FarmLens Ltd

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

Crop details

Turmeric

Curcuma longa

Family: Zingiberaceae

Categories

Spices & Condiments

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Quick stats

Family	Zingiberaceae
Typical harvest	23.0 t/ha
Varieties	48
Pests and diseases	64
Seasons	48

Crop profile

Growth habit	perennial
Days to harvest	270
Main uses	Fresh and dried rhizomes for spice/colouring, processing into powder and pastes.
Pollination	unknown
Origin and where it grows	Thrives in warm, humid to sub-humid mid-altitudes with reliable moisture or irrigation.

Weather, soil and spacing

Best temperature	20 - 30 °C
Rainfall	1200 - 1600 mm/yr
Altitude	0 - 2000 m
Best pH	6 - 6.8
Soil type	Loose, well-drained loam/sandy loam rich in organic matter for finger development.
Row spacing	60 cm
Plant spacing	25 cm
Planting depth	5 cm
Seed rate	2000 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 270 days after planting.

Main use: Farmers mostly grow this crop for fresh and dried rhizomes for spice/colouring, processing into powder and pastes..

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

Where it grows: Thrives in warm, humid to sub-humid mid-altitudes with reliable moisture or irrigation.. Grouped under: Spices & Condiments.

Best climate: 20 - 30 °C; 1200 - 1600 mm/yr; up to about 2000 m a.s.l.

Soil: Best at pH 6 - 6.8; loose, well-drained loam/sandy loam rich in organic matter for finger development..

Farmer guide (Mwongozo wa Mkulima)

Planting	Plant clean, disease-free seed rhizomes (mother pieces and fingers) with 2–3 buds on raised, mulched beds at onset of rains.
Transplanting	Direct planting of rhizomes is standard (no transplanting).
Irrigation	Maintain even moisture during sprouting, tillering and finger bulking; avoid soggy beds.
Fertigation	Under drip, apply small weekly feeds—more N early, increase K from mid-season to harvest.
Pest scouting	Scout weekly for rhizome rots, leaf spots and nematode symptoms. Rogue out rotting clumps fast.
Pruning and training	No pruning; keep beds weed-free and well mulched.
Harvest	Harvest when leaves yellow and lodge (~8–10 months). For fresh turmeric, dig earlier when fibres are softer.
Postharvest	Lift gently, wash, cure in shade 1–2 days. For dry spice, boil/steam fingers briefly, then sun/solar-dry and polish before grinding.

Nutrient schedule (Mbolea kwa Hatua)

#	Stage	DAP	Product	Rate	Targets (kg/ha)	Notes
1	Basal at planting	0	NPK 17-17-17 + compost	150 kg/ha (plus 6–8 t/ha compost)	N: 26, P?O?: 26, K?O: 26	Blend lightly into topsoil; avoid direct contact with seed pieces.
1	Basal at planting	0	NPK 17-17-17 + compost	150 kg/ha (plus 6–8 t/ha compost)	N: 26, P?O?: 26, K?O: 26	Blend lightly into topsoil; avoid direct contact with seed pieces.
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2	Early topdress	45	CAN 26% N	120 kg/ha	N: 31, P?O?: 0, K?O: 0	Apply on moist soil along rows; cover lightly.
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3	Bulking K boost	90	Sulfate of potash (SOP)	120 kg/ha	N: 0, P?O?: 0, K?O: 60	Improves finger size, density and postharvest quality.
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Nutrient requirements

Nutrient	Stage	Amount	Unit
N	Basal	40	kg/ha
P?O?	Basal	30	kg/ha
K?O	Basal	40	kg/ha
N	Topdress_early	40	kg/ha
P?O?	Topdress_early	10	kg/ha
K?O	Topdress_early	30	kg/ha
N	Bulking	20	kg/ha
P?O?	Bulking	0	kg/ha
K?O	Bulking	50	kg/ha
N	Basal	40	kg/ha
P?O?	Basal	30	kg/ha
K?O	Basal	40	kg/ha
N	Topdress_early	40	kg/ha
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P?O?	Basal	30	kg/ha
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N	Topdress_early	40	kg/ha
P?O?	Topdress_early	10	kg/ha
K?O	Topdress_early	30	kg/ha
N	Bulking	20	kg/ha
P?O?	Bulking	0	kg/ha

Nutrient	Stage	Amount	Unit
K?O	Bulking	50	kg/ha
N	Basal	40	kg/ha
P?O?	Basal	30	kg/ha
K?O	Basal	40	kg/ha
N	Topdress_early	40	kg/ha
P?O?	Topdress_early	10	kg/ha
K?O	Topdress_early	30	kg/ha
N	Bulking	20	kg/ha
P?O?	Bulking	0	kg/ha
K?O	Bulking	50	kg/ha
N	Basal	40	kg/ha
P?O?	Basal	30	kg/ha
K?O	Basal	40	kg/ha
N	Topdress_early	40	kg/ha
P?O?	Topdress_early	10	kg/ha
K?O	Topdress_early	30	kg/ha
N	Bulking	20	kg/ha
P?O?	Bulking	0	kg/ha
K?O	Bulking	50	kg/ha
N	Basal	40	kg/ha
P?O?	Basal	30	kg/ha
K?O	Basal	40	kg/ha
N	Topdress_early	40	kg/ha
P?O?	Topdress_early	10	kg/ha
K?O	Topdress_early	30	kg/ha
N	Bulking	20	kg/ha
P?O?	Bulking	0	kg/ha
K?O	Bulking	50	kg/ha
N	Basal	40	kg/ha
P?O?	Basal	30	kg/ha

Nutrient	Stage	Amount	Unit
K?O	Basal	40	kg/ha
N	Topdress_early	40	kg/ha
P?O?	Topdress_early	10	kg/ha
K?O	Topdress_early	30	kg/ha
N	Bulking	20	kg/ha
P?O?	Bulking	0	kg/ha
K?O	Bulking	50	kg/ha
N	Basal	40	kg/ha
P?O?	Basal	30	kg/ha
K?O	Basal	40	kg/ha
N	Topdress_early	40	kg/ha
P?O?	Topdress_early	10	kg/ha
K?O	Topdress_early	30	kg/ha
N	Bulking	20	kg/ha
P?O?	Bulking	0	kg/ha
K?O	Bulking	50	kg/ha
N	Basal	40	kg/ha
P?O?	Basal	30	kg/ha
K?O	Basal	40	kg/ha
N	Topdress_early	40	kg/ha
P?O?	Topdress_early	10	kg/ha
K?O	Topdress_early	30	kg/ha
N	Bulking	20	kg/ha
P?O?	Bulking	0	kg/ha
K?O	Bulking	50	kg/ha
N	Basal	40	kg/ha
P?O?	Basal	30	kg/ha
K?O	Basal	40	kg/ha
N	Topdress_early	40	kg/ha
P?O?	Topdress_early	10	kg/ha

Nutrient	**Stage**	**Amount**	**Unit**
K?O	Topdress_early	30	kg/ha
N	Bulking	20	kg/ha
P?O?	Bulking	0	kg/ha
K?O	Bulking	50	kg/ha
N	Basal	40	kg/ha
P?O?	Basal	30	kg/ha
K?O	Basal	40	kg/ha
N	Topdress_early	40	kg/ha
P?O?	Topdress_early	10	kg/ha
K?O	Topdress_early	30	kg/ha
N	Bulking	20	kg/ha
P?O?	Bulking	0	kg/ha
K?O	Bulking	50	kg/ha
N	Basal	40	kg/ha
P?O?	Basal	30	kg/ha
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P?O?	Basal	30	kg/ha
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N	Topdress_early	40	kg/ha
P?O?	Topdress_early	10	kg/ha
K?O	Topdress_early	30	kg/ha
N	Bulking	20	kg/ha
P?O?	Bulking	0	kg/ha

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K?O	Bulking	50	kg/ha
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P?O?	Basal	30	kg/ha
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N	Topdress_early	40	kg/ha
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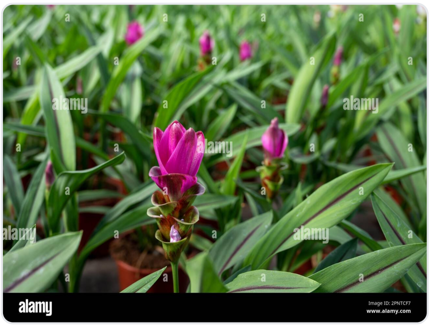
P?O?	Topdress_early	10	kg/ha
K?O	Topdress_early	30	kg/ha
N	Bulking	20	kg/ha
P?O?	Bulking	0	kg/ha
K?O	Bulking	50	kg/ha

Field images



Varieties

Name	Country	Maturity (days)	Traits
Alleppey-type selection	KE	260	Deep colour, high curcumin; suited for drying.
Early yellow selection	TZ	240	Earlier harvest for fresh market.
Local turmeric (manjano) type	UG	270	Adapted local selection for homestead and market.
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Fertilizer recommendations

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Basal	NPK 17-17-17 + compost	150	With 6–8 t/ha compost incorporated pre-plant.
Topdress (early)	CAN 26% N	120	6–8 weeks after emergence.
Bulking	SOP (K?SO?)	120	Boosts finger bulking and colour.

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Basal	NPK 17-17-17 + compost	150	With 6–8 t/ha compost incorporated pre-plant.
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Pests and diseases

Name	Type	Symptoms	Management
Rhizome rot (Pythium/Fusarium complex)	disease	Yellowing, wilting, soft brown rhizomes with foul smell.	Well-drained raised beds, clean seed, remove infected stools and improve rotation.
Leaf blotch/spot	disease	Brown lesions on leaves; premature drying.	Better airflow, avoid late overhead irrigation, timely protectants when needed.
Root-knot nematodes	pest	Stunted clumps, poor bulking, knotted roots.	Use clean seed, rotate with non-hosts, add organic matter and solarise beds where feasible.
Cutworms/armyworms (early)	pest	Seedlings cut or defoliated at early stages.	Keep beds clean pre-planting; spot treat early outbreaks.
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Yields

System	Typical	Min	Max	Notes
Low-input rainfed (fresh)	12	8	16	Basic manuring and mulching; minimal fertilizer.
Managed beds (fresh)	22	15	30	Good seed, organic matter + balanced NPK, irrigation as needed.
Intensive drip + fertigation	35	25	45	High-quality seed, rigorous sanitation, steady feeding and moisture.
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Season calendars

Country	Region	Planting	Harvest
KE	High rainfall highlands & irrigated mid-altitudes	Onset of long or short rains on raised, mulched beds.	8–10 months after planting depending on market (fresh vs dry).
TZ	Southern highlands & northern irrigated belts	Start of main rains or under irrigation any time.	Staggered harvests based on demand and curing plans.

Country	Region	Planting	Harvest
UG	Moist mid-altitudes with good drainage	At onset of reliable rains on friable soils.	Most crops ready 9–10 months from planting.
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Region suitability

Country	Region	Suitability
KE	Central & Rift highlands; wet mid-altitudes	High
TZ	Southern highlands; Kilimanjaro/Arusha irrigated pockets	High
UG	Mid-altitude belts with dependable rainfall and drainage	High