

# *Sphaeranthus indicus* Linn.

Fam : Asteraceae

Ayurvedic name	Mundi, Mahamundi, Hapusa
Unani name	Mundi
Hindi name	Gorakhmundi
English name	East Indian Globe Thistle
Trade name	Gorkhmundi
Parts used	Whole plant



Plant of *Sphaeranthus indicus*

## Morphological Characteristics

It is an aromatic annual spreading herb with branches, 30cm to 60cm tall. Stems and branches have toothed wings, more or less covered with glandular hairs. Leaves are sessile, decurrent, obovate-oblong, glandular, dentate and narrowed at the base.

## Floral Characteristics

Flowers are in compound heads, globose, ovoid in shape, ebracteate, borne on solitary glandular peduncles with toothed wings. Flowers are purple in colour. Involucre of bracts is linear in shape, acuminate apex, pubescent and ciliate near the ends. Fruit is achenes are glabrous and stalked.

## Distribution

Plant is found throughout India, at an altitude of 1500 m msl.

## Climate and Soil

It grows as a weed in paddy fields and thrives well after harvest of paddy over medium clayey soils.

## Propagation Material

Plant is propagated by seeds.

## Agro-technique<sup>19</sup>

### Nursery Technique

- **Raising Propagules:**

Seed are sown in August in well prepared nursery beds. It takes about 10-12 days for germination. Seedlings are ready within one month attaining the height of 5.0 - 6.0 cm. It is then ready for field planting.

### Planting in the Field

- **Land Preparation and Manure Application:**

The field is ploughed, harrowed and

<sup>19</sup> Agro-technique study carried out by MPKV, Rahuri, Maharashtra

planked to have a fine tilth. About 5-10 t of FYM along with N:P:K 20:30:30 kg/ha is mixed with soil before transplanting seedlings at a distance of 30cm X 15cm. Irrigation is given immediately. Rest of Nitrogen is given at 30 and 70 days after planting.

- **Intercropping System:**

It can be grown as intercrop in paddy fields.

- **Interculture and Maintenance Practices:**

Two weeding and hoeing are given at 20 and 45 days after planting.

- **Irrigation Practices:**

About 4 to 5 irrigation at an interval of 15 days is required after monsoon rain is over.

- **Disease and Pest Control:**

Leaf eating caterpillar has been observed and can be controlled through bio-pesticide.

## Harvest Management

- **Crop Maturity and Harvesting:**

Flowering starts in November and

continues upto March. Seed can be collected from March to April.

- **Post-harvest Management:**

Plant should be dried in shade.

- **Chemical Constituents:**

It has an essential oil, containing methyl chavicol,  $\alpha$ -ionone, d-cadinene, p-methoxycinnamadehyde as major constituents and a-terpinene, citral, geraniol, geranyl acetate,  $\beta$ -ionone, shaerene, indicusene and sphaeranthol are minor constituents. Leaves contain some alkaloids.

- **Yield:**

Yield of dry herbage is around 1000-1200 kg/ha.

## Therapeutic Uses

The whole plant is used for formulation of medicine. It is pungent, bitter and stomachic and stimulant. It is a remedy for glandular swelling in the neck, urethral discharge and jaundice. The juice of plant is styptic and useful in liver and gastric disorder. A decoction of the root is used for chest pain, cough and bowel complaints. Bark powder mixed with whey is useful in piles. Leaf juice boiled with milk and sugar candy used for cough.