

Aristolochia indica Linn.

Fam. Aristolochiaceae

Ayurvedic name	Isharmul
Unani name	Zarawand Hindi
Hindi name	Kiramar
English name	The Indian Birthwort
Trade name	Ishar-mul
Parts used	Leaves and Roots



Aristolochia indica

Morphological Characteristics

Aristolochia indica is a perennial creeper with a woody rootstock. Leaves are alternate, entire with more or less undulate margins, somewhat cordate, acuminate or obovate.

Floral Characteristics

Flowers constitute of greenish-white or light purplish perianth with inflorescence in axillary cymes or fascicles, 1-2 lipped, hairy within limbs dilated. Stamens are six in number, adnate and filaments are not distinguishable from the style. Anthers are adnate to column. Carpel is six locular with two ovules. The flowers are usually foetid in odour. Fruit is globose, oblong, septicidal, six valved capsule and opening from below upwards. Seeds are many in number, flat and winged.

Distribution

Plant is distributed in lower hills and plains of India, Bengal and Assam.

Climate and Soil

It grows in warm and moist climate, with temperature ranging from 20°C to 33°C, and annual



rainfall ranging 100-150 cm and spread out to a greater part of the year. It can also be cultivated over well drained sandy- loam soil rich in organic matter. It needs irrigation at lower elevation where rainfall is low.

Propagation Material

Seeds.

Agro-technique⁴

Nursery Technique

- **Raising Propagules:** Seeds mature during May-July. Germination of seed is about 80%. Seeds may be sown in rows over raised beds and 10 cm apart. Seedlings at 4-5 leaves stage can be transferred in polybags or kept in the nursery bed till it attains 15 cm height, when it is ready for transplantation. Seed viability remains at 70-80% up to one year. Seeds should be treated in Bavistin/Captan/Thiram before sowing. About 30,000 seedlings are needed for one hectare land.

Planting in the Field

- **Land Preparation and Fertilizer Application:** Land should be deeply ploughed and harrowed twice and made into good tilth. FYM @ 10 t/ha alongwith NPK @ 25:60:100 kg/ha during land preparation may be applied. Later N @ 25 kg/ha may be applied after planting and again at 3 months interval.
- **Transplanting and Optimum Spacing:** Seedlings may be raised in May-July and their transplantation done in August-September. 60X60 cm spacing is optimal requirement.
- **Intercropping System:** Annual herbs like chilli can be grown as intercrop.
- **Inter-culture and Maintenance Practices:** Hoeing and hand weedings are carried out simultaneously 45 days after planting, thereafter at 6 months interval in first year. In second year, periodicity of interculture remains same.
- **Irrigation Practices:** Usually rainfed crop, but supplementary irrigation is needed during dry seasons.
- **Weed Control:** Pre-emergence application of Pendimethaline @ 1.0 kg/ha or Simazine @ 2.0 kg/ha may be applied, thereafter hand weeding at 90 days after transplanting and later as per weed population. Application of post-emergence herbicides is not suggested.
- **Disease and Pest Control:** Leaf blight is observed in the plantation during winter season. Application of Dithane M-45 @ 3 gm/lit at 15 days interval is found to control

⁴ Agro-technique study carried out by North East Institute of Science Technology (NEIST) Jorhat – 785006, Assam.

