Bacopa monnieri

A revered plant for memory and longevity



Regional-cum-Facilitation Centre (Southern Region)
National Medicinal Plants Board, Ministry of AYUSH, Govt. of India
KSCSTE-Kerala Forest Research Institute, Peechi
Thrissur 680 653, Kerala

INTRODUCTION



Bacopa monnieri, commonly known as Brahmi or Jalbuti (trade name), Jalabrahmi or Kiru Brahmi (Kannada), Neerubrhami (Malayalam), Brammi (Tamil), Sambarani chettu (Telugu) is a semi-succulent with creeping stem and ascending branches belonging to the family Plantaginaceae. It has small, fleshy leaves arranged oppositely on the stem and produces small blue, purple, or white flowers from the leaf axils.

For centuries, traditional Ayurvedic medicine has used the Brahmi plant, or "Medhya Rasayana," to improve memory, concentration, and mental health while easing stress. Modern research supports this, exploring its potential to manage conditions like Alzheimer's, Parkinson's, and depression, while its calming effects aid sleep. Beyond brain health, Brahmi leaves and stems offer whole-body benefits. They protect cells from damage, reduce swelling, pain, and fevers, and help prevent seizures. The plant also supports major bodily systems by strengthening the heart, opening airways for easier breathing, and protecting the stomach lining.

AGRO-TECHNIQUES

Bacopa monnieri thrives best in waterlogged, alluvial marshy areas and prefers slightly acidic soils with a pH between 5.0 and 6.5. Cultivation begins in a nursery between May and July using healthy, 4 to 5 cm stem cuttings with 4-8 internodes planted in beds enriched with farmyard manure (FYM). These cuttings develop roots within a week and are ready for transplanting after one month, requiring approximately 60,000 cuttings per hectare.

Before transplanting, the main field must be finely ploughed and prepared with 5 t/ha of FYM and 25 kg/ha of neem cake powder. For the best herbage yield, the rooted cuttings are transplanted into moist soil at a 10 × 10 cm spacing during July and August.



Because the crop requires constant moisture to establish and grow, flood irrigation should immediately follow transplanting. Watering is then required every two to three days during dry periods, with reduced frequency during the rainy season. Finally, hand weeding is necessary every 15 to 20 days during early growth; however, once the plants spread and form a dense vegetative mat, weeding is rarely needed.

HARVESTING AND POST-HARVEST MANAGEMENT



Bacopa monnieri reaches harvest maturity 75 to 90 days after planting, when it achieves maximum vegetative growth. The ideal harvesting period is between October and November; delaying this can reduce both overall plant biomass and the active bacoside content. During the harvest, the upper foliage is trimmed, leaving a small basal section intact to support future regrowth. Afterward, the plant material is washed thoroughly to remove soil and foreign matter. It is then spread in thin layers and shade-dried in a well-ventilated area to preserve its medicinal quality, as direct sunlight degrades the active compounds. Finally, the dried herb must be packed in airtight containers or moisture-proof bags and stored in a cool, dry place to prevent moisture absorption and fungal growth. Because the medicinal bacoside content naturally decreases after six months, prolonged storage should be avoided.



ECONOMICS OF CULTIVATION

With proper management, this crop is highly viable for commercial cultivation, yielding about 2,500 kg/ha of dry herbage annually. The cultivation cost averages Rs. 45,000 to Rs. 55,000 per hectare. It generates a gross income of Rs.80,000 to Rs.1,10,000 and a net profit of Rs.35,000 to Rs.55,000 per hectare, resulting in a strong benefit-cost ratio of 1.7 to 2.0.



NMPB-RCFC (SOUTHERN REGION)

NMPB-RCFC (Southern Region) is one of the seven Regional cum Facilitation Centres of the National Medicinal Plants Board (NMPB). NMPB functioning under the Ministry of AYUSH, Govt. of India.

Contact

NMPB Regional-cum-Facilitation Centre
(Southern Region)
Kerala Forest Research Institute
Peechi 680653, Thrissur District, Kerala, INDIA
Phone: +91 487 2690100; +91 8289995600
E-mail: rcfcsouthern@gmail.com
Website: www.rcfcsouthern.org