

STANDARD CULTIVATION PROCEDURE FOR BRAMHI

INTRODUCTION:→ The botanical name of Brahmi is *Bacopa monnieri* and belongs to family Scrophulariaceae. It is mainly found in warmer and humid conditions. Whole herb i.e. seeds, roots, leaves, rhizomes etc. are used for preparing various drugs. Drugs prepared from Brahmi is used as anticancer and used to cure anemia, asthma, diuretic, tumours and epilepsy. It is also used as an antidote for snake bite. It is a creeping annual herb with average height of 2-3 feet with branched roots at the nodes. Flowers are of whitish or pale blue in color with small and oval shaped fruit. Seeds are 0.2-0.3mm in size with dark brown in color.

CULTIVATION:

Climate: →

Temperature	:	33-40°C
Rainfall	:	650-830 mm
Sowing Temperature	:	25-30°C
Harvesting Temperature	:	20-25°C

Soil: → It grows in variety of soils. It can even tolerate poor drainage system. It gives best result in alluvial marshy soil. It can be grown in marshy areas, canals and several water bodies. It requires acidic soil for its good growth.

Popular Varieties: →

Pragyashakti: Developed by CIMAP, Lucknow. The variety contains 1.8-2% Bacoside and is used maximum by local people.

Subodhak: Also developed by CIMAP, Lucknow. The variety contains 1.8-2% Bacoside and is used maximum by local people.

Land Preparation: → For Brahmi plantation, it required well pulverize and levelled soil. To bring soil to fine tilth, ploughing and harrowing is to be done. Irrigation is done immediately when land is converted to plots. Application of FYM @20q/acre is mixed with soil at the time of ploughing.

Sowing: →

- ❖ **Time of sowing:** - The planting should be done in the month of mid-June or early July.
- ❖ **Spacing:** - Seedlings are transplanted at the distance of 20 x 20cm
- ❖ **Method of sowing:** - Seedlings are transplanted in main field.

Seed: →

- ❖ **Seed Rate:** - About 25000 numbers of cuttings are required for planting in one acre area.

Nursery Management and Transplanting: → Sow rooted plants on prepared beds. Transplanting is done when the seedlings are 4-5 cm long and are sow at the distance of 20 x 20cm. Irrigation is given immediately after transplanting.

Transplanting is mainly done in the month of March-June. Irrigation is given at the regular interval for the good growth of the plant. Harvesting should be done in September.

Fertilizer Requirement (kg/acre): →

UREA	SSP	MURIATE OF POTASH
87	150	40

Nutrient Requirement (kg/acre): →

NITROGEN	PHOSPHORUS	POTASH
40	24	24

At the time of land preparation, apply organic manure such as FYM @20q/acre and mix well in soil. Apply inorganic fertilizer dose of N:P:K @40:24:24kg/acre in the form of Urea@87kg, SSP@150kg and MOP@40kg/acre. Phosphorus and potash are applied as a basal dose and Nitrogen is applied in 3 split doses. First application is done 30 days after planting then second application is done at 60-70 days and third application is applied at 90 days after planting.

Weed Control: → Hand weeding is to be done to keep the field weed free. First weeding is done in 15-20 days after transplanting. Then second irrigation should be done at the interval of 2 months.

Irrigation: → It is a rainy season crop therefore it requires water immediately after end of rainy season. In winter season, apply irrigation with the interval of 20 days and in summer season irrigation should be done at the interval of 15 days.

Plant protection: →**❖ Pest and their control:**

Grasshopper: They are the insects which feed on green plants. As a result they spoil the leaves and the plant parts.

To control plant from insect, spray with Nuvacron @0.2% or Neem based insecticide.

Harvesting: → Plant starts yielding by 5-6 months after transplantation. Harvesting is done in the month of October – November. The upper portion from the base i.e. 4-5 cm from the base is cut for harvesting. 2-3 harvestings are done in one year.

Post-Harvest: → After harvesting, drying of fresh material is done in shade. Then packing is done in airtight bags for long distance transportation. From dry material several products are made such as Brahmighrtam, Sarasvataristam, Brahmitailam, Misrakasneham, Memory plus and Megamind plus are made after processing.