

FarmLens Ltd

Website: farmlens.africa | App: app.farmlens.africa | Headquarters: Nairobi, Kenya



Crop details

Date Palm

Phoenix dactylifera

Family: Arecaceae

Categories

Fruits & Nuts

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Quick stats

Family	Arecaceae
Typical harvest	9.0 t/ha
Varieties	1
Pests and diseases	2
Seasons	1

Crop profile

Growth habit	tree
Days to harvest	365
Main uses	Fresh and dried dates for food security and market sales.
Pollination	insect
Origin and where it grows	Grown in hot arid East African pockets with irrigation access.

Weather, soil and spacing

Best temperature	24 - 38 °C
Rainfall	100 - 400 mm/yr
Altitude	0 - 2600 m
Best pH	6 - 7
Soil type	Deep, fertile, well-drained soil with good organic matter.
Row spacing	500 cm
Plant spacing	500 cm
Planting depth	30 cm
Seed rate	kg/ha (check local recommendation)
Nursery days	180

Simple notes for farmers

About the crop: This crop has a growth habit described as "tree". Harvest typically starts about 365 days after planting.

Main use: Farmers mostly grow this crop for fresh and dried dates for food security and market sales..

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

Where it grows: Grown in hot arid East African pockets with irrigation access.. Grouped under: Fruits & Nuts.

Best climate: 24 - 38 °C; 100 - 400 mm/yr; up to about 2600 m a.s.l.

Soil: Best at pH 6 - 7; deep, fertile, well-drained soil with good organic matter..

Farmer guide (Mwongozo wa Mkulima)

<u>Planting</u>	Plant healthy Date Palm seedlings or grafted plants at onset of rains in prepared pits.
<u>Transplanting</u>	Handle Date Palm rootballs carefully and water well after planting.
<u>Irrigation</u>	Maintain steady moisture during establishment and fruit development of Date Palm.
<u>Fertigation</u>	Split nutrients through active growth and fruit development in Date Palm.
<u>Pest scouting</u>	Scout Date Palm regularly for fruit flies, scales, borers, and foliar diseases.
<u>Pruning and training</u>	Prune Date Palm to maintain canopy light, height, and sanitation.
<u>Harvest</u>	Harvest Date Palm at the right maturity stage for fresh-market quality.
<u>Postharvest</u>	Keep Date Palm shaded and cool after harvest to preserve market quality.

Nutrient schedule (Mbolea kwa Hatua)

<u>#</u>	<u>Stage</u>	<u>DAP</u>	<u>Product</u>	<u>Rate</u>	<u>Targets (kg/ha)</u>	<u>Notes</u>
1	Planting or season start	0	Well-rotted manure	8000 kg/ha	N: N/A, P?O?: N/A, K?O: N/A	Improve rooting environment for Date Palm.
2	Pre-fruiting	90	NPK 17-17-17	200 kg/ha	N: 34, P?O?: 34, K?O: 34	Balanced nutrient support for Date Palm.

Nutrient requirements

<u>Nutrient</u>	<u>Stage</u>	<u>Amount</u>	<u>Unit</u>
N	Basal	40	kg/ha
P?O?	Basal	30	kg/ha
K?O	Basal	40	kg/ha
N	Fruiting	40	kg/ha
K?O	Fruiting	50	kg/ha

Field images



Varieties

<u>Name</u>	<u>Country</u>	<u>Maturity (days)</u>	<u>Traits</u>
Barhi	KE	365	High-value date palm for hot dry agroecologies.

Fertilizer recommendations

<u>Stage</u>	<u>Product</u>	<u>Rate</u>	<u>Notes</u>
Planting	Well-rotted manure	8000	Organic matter for Date Palm establishment.
Pre-fruiting	NPK 17-17-17	200	Balanced fertilizer ahead of major Date Palm crop load.

Pests and diseases

<u>Name</u>	<u>Type</u>	<u>Symptoms</u>	<u>Management</u>
Fruit flies	pest	Stings, larval feeding, and rotting fruits.	Field sanitation, trapping, and timely harvest.
Anthraxnose and fruit rots	disease	Lesions on flowers, leaves, or fruits reducing quality.	Prune for airflow, keep orchards clean, and protect during wet periods.

Yields

<u>System</u>	<u>Typical</u>	<u>Min</u>	<u>Max</u>	<u>Notes</u>
Managed orchard production	9	5.4	14.4	Typical orchard yield for Date Palm under practical management.

Season calendars

<u>Country</u>	<u>Region</u>	<u>Planting</u>	<u>Harvest</u>
KE	Managed Orchard Zones	Mar-Apr or Oct-Nov	Depends on variety and agroecology

Region suitability

<u>Country</u>	<u>Region</u>	<u>Suitability</u>
KE	Managed Orchard Zones	Medium

Source: FarmLens Ltd - farmlens.africa and app.farmlens.africa. Headquarters: Nairobi, Kenya. This guide was generated from the FarmLens database.