FarmLens Ltd

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Crop details

Sisal

Agave sisalana

Family: Asparagaceae

Categories

Oil & Industrial

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Quick stats

Family	Asparagaceae
Typical harvest	2.8 t/ha
Varieties	1
Pests and diseases	2
Seasons	1

Crop profile

Growth habit	perennial
Days to harvest	365
Main uses	Fiber crop for ropes, twines, and industrial biomaterials.
Pollination	wind
Origin and where it grows	Traditional cash crop in arid and semi-arid coastal East Africa.

Weather, soil and spacing

Best temperature	20 - 34 °C
Rainfall	500 - 1200 mm/yr
Altitude	800 - 3000 m
Best pH	6 - 7
Soil type	Well-drained loam to clay loam with moderate fertility.
Row spacing	20 cm
Plant spacing	5 cm
Planting depth	4 cm
Seed rate	80 kg/ha

Simple notes for farmers

About the crop: This crop is perennial; once planted it can keep producing for many years. Harvest typically starts about 365 days after planting.

Main use: Farmers mostly grow this crop for fiber crop for ropes, twines, and industrial biomaterials..

Pollination: Mainly wind; healthy flowers and pollinators improve fruit set.

Where it grows: Traditional cash crop in arid and semi-arid coastal East Africa.. Grouped under: Oil & Industrial.

Best climate: 20 - 34 °C; 500 - 1200 mm/yr; up to about 3000 m a.s.l.

Soil: Best at pH 6 - 7; well-drained loam to clay loam with moderate fertility..

Farmer guide (Mwongozo wa Mkulima)

Planting	Direct-seed Sisal into a fine firm seedbed at onset of reliable rains.
Transplanting	Not transplanted.
Irrigation	Maintain moisture during establishment and grain filling where irrigation is used.
Fertigation	Split nitrogen between planting and early vegetative growth where moisture allows.
Pest scouting	Scout Sisal for aphids, armyworms, foliar diseases, and lodging risk.
Pruning and training	No pruning needed; keep weeds low during early establishment.
Harvest	Harvest Sisal when grains harden and heads dry down evenly.
Postharvest	Dry grain well before threshing and storage.

Nutrient schedule (Mbolea kwa Hatua)

#	Stage	DAP	Product	Rate	Targets (kg/ha)	Notes
1	Basal	0	DAP	100 kg/ha	N: 18, P?O?: 46, K?O: N/A	Starter fertilizer for Sisal establishment.
2	Topdress	28	CAN	100 kg/ha	N: 26, P?O?: N/A, K?O: N/A	Topdress Sisal before rain or irrigation.

Nutrient requirements

Nutrient	Stage	Amount	Unit
N	Basal	25	kg/ha
P?O?	Basal	25	kg/ha
K?O	Basal	20	kg/ha
N	Topdress	30	kg/ha

Field images



Varieties

Name	Country	Maturity (days)	Traits
Sisal 11648	TZ	365	Industrial fiber agave adapted to dry zones.

Fertilizer recommendations

Stage	Product	Rate	Notes

Planting	DAP	100	Basal phosphorus for Sisal establishment.
Topdress	CAN	100	Nitrogen support for Sisal vegetative growth.

Pests and diseases

Name	Type	Symptoms	Management
Aphids	pest	Sap sucking on leaves and grain heads.	Scout early, preserve beneficial insects, and control when thresholds are exceeded.
Leaf rust	disease	Rust pustules on leaves reducing grain fill.	Use tolerant varieties, rotation, and timely disease control.

Yields

System	Typical	Min	Max	Notes
Rainfed smallholder production	2.8	1.7	4.8	Typical grain yield under practical Sisal management.

Season calendars

Country	Region	Planting	Harvest
KE	Highland Grain Zones	Mar-Apr	Jul-Aug

Region suitability

Country	Region	Suitability
KE	Highland Grain Zones	Medium