It grows well in almost any type of soil and in a variety of climates. It is not tolerant of heavy rains or standing water.

Variety: The variety RRL (J)-82 has been found to be suitable for cultivation and yield quality.

Propagation material

Stem cuttings are the best planting material for commercial crop production, and they can be obtained from mother plants in June–July. The plant can also be raised from seeds. Seeds take nearly twice as long to mature and produce the same amount of drug .

Propagule rate:

About 2500 cuttings are required for plantation in one hectare of land.

Spacing

3 m × 3 m is recommended for better yield.

Nursery raising and planting:

The plant is cultivated by stem cutting in the month of May-June. Being a twiner the plant requires some support preferably Neem and Mango trees.

Weeding and hoeing:

Periodical hoeing is done, both in the nursery and field as per requirement.

Manures, fertilisers, and pesticides:

Medicinal plants should be grown without the use of chemical fertilisers or pesticides. For maximum yield, organic manures such as Farm Yard Manure @10 t/ha, Vermi-Compost @2 t/ha, and Green Manure @10 t/ha should be used. To prevent diseases, bio-pesticides (single or mixtures) made from Neem (kernel, seeds, and leaves) and cow's urine, could be prepared.

Irrigation: The field after planting should be irrigated periodically weekly during summer season and fortnightly during winter season

Harvesting/post harvesting operation: When the leaves begin to fall in August-September, the stems should be cut 30 cm above the ground and collected. Pale green coloured stems are cut into small pieces and dried in shade.

Yield: Approximately 10-15 q/ha from second year onward.

Conclusion:

Tinospora has many medicinal properties, ability to cure many diseases and a great potential in improving human health. Being a high valued crop to cure diseases, a lot of research have to be done for the improvement in tinospora.

