Amla

Phyllanthus amarus

Syn: Emblica Officinalis. Gaertn.

Family : Euphobiaceae

A small to medium sized deciduous tree, 8-18 m in height with crooked trunk and spreading branches. Leaves simple, sub sessile, flower greenish to yellow, fruit nearly sperical pale yellow with vertical furrows.

Common Name:

English : Indian Gooseberry

Kanada : Amalaka, Nelhi

Hindi : Alma, Aonla

Tamil : Nelhi

Telgu : Usirikai, Usirika

Distribution

This species is probably native to America, now naturalized in the tropics of the world. Wild or planted throughout the deciduous forests of tropical India, it is found on hill slopes and throughout the warmer parts of India.

Agro climatic Requirements:

Soil: It is well adapted to variety of soils, at soil pH ranging from alkaline to neutral and acidic soil. Plants have shown preference for calcareous well drained and light textured soils. Plants do not grow properly under shades.

Climate: It grows under semi-temperate to tropical conditions and under high rainfall. It however, rarely survives under dry or very low temperature conditions. Water logging does not show any lethal effects on this crop.

Varieties:

A selection named "Navyakrit" from CIMAP, Lucknow has been found superior to get high herbage yield and active constituents.

Cultivation: It can be propagated using seeds.

Seed Propagation:

Sowing Method: The seeds are sown in well-prepared nursery beds. Well-decomposed Farm Yard Manure should be mixed with top layer of the soil while preparing the beds. Being minute, the seeds are mixed with dry soil or sand to allow uniform distribution of seeds on the nursery bed. Later a thin layer of soil is spread to cover the nursery beds. Appropriate moisture is maintained in the beds till the seeds have germinated.

Sowing Season: Sowing in April-May gives higher seed germination and good yield.

Transplanting:

30-40 day old seedlings, which are 10-15 cm tall are transplanted at a spacing of 15x15 cm. Irrigation soon after transplanting ensures good establishment of the seedlings.

Plant Protection:

Major insects: Leaf eating caterpillar and stem weevils

Major disease: Powdery mildew

Schedule

1. Spray the plants with 0.2% Nuvacron to control the insect pests.
2. Powdery mildew can be effectively controlled by applying the sulphur containing fungicide like sulphex @ 0.25%

Harvest and Yield:

The crop is ready for harvest after 3 months of transplanting biomass when the plants are greenish and herbaceous. As the crop grows, there is an increase in but the quantity of leaves is reduced because of the fall of the lower leaves. Since major active ingredients are confined to the leaves, production of maximum leaf biomass is the aim of harvesting at an appropriate time. Under Bangalore condition September month has been found to be the optimum time of harvesting for high drug yield. The herb is shade dried for 3-4 days with constant raking with sticks. After drying the material is stored in gunny bags and kept in a cool dry place.

The yield of herb varies very much with the spacing. By adopting a spacing of 15 x 10cm an average yield of 2000kg of dry herb per hectare can be achieved. The total Phyllanthin content in herb may range from 0.4% to 0.5%.

Cost of Cultivation: Approximate cost of cultivation comes around Rs.62,500/- per hectare.

Inputs:

Sl.No	Materials	Per acre	Per hectare
1	Seeds (kg)	0.4	1.0
2	Farm Yard Manure (t)	4	10
3	Fertilizer (kg)		
	N	60	150
	P_2O_5	24	60
	K_2O	24	60

Part Used: Whole Plant- Fruit, seed, leaves, root, bark and flowers.

Medicinal Uses:

Amla ia an antioxidant with the free radical scavenging properties, which may be due to the presence of high levels of super oxide dismutase. It is effective in the treatment of peptic ulcer, dyspepsia, jaundice, leucorrhoea / Pradara, dibetes etc. Further reported arehepatoprotective, antioxidant, antimutagenic, cytoprotectic, antitumour and antmicrobial.