

# Aloe

*Aloe vera*

Family: Liliaceae

Perennial herb growing up to 60cm tall, with short stem, shallow root. Leaves large, thick, succulent, pale green with white blotches. Flowers are yellow, Fruits capsules rarely seen.

**Common names:**

Kannada: Lolisara

Hindi: Gwar petta , Kambans

English: Aloe, Barbaolos aloe

**Distribution:**

Native to cape verde and canary islands but naturalized elsewhere commonly seen along roadsides and waste places under bushes and also largely cultivated.

**Agroclimatic requirements:**

It has wide adaptability and can grow in various climatic conditions. It can be grown equally in warm humid or dry climatic with an annual rainfall of 35-40cm to 150-200 cm

**Varieties:** *Aloe vera var.chinensis*, *Aloe vera var littoralis* and *Aloe abyssinica*

**Cultivation:** it can be propagated by using root suckers

**Propagations:**

Medium sized root suckers are chosen and carefully dugout without damaging the parent plant at the base and directly planted in the main field. It can also be propagated through rhizome cuttings. In this case, after harvest of the crop, the underground rhizome is also dugout and made



in to 5-6 cm length cuttings with 2-3 nodes on them. It is rooted in specially prepared sand beds or containers and after it has started sprouting. It is ready for transplanting.

**Inputs:**

Sl.No	Materials	Per acre	Per hectare
1	No.of suckers	14,550	36,500
2	Farm Yard Manure (t)	6	15
3	Fertilizer (kg)		
	N	20	50
	P <sub>2</sub> O <sub>5</sub>	20	50
	K <sub>2</sub> O	20	50

**Planting**

The field should be well prepared before planting. Apply 15 kg FYM per ha before 15 days of planting. Open small furrows and apply entire dose of NPK at the time of planting. About 15-18 cm long root suckers or rhizomes are planted at spacing of 60 x 45 cm in such a way that 2/3 portion of the rhizome or sucker should be in the soil. Irrigate the field

**Irrigation and weeding:**

Irrigation must be given accordingly to moisture status and soil type. The land is kept weed free by weeding as and when necessary

**Plant protection:**

**Major insect:** Mealy bug

**Major diseases:** Leaf spot, leaf rot and Anthracnose

**Schedule**

1. Spray chlorpyrifos 2ml in 1 litre of water to control mealy bug
2. Spray the crop with Bavistin 10g with Calphomin 3ml per litre and repeat at 10 days interval for controlling leaf rot and anthracnose.

3. Leaf spot can be controlled by spraying the crop with 0.2% Dithane M-45 at weekly intervals.

**Harvesting and yield:**

The crop is ready to harvest about 8 months after planting. The plants can be removed manually. The broken rhizomes left in the soil throws new sprouts to raise the succeeding crop. Aloe plantation gives commercial yield from second year and up to 5 years. Thereafter it needs re-plantation.

An average yield of about 10000-12000 fresh rhizomes per hectare may be obtained.

Cost of Cultivation: Approximate cost of cultivation comes around Rs.42,500/- per hectare.

**Part Used:** Juice, Leaves

**Medicinal uses:**

1. Used in preparation and for flavoring liquors
2. Leaf and root juices used to treat spleen enlargement, stomach disorders, epilepsy, jaundice, tumors, headache and as a coolant.
3. Aloe vera is a source of the drug “ Aloin”
4. Aloe contains cathartic anthrax-glycosides as its active principle ranging from 4.5 to 25 % of aloin. These are extensively used as active ingredients in laxative and ant—obesity preparation, as moisturizer, emollient or wound healer in various cosmetic and pharmaceutical formulations.