

FarmLens Ltd

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



Crop details

Capsicum

Capsicum annuum

Family: Solanaceae

Categories

Vegetables

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Quick stats

Family	Solanaceae
Typical harvest	31.0 t/ha
Varieties	48
Pests and diseases	112
Seasons	64

Crop profile

Growth habit	annual
Days to harvest	130
Main uses	Fresh green and coloured fruits of hoho used for cooking, salads, stuffing and seasoning.
Pollination	self
Origin and where it grows	Capsicum / Bell pepper (hoho) is widely grown in irrigated and rainfed vegetable areas in East Africa, especially near towns and irrigation schemes.

Weather, soil and spacing

Best temperature	18 - 28 °C
Rainfall	700 - 1000 mm/yr
Altitude	0 - 2200 m
Best pH	6 - 6.8
Soil type	Deep, well-drained loam or sandy loam with plenty of organic matter. Capsicum / Bell pepper (hoho) prefers fertile, well-structured soils.
Row spacing	75 cm
Plant spacing	40 cm
Planting depth	1.5 cm
Seed rate	0.4 kg/ha
Nursery days	35

Simple notes for farmers

About the crop: This crop is annual; it grows and is harvested in one season. Harvest typically starts about 130 days after planting.

Main use: Farmers mostly grow this crop for fresh green and coloured fruits of hoho used for cooking, salads, stuffing and seasoning..

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

Where it grows: Capsicum / Bell pepper (hoho) is widely grown in irrigated and rainfed vegetable areas in East Africa, especially near towns and irrigation schemes.. Grouped under: Vegetables.

#	Stage	DAP	Product	Rate	Targets (kg/ha)	Notes
2	Early topdress	21	CAN 26% N	100 kg/ha	N: 26, P?O?: 0, K?O: 0	Apply between rows of hoho when soil is moist; irrigate or lightly incorporate.
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3	Fruiting topdress (N + K)	40	NPK 12-6-24 or urea + SOP/MOP	150 kg/ha	N: 18, P?O?: 9, K?O: 36	Supports fruit set and filling in Capsicum / Bell pepper (hoho); avoid too much late nitrogen.
3	Fruiting topdress (N + K)	40	NPK 12-6-24 or urea + SOP/MOP	150 kg/ha	N: 18, P?O?: 9, K?O: 36	Supports fruit set and filling in Capsicum / Bell pepper (hoho); avoid too much late nitrogen.
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Nutrient requirements

<u>Nutrient</u>	<u>Stage</u>	<u>Amount</u>	<u>Unit</u>
N	Basal	50	kg/ha
P?O?	Basal	60	kg/ha
K?O	Basal	60	kg/ha
N	Topdress_early	40	kg/ha
P?O?	Topdress_early	0	kg/ha
K?O	Topdress_early	30	kg/ha
N	Topdress_fruiting	30	kg/ha
P?O?	Topdress_fruiting	0	kg/ha
K?O	Topdress_fruiting	60	kg/ha
N	Basal	50	kg/ha
P?O?	Basal	60	kg/ha
K?O	Basal	60	kg/ha

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P?O?	Topdress_fruiting	0	kg/ha
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N	Topdress_fruiting	30	kg/ha
P?O?	Topdress_fruiting	0	kg/ha
K?O	Topdress_fruiting	60	kg/ha

Field images



Varieties

<u>Name</u>	<u>Country</u>	<u>Maturity (days)</u>	<u>Traits</u>
Hybrid blocky hoho (green/red)	KE	120	Large blocky fruits, thick walls, good yield and market value.
Coloured hoho hybrid (yellow/orange)	KE	130	Attractive coloured fruits, good for high-value markets.
Local hoho type	KE	110	Traditional taste, smaller fruits and lower yield than hybrids.
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Fertilizer recommendations

<u>Stage</u>	<u>Product</u>	<u>Rate</u>	<u>Notes</u>
Basal	NPK 17-17-17 or 15-15-15	250	Gives balanced nutrients for early hoho growth.
Topdress (N source)	CAN 26% N or urea	100	Apply once or twice during vegetative growth of Capsicum / Bell pepper (hoho).
Topdress (K source)	Sulfate of potash (SOP) or high-K NPK	100	Improves fruit size, firmness and colour of hoho.
Organic	Well-rotted farmyard manure or compost	8000	Apply before transplanting to improve soil structure, moisture holding and biological activity.
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<u>Stage</u>	<u>Product</u>	<u>Rate</u>	<u>Notes</u>
Organic	Well-rotted farmyard manure or compost	8000	Apply before transplanting to improve soil structure, moisture holding and biological activity.
Basal	NPK 17-17-17 or 15-15-15	250	Gives balanced nutrients for early hoho growth.
Topdress (N source)	CAN 26% N or urea	100	Apply once or twice during vegetative growth of Capsicum / Bell pepper (hoho).
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Pests and diseases

<u>Name</u>	<u>Type</u>	<u>Symptoms</u>	<u>Management</u>
Aphids	pest	Clusters of small soft-bodied insects on hoho shoots and leaf undersides, curled leaves, sticky honeydew and sooty mould.	Encourage natural enemies, remove heavily infested shoots and use selective insecticides or biopesticides when populations rise.
Whiteflies	pest	Small white insects flying up when hoho plants are disturbed, sticky honeydew, yellowing leaves and virus transmission.	Use yellow sticky traps, remove severely affected plants, and apply selective products when necessary.
Thrips	pest	Silvery streaks and small brown spots on hoho leaves and fruits, distorted growing tips and scarred fruits.	Reduce weeds, use blue or yellow sticky traps and apply targeted insecticides/biopesticides based on scouting.
Fruit borer / bollworm	pest	Holes in hoho fruits, with caterpillars and droppings inside; fruits rot and drop.	Collect and destroy infested fruits, use pheromone traps where available and apply recommended insecticides early.
Bacterial leaf spot	disease	Small water-soaked spots on hoho leaves and fruits that enlarge and turn dark, sometimes cracking.	Use clean seed, avoid working in fields when wet, rotate crops and use copper-based protectants where pressure is high.
Powdery and downy mildews	disease	White powdery growth or yellow patches on leaves of hoho, leading to leaf drop and weak plants.	Keep canopies open, avoid overhead irrigation in the evening and apply appropriate fungicides when needed.
Viral diseases (mosaic, leaf curl)	disease	Mottled, curled and twisted leaves, stunting and poor fruiting in hoho.	Use healthy seed/seedlings, control aphids and whiteflies and rogue out severely affected plants early.

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Yields

<u>System</u>	<u>Typical</u>	<u>Min</u>	<u>Max</u>	<u>Notes</u>
Open-field hoho, low input	8	5	12	Local or open-pollinated varieties, little fertilizer and limited pest control.
Open-field hoho, improved management	25	15	35	Hybrid seed, staking where needed, recommended fertilizer and regular pest and disease management.
Irrigated net-house / greenhouse hoho	60	40	80	Protected cultivation, high-performing hybrids, drip and fertigation, and strong crop protection.
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Irrigated net-house / greenhouse hoho	60	40	80	Protected cultivation, high-performing hybrids, drip and fertigation, and strong crop protection.
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Season calendars

<u>Country</u>	<u>Region</u>	<u>Planting</u>	<u>Harvest</u>
KE	Irrigated hoho belts and river valleys	Most months (with irrigation)	Starts about 2–3 months after transplanting and continues for several pick

<u>Country</u>	<u>Region</u>	<u>Planting</u>	<u>Harvest</u>
KE	Mid-altitude rainfed hoho areas (long rains)	Mar–Apr	Jun–Aug
KE	Short-rains hoho season	Oct–Nov	Jan–Mar
TZ	Peri-urban and irrigated Capsicum / hoho zones	Most months with water and good disease control	Multiple pickings starting 2–3 months after transplanting
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Region suitability

<u>Country</u>	<u>Region</u>	<u>Suitability</u>
KE	Irrigation schemes and river valleys	High
KE	Peri-urban vegetable belts around major towns	High

<u>Country</u>	<u>Region</u>	<u>Suitability</u>
KE	Very hot, dry lowlands without irrigation	Low
TZ	Central and northern hoho producing areas	High
UG	Mid-altitude vegetable-growing zones	High

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