

Mature leaves are cut leaving 4 young leaves per plant for subsequent harvesting. Dry season harvesting gives more and better quality sap. The side suckers, are also harvested for nursery establishment.

Processing: (juice/sap extraction)

Harvested leaves are placed in a circle around a plastic-lined hollow basin on the ground, to allow the yellow bitter sap to drain naturally without squeezing.

The juice can be sold raw or can be bulked up in 200 litre drums. It is then heated carefully for 12 hours. The resinous matter is then poured in a 90kg sack, where it solidifies on cooling to a heavy material. This is conserved in a waterproof area for sale to be used in cosmetic and alternative medicine industries.

The leaves can also be cut into small strips and put in water to extract the gel that is used in cosmetics and as medicines in the cottage industry.



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Grow aloe for wealth, health and land rehabilitation



Introduction

There are over 22 *Aloe* species in Kenya but the most popular is *Aloe vera* which was introduced from Saudi Arabia and the United States.

Plants of the genus *Aloe* are tropical soft fleshy plants that produce sap/gel which has multiple useful properties.

The *Aloes* are good soil conservation plants and can be used for bare lands reclamation and stabilization of soils in the ASALs.

Growing requirements

Climate

Dry and warm to hot conditions.

Rainfall

300 - 700mm per annum but dry soils may require initial irrigation for establishment.

Soils

Moderately fertile and fast draining (prefer hillsides) as the plant contains a lot of water and wilts if the soil is water logged.

The ideal pH is between 6 and 7 but can tolerate higher soil pH levels and high Na and K concentrations.

Propagation

Propagation is mainly through suckers and plantlets.

Germination of seeds in a bed of pure sand is also possible for local varieties that set seed, but the procedure is tedious and costly.

Nursery establishment

Polyethylene tubes are filled with a soil mixture of earth, organic matter and sand in the ratio of 1:2:3.

Healthy and vigorous shoots are taken from the mother plant and put in the polyethylene tubes. These are then put in a nursery for root establishment which takes two months.



Aloe plantlets in polyethylene bags

Land preparation

Aloe survives under adverse conditions of tropical arid and semi-arid areas but it is advisable to start with a properly ploughed land. For fragile environments, only the area around the hill (planting hole) should be dug.



Well prepared land for planting Aloe

Planting

Make furrows one metre apart and holes at a half metre interval along the rows. This gives a population of 5,000 plants per acre

Farm Yard Manure at 10t/acre is added if the soil is poor and the same dose is repeated in subsequent years. NPK at 20kg/acre should be added as basal fertilizer.

Field Management

Pests

Mealy bugs are occasional pests and are controlled using available insecticides mixed with white oil for stickiness.

Diseases

Leaf spot and anthracnose diseases occasionally infest the crop and are controlled by fungicide sprays.



Aloe vera plantation

Harvesting

Leaves attain maturity in 8 months and fields can last up to 5 years after planting.