## Curcuma amada Roxb.

Family : Zingiberaceae

**Group** : Stomach disorders/carminatives/laxative

Parts Used : Rhizome Vernacular Names

English : Mango Ginger
Malayalam : Maanga Inchi
Hindi : Ama-haldi
Sanskrit : Amrardrakam

Bengali : Amada Kannada : Ambahaldi Tamil : Maankai Inchi



**Distribution and Habitat:** Mango-ginger is an under exploited spice crop which grows luxuriantly in tropical soils with good drainage.

Botany: It is a rhizomatous aromatic herb with a leafy tuft and 60-90 cm in height.

- *Leaves*: Long, petiolate, oblong-lanceolate, tapering at both ends, glabrous and green on both sides.
- *Flowers*: White or pale yellow, arranged in spikes in the centre of tuft of the leaves. Lip is semi-elliptic, yellow and 3-lobbed with the mid lobe emarginate.

Properties: Appetiser, carminative, digestive, demulcent

Chemical constituents: The essential oil contains  $\alpha$ -pinene,  $\alpha$ -and  $\beta$ -curcumene, camphor, cuminyl alcohol, myristic acid and turmerone. Car-3-ene and cis-ocimene contribute the characteristic mango odour of the rhizome. The colouring matter is curcumin.

**Uses:** The rhizome of Mango ginger is bitter, sweet sour, aromatic, cooling, appetiser, carminative, digestive, stomachic, demulcent, vulnerary, febrifuge, aphrodisiac, laxative, diuretic, expectorant, anti-inflammatory and antipyretic. The rhizome of mango- ginger is used for preparing pickles, chutney, preserve, candy, sauce and salad and in meat and other culinary preparations. The rhizome has excellent medicinal properties.

## **Agrotechnology**

**Soil and climate:** It prefers loamy well drained fertile soil. Hot humid tropical climate with high rainfall more than 1500 mm are essential. The crop comes up well in open conditions, but it tolerates low levels of shade and therefore partially shaded situations can also be utilized for its cultivation.

**Propagation:** Whole or split mother rhizomes or well developed, healthy and disease free finger rhizome weighing 15-20 g is suitable for planting. Prepare the land to a good tilth during February – March subject to the availability of pre-monsoon showers. Prepare beds of convenient length, 1.2m wide, 25 cm high with 40 cm spacing between beds. Plant during April with the commencement of pre-monsoon showers. Take small pits in the beds with spacing of 25 x 30 cm and at a depth of 4-5 cm. Seed rate is 1500 Kg/ha.

**Varieties:** In Kerala local varieties are used for cultivation.'Amba' is a released variety from HARS, Pottangi, Orissa. **Manuring:** Apply cattle manure or compost as basal dose @ 30-40 t/ ha, spread over the beds and mix well. Apply NPK fertiliser @ 30:30:60 Kg/ha. Full dose of P and half dose of K may be applied 60 days after planting.

**After cultivation:** Mulch the crop immediately after planting with green leaves @ 15t/ ha. Repeat mulching after 50 days with same quantity of green leaves. The rhizomes germinate within 3-4 weeks. Remove weeds 45 days after planting and repeat if necessary. Earth up the crop after 60 days of planting.

**Plant protection:** Shoot borer (Dichocrocis punctiferalis) cause damage to the crop. Appearance of 'dead heart' in the field is the main symptom. Pull out the dead hearts with the larvae inside and burn it. If infestation is severe, spray dimethoate or quinalphos at 0.05%.

**Harvesting:** Drying of the leaves is the indication of harvesting time. From sixth month onwards harvesting can be done by lifting the entire plant with a spade and then cutting away the top portion. Roots and soil particles are removed from the rhizomes and it is advisable to dry the rhizomes under shade for one day before storage or transporting.



