

BHUMI AMALAKI



GENERAL INFORMATION

Bhumi amalaki known as Phyllanthus which means "leaf and flower". It is an annual herb with average height of 30-40cm. Flowers are whitish-green in color and are small elliptic-oblong shaped. It is rich in the source of vitamin C. Whole plant is used for preparing various products as well as medicines. Bhumi amalaki is used for treatment of jaundice, asthma, skin diseases, cough and also purifies blood. It is found throughout the world including southern china, Sothern India and Bahamas. In India it is grown in Chhattisgarh, Jharkhand, Bihar etc.

CLIMATE

Temperature

28-38 degree

Rainfall

25-30cm

Sowing Temperature

30-33 degree

Harvesting Temperature

23-20 degree

SOIL

It is grown in wide variety of soil ranging from alkaline to neutral and acidic soil. It also grown on calcareous soil with well drainage system and on light textured soils.

POPULAR VARIETIES WITH THEIR YIELD

Phyllanthus urinaria: The variety has rough fruit or capsule surface.

Phyllanthus debilis: The variety has smooth surface capsules.

Phyllanthus amarus: The variety has small, depressed-globose shaped capsules.

Phyllanthus niruri: The variety has smooth surface capsules.

Phyllanthus fraternus: The variety has small and smooth surface capsules.

LAND PREPARATION

For Bhumi amalaki, land is prepared in the month of April – May. To bring soil to fine tilth, one deep cultivator and then tillering 2-3 times is done. Beds must be prepared of convenient length i.e. 30-40cm.

SOWING

Time of sowing

Nursery beds are prepared in the month of March – April.

Spacing

Transplantation in field at spacing of 15cm x 10cm.

Method of sowing

Transplanting of seedling in main field when they attained height of 10-15cm.

SEED

Seed Rate

For good yield, use seed rate of 400g/acre.

NURSERY MANAGEMENT AND TRANSPLANTING

Propagation is done through seeds. Sow seeds on raised beds of 30-40cm width and of convenient length. The best time for sowing the seeds are in the month of April – May.

Seedlings are ready for transplantation in 15-30 days when the plant is 10-15cm tall. Water the seedling beds 24 hours before transplanting so that seedlings can be easily uprooted and be turgid at transplanting time. Transplantation is done in nursery bed having 15cm length and breadth. After transplantation irrigation is done immediately. The crops have high yield if they are grown by transplanting.

FERTILIZER

At the time of land preparation, apply well decomposed organic manure i.e. FYM @5-10tonnes well mixed with soil. The crop does not require fertilizer dose N, P and K. For high yield and better growth nitrogenous fertilizers are given in some quantity. DAP is applied as a basal dose @70-80kg/acre.

IRRIGATION

In dry areas especially in northern plains, single irrigation every fortnight is required and in rainy areas especially in southern parts irrigation is not required. Stagnating water is not the problem for this plant.

WEED CONTROL

Do hand weeding once in a month to keep the field weed free. Commercial herbicides spray should not be done as it causes deterioration to the crop and affects the land.

PLANT PROTECTION

- **Pest and their control:**

Leaf eating caterpillar: They feed themselves on fresh green leaves as a result they affect the foliage of crop.

Spraying of Nuvacron @0.2% is done to keep plant pest free.

Stem weevils: It feeds themselves on epidermal tissues of foliage and stem.

Spraying of Nuvacron @0.2% is done to keep plant pest free.

- **Disease and their control:**

Powdery mildew: It is a fungal disease which causes white rust on the leaves.

Application of Sulfex @0.25% is done to cure from disease.

HARVESTING

Harvesting is done in the month of September when the rainy season is just completed. Harvesting is done when plant is green in color and is herbaceous because at that time leaves have higher quantity and high active constituents.

POST-HARVEST

After harvesting, the leaves are air dried. Then they are packed in airtight bags to increase self-life. By processing several products like juice, powder, tonics etc. are made.

REFERENCES

1. Punjab Agricultural University Ludhiana
2. Department of Agriculture
3. Indian Agricultural Research Institute, New Delhi
4. Indian Institute of Wheat and Barley Research
5. Ministry of Agriculture & Farmers Welfare