Eclipta prostrata (L.) L.

Synonym. Eclipta alba (L.) Hassk.

Family: Asteraceae

Various names

Common/Trade names: False daisy, Bhringraj

Sanskrit names: Bhringaraj, Bhrngarajah **Hindi names**: Bharangraj, Mocakand

Popular name/s in the southern region

• Andaman & Nicobar Islands: Bharangraj, Mocakand

• Andhra Pradesh: Galagarachettu

• Karnataka: Bhringaraja, Garagalu

• Kerala: Kayyoonni, Kanjunni

• Lakshadweep: Bhringaraj

• Puducherry: Karisalnkani

• Tamil Nadu: Ankaravariti, Appulantam

• Telangana: Galagarachettu





Distribution

Eclipta prostrata is widely distributed in the tropics. Within India, it is common in moist situations and disturbed habitats such as roadsides, wastelands and paddy field.

Description

Herbs, up to 25 cm high. Leaves simple, opposite, $1-3 \times 0.2$ -0.5 cm, oblong, oblong-lanceolate or oblong-elliptic, acute or subacuminate at apex, cuneate at base, entire, sessile or subsessile. Heads 4-5 mm across. Ray florets 2-3 seriate, female, ca 4 mm long. Disk florets numerous, ca 3 mm long. Corolla white, campanulate, ca 1.6 mm long; lobes 4, ovate, ciliate on margin. Achenes yellowish brown to brown, oblong-turbinate, compressed and sharply angled, hairy at apex; pappus of partially or completely united scales forming a cone at the apex.

Uses

The whole plant and seeds are used to make of oil, powder and juice to treat filariasis, boils, wound, headache, giddiness, lack of vision, indigestion, enlargement of liver and spleen, jaundice, pain in the abdomen, cough, skin diseases, skin diseases and fever. Plant preparations are also used to treat greying of hair and for rejuvenation.

Agro-ecological requirements

Bhringaraj grows wild in a variety of soils (viz. sandy to clay soil). It prefers warm climate with a temperature range of 250 C to 350 C.

Cultivation

Planting-stock production: Propagules could be raised from seeds and stem cuttings.

Seed propagation: Seed germination is 75-85% without any pre-sowing treatment. About 500 g seeds give approximately 25,000 propagules. Farmyard manure may be applied as basal dose during land preparation. Place the seeds on top of the soil and cover the seeds with 6 mm layer of compost or soil. Water the seeds with sprayer and place them where they receive partial morning sun. Keep the soil constantly moist until the germination, which will take around 1-2 weeks.

Vegetative propagation: 10-15 cm long stem cuttings can be used.

Field planting: Transplanting time is April-August. Optimum spacing is 20 × 20 cm.

Manuring/Fertilization: Bhringaraj is a 3 months crop. Maximum yield in nitrogen rich soil..

Irrigation: Need-based irrigation could be done.

Pest and diseases: No serious pests or diseases are reported, but certain insects cause minor damage during early stage of growth.

Harvesting & Post-harvest processing

Whole plant can be harvested 90 days after transplanting at early flowering stage. After harvesting, plants should be cleaned, shade-dried, packed in gunny bags and kept in cool and dry place.

Yield

On an average, Bhringaraj plant yields about 6000 kg dried herbage per hectare per year.

Economics of cultivation

Cost of cultivation: ₹ 15,750 per hectare

Market price: Whole plant - ₹ 40 - 50/kg

Quantitative quality standards for cleaned salable whole plant(acceptable limits) (w/v)

- Foreign matter: Not more than 2%
- Ash: Not more than 7%
- *Acid-insoluble ash*: Not more than 1.2%
- Ethanol-soluble extractive: Not less than 16%
- Water-soluble extractive: Not less than 11.0%

Note: Farmers are advised to adopt suitable practices so as to meet the quality parameters and standards of the buyers.