

## BOTANICAL DESCRIPTION

**Maguay**, *Agave cantala* Roxb., grows into a rosette of leaves which droops to horizontal position when it matures. A rosette usually



consist of 20 to 50 leaves. The leaves which crowd on the stem are fleshy, thick and persistent for several years. The thin grayish leaves end in terminal spines bearing marginal prickles. Each leaf is 5 ft long while its width ranges from 2.5 to 4 inches and has an average weight of 200 g.

## VARIETIES

- Agave fourcroydes henequen
- Agave angatifolia
- Agave amanuensis
- Yucatan

## CULTURAL MANAGEMENT

### Soil Requirement

Fertile soil is not requisite. Soil which seems unproductive like rocky soil is still suitable for maguay production. It is also adapted to undulating or hilly areas and even grows along the seashore.

### Climatic Requirement

Maguay is not a difficult plant to cultivate. It endures diversified climatic conditions and does not require abundant or evenly distributed rainfall.

## Method of Propagation

Bulbils and suckers are commonly used for maguay propagation. However, suckers of 40 - 50 cm long are preferred than bulbils. Matured leaves from suckers and leaves during the first three years give more fibers.

## Planting Season

Planting may be done at the start of the rainy season.

## Distance of Planting

The planting materials are spaced at 1m x 1.5m apart in a single row and 2m x 2.5m apart in double rows.

## Rate of Fertilization

Fertilizer need not be applied. However, its application will greatly improve the growth of the plant, 6-9-12 NPK fertilizer mixture around 200 - 300 kgs per hectare per year is recommended.

## Pest and Disease Control

Maguay plant shows strong resistance to drought, pests and diseases. It only requires regular weeding.

## MATURITY AND HARVESTING

The first harvesting of Maguay must take place when the leaves droop to a horizontal position with an angle of 45°. During this period, the fiber of the leaves is already strong. Subsequent harvesting can be scheduled after 3 - 4 months. Harvestable plant can produce at least 10-30 leaves per year.

## METHODS OF EXTRACTION

**Retting** - the bundled leaves weighing 7 - 7.5 kgs are soaked in water for 15 - 30 days. When retting in salt water, the leaves are split into halves and bundled.

**Note:** Fresh water retting is slower than salt water retting.

**Decortication** - the leaves are simply fed directly into a decorticating machine.

## YIELD PER HECTARE

**Retting** - yield of maguay ranges from 2,185 to 3,140 kgs per hectare. Fiber recovery ranges from 4% - 5%.

**Decortication** - estimated yield per hectare ranges from 1,300 to 1,700 kgs of fiber. Fiber recovery ranges from 2% - 2.5%.



Philippine Fiber Industry Development Authority

For Inquiries:

Email us at [tad@philfida.da.gov.ph](mailto:tad@philfida.da.gov.ph) (Technical Assistance Division)

Website: [philfida.da.gov.ph](http://philfida.da.gov.ph)



# CLASSIFICATION AND GRADING

## Retted Maguey

1. MR-1 Maguey One
2. MR-2 Maguey Two
3. MR-3 Maguey Three
4. MR-4 Maguey Damaged
5. MR-5 Maguey String
6. MR-6 Maguey Tow

## Decorticated Maguey

1. MD-1 Maguey Deco One
2. MD-2 Maguey Deco Two
3. MD-X Maguey Deco Residual

## PRINCIPAL USES

**Carpets**  
**Rugs**  
**Doormats**  
**Bags**  
**Ropes**  
**Twine**  
**Cords**  
**Sacks**  
**Paper**

# MAGUEY TECHNOGUIDE



*Agave cantala* Roxb

## CONTENTS:

Botanical Description  
Varieties  
Cultural Management  
Maturity and Harvesting  
Methods of Extraction  
Yield Per Hectare  
Classification and Grading  
Principal Uses

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FPUL, BAI Compound, Visayas Ave., Vasra, Quezon City.