

FarmLens Ltd

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Crop details

Jackfruit

Artocarpus heterophyllus

Family: Moraceae

Categories

Fruits & Nuts

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Quick stats

Family	Moraceae
Typical harvest	15.0 t/ha
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Crop profile

Growth habit	perennial
Days to harvest	365+
Main uses	Fruit (fresh/process)
Pollination	wind
Origin and where it grows	S/SE Asia; tropics

Weather, soil and spacing

Best temperature	22 - 30 °C
Rainfall	1200 - 2000 mm/yr
Altitude	0 - 1200 m
Best pH	6 - 6.8
Soil type	Deep, well-drained loam
Row spacing	800 cm
Plant spacing	800 cm
Planting depth	60 cm
Seed rate	kg/ha (check local recommendation)
Nursery days	90

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 fruit (fresh/process).

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

Where it grows: S/SE Asia; tropics. Grouped under: Fruits & Nuts.

Best climate: 22 - 30 °C; 1200 - 2000 mm/yr; up to about 1200 m a.s.l.

Soil: Best at pH 6 - 6.8; deep, well-drained loam.

Farmer guide (Mwongozo wa Mkulima)

<u>Planting</u>	Plant grafted seedlings at onset of rains in large pits (e.g., 60×60×60 cm) with compost. Stake young trees; mulch and weed circles.
<u>Transplanting</u>	Handle root ball gently; avoid bending taproot; plant at same collar height.
<u>Irrigation</u>	Keep moist during establishment and dry spells; critical at flowering/fruit set.
<u>Fertigation</u>	Split N and K into small doses during active growth; avoid heavy late N.
<u>Pest scouting</u>	Monitor fruit borers, mealybugs, scale/sooty mold; prune for airflow; remove infested fruits.
<u>Pruning and training</u>	Formative prune to 3–4 scaffold branches at 1–1.2 m; maintain open canopy.
<u>Harvest</u>	Harvest when fruit spines flatten and aroma develops; cut with 10–15 cm peduncle; handle carefully.
<u>Postharvest</u>	Shade-cool; avoid latex stains; consume/process promptly; short ambient shelf life.

Nutrient schedule (Mbolea kwa Hatua)

#	<u>Stage</u>	<u>DAP</u>	<u>Product</u>	<u>Rate</u>	<u>Targets (kg/ha)</u>	<u>Notes</u>
1	Basal	0	NPK 17-17-17	180 kg/ha	N: N/A, P?O?: N/A, K?O: N/A	Pit-mix compost; light NPK away from roots
2	Topdress 1	90	CAN 26% N	60 kg/ha	N: N/A, P?O?: N/A, K?O: N/A	Establishment boost; irrigate after
3	Topdress 2	180	MOP (KCl)	60 kg/ha	N: N/A, P?O?: N/A, K?O: N/A	Support canopy and future fruiting
4	Pre-flowering	365	NPK 15-9-20 (or similar)	120 kg/ha	N: N/A, P?O?: N/A, K?O: N/A	Higher K for fruiting

Nutrient requirements

<u>Nutrient</u>	<u>Stage</u>	<u>Amount</u>	<u>Unit</u>
N	Basal	60	kg/ha
P?O?	Basal	40	kg/ha
K?O	Basal	80	kg/ha
N	Early_growth	30	kg/ha
K?O	Early_growth	20	kg/ha
N	Fruiting	40	kg/ha
K?O	Fruiting	40	kg/ha

Field images



Varieties

<u>Name</u>	<u>Country</u>	<u>Maturity (days)</u>	<u>Traits</u>
Local Jackfruit	KE	1200	Large fruits
Grafted sweet type (generic)	KE	1460	Early bearing; sweet bulbs; manageable canopy
Firm-flesh type (processing)	TZ	1825	Good chips/flour; large fruits

Fertilizer recommendations

<u>Stage</u>	<u>Product</u>	<u>Rate</u>	<u>Notes</u>
Basal	Compost/manure (well-decomposed)	3000	Pit incorporated at planting
Basal	NPK 17-17-17	150	Light dose; away from stem
Topdress	CAN 26% N	60	~3 months after planting
Topdress	MOP (KCl)	60	~6 months after planting
Fruiting	NPK high-K (e.g., 15-9-20)	120	Before flowering/fruit set

Pests and diseases

<u>Name</u>	<u>Type</u>	<u>Symptoms</u>	<u>Management</u>
Fruit borer	pest	Bored fruits	Bag young fruits; sanitation
Fruit borer (carpophagous moth/borer)	pest	Bored fruits; premature drop	Sanitation; bagging; timely harvest; rotate actives if spraying
Mealybugs & scale (with sooty mold)	pest	Honeydew, black mold on leaves/fruits	Control ants; prune; oils/soap or selective insecticides
Fruit fly (Tephritidae)	pest	Stings; maggots in pulp	Bait traps; field sanitation; bagging
Anthracnose	disease	Leaf/fruit spots; rots postharvest	Prune for airflow; avoid overhead irrigation; protectants if severe
Stem/foot rot (Phytophthora)	disease	Cankers; collar rot; dieback	Well-drained sites; avoid injuries; copper paints on wounds

Yields

<u>System</u>	<u>Typical</u>	<u>Min</u>	<u>Max</u>	<u>Notes</u>
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orchard	15	8	25	
rainfed orchard (low density)	12	8	18	Mature trees; 80–120 trees/ha
irrigated/improved (medium density)	18	12	30	Good management; pruning & nutrition

Season calendars

<u>Country</u>	<u>Region</u>	<u>Planting</u>	<u>Harvest</u>
KE	Coastal & low-mid altitude (long rains)	Mar–Apr	Year-round once mature
KE	Coastal & low-mid altitude (short rains)	Oct–Nov	Year-round once mature
UG	Central/wet zones	Mar–Apr	Year-round once mature
TZ	Coast & Northern zones	Mar–Apr	Year-round once mature

Region suitability

<u>Country</u>	<u>Region</u>	<u>Suitability</u>
KE	Arid/semi-arid with poor irrigation	Low
KE	Coast; Lake Basin; mid-altitude humid	High
KE	Coastal/low mid-altitudes	High
KE	High, cool highlands (>1800 m)	Low
TZ	Coastal belt; Morogoro; Kilimanjaro foothills	High
UG	Central; Lake Victoria basin	High

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