



Crop details

Categories

**Black pepper (pilipili manga)**

Spices & Condiments

*Piper nigrum*

Family: Piperaceae

Generated: 2025-12-15 08:44

**Quick stats**

<b><u>Family</u></b>	Piperaceae
<b><u>Typical harvest</u></b>	0.9 t/ha
<b><u>Varieties</u></b>	3
<b><u>Pests and diseases</u></b>	6
<b><u>Seasons</u></b>	0

**Crop profile**

<b><u>Growth habit</u></b>	climber
<b><u>Days to harvest</u></b>	1095
<b><u>Main uses</u></b>	Dry peppercorns (black/white); fresh green spikes for pickles; some leaf/stem use for extracts.
<b><u>Pollination</u></b>	insect
<b><u>Origin and where it grows</u></b>	Thrives in warm, humid tropics with regular rainfall and shade/support; niche pockets along East African coast/high rainfall zones.

**Weather, soil and spacing**

<b><u>Best temperature</u></b>	23 - 30 °C
<b><u>Rainfall</u></b>	1800 - 3000 mm/yr
<b><u>Altitude</u></b>	0 - 1500 m
<b><u>Best pH</u></b>	5.5 - 6.5
<b><u>Soil type</u></b>	Deep, well-drained loam or lateritic soils with high organic matter; good mulching essential.
<b><u>Row spacing</u></b>	250 cm
<b><u>Plant spacing</u></b>	250 cm
<b><u>Planting depth</u></b>	5 cm
<b><u>Seed rate</u></b>	kg/ha (check local recommendation)
<b><u>Nursery days</u></b>	90

**Simple notes for farmers**

**About the crop:** This crop has a growth habit described as "climber". Harvest typically starts about 1095 days after planting.

**Main use:** Farmers mostly grow this crop for dry peppercorns (black/white); fresh green spikes for pickles; some leaf/stem use for extracts..

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

**Where it grows:** Thrives in warm, humid tropics with regular rainfall and shade/support; niche pockets along East African coast/high rainfall zones.. Grouped under: Spices & Condiments.

**Best climate:** 23 - 30 °C; 1800 - 3000 mm/yr; up to about 1500 m a.s.l.

**Soil:** Best at pH 5.5 - 6.5; deep, well-drained loam or lateritic soils with high organic matter; good mulching essential..

### **Farmer guide (Mwongozo wa Mkulima)**

<b><u>Planting</u></b>	Plant healthy rooted cuttings at the onset of rains next to sturdy standards/live supports (e.g., Gliricidia). Mulch thickly and tie vines to the support.
<b><u>Transplanting</u></b>	Provide temporary shade and wind protection during establishment.
<b><u>Irrigation</u></b>	Maintain even moisture during dry spells, flowering and berry filling; avoid soggy soils.
<b><u>Fertigation</u></b>	Split small feeds through rainy months; more N early for vine growth, boost K at spike set/filling.
<b><u>Pest scouting</u></b>	Check weekly for pollu/borer damage on spikes, thrips/mites on leaves, mealybugs at nodes, and foot rot symptoms.
<b><u>Pruning and training</u></b>	Train main vine up the standard; prune excess laterals; keep base weed-free and mulched.
<b><u>Harvest</u></b>	For black pepper, harvest spikes when most berries are fully grown but still green (a few turning red). Blanch/steam optionally, then sun/solar-dry to black wrinkled stage.
<b><u>Postharvest</u></b>	Dry quickly on clean racks (3–5 days) to brittle; thresh and clean; store airtight in cool, dry conditions.

### **Nutrient schedule (Mbolea kwa Hatua)**

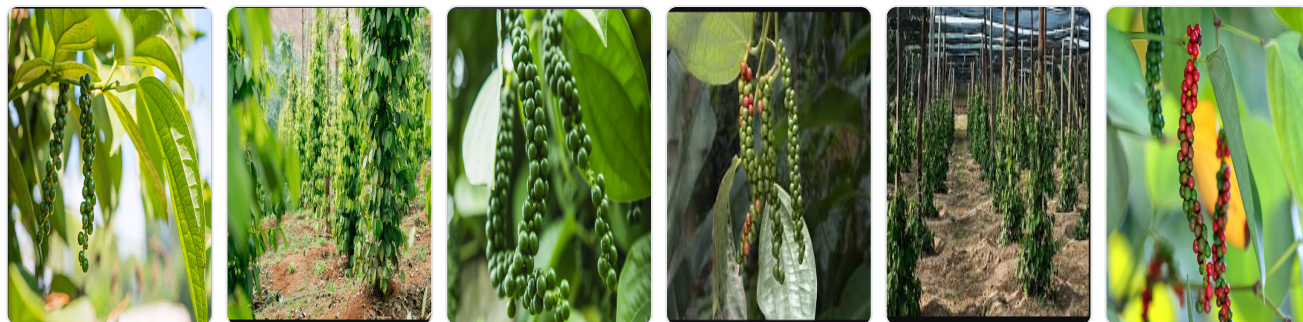
#	<b><u>Stage</u></b>	<b><u>DAP</u></b>	<b><u>Product</u></b>	<b><u>Rate</u></b>	<b><u>Targets (kg/ha)</u></b>	<b><u>Notes</u></b>
1	Basal at planting/onset of rains	0	NPK 15-15-15 + compost	150 kg/ha (plus 6–10 t/ha compost)	N: 22, P?O?: 22, K?O: 22	Ring-apply in basins away from stem; mulch afterwards.
2	Vegetative topdress	90	CAN 26% N	120 kg/ha	N: 31, P?O?: 0, K?O: 0	Moist soil; cover lightly and re-mulch.
3	K boost at spike set	150	Sulfate of potash (SOP)	120 kg/ha	N: 0, P?O?: 0, K?O: 60	Improves berry filling and quality.

### **Nutrient requirements**

<b><u>Nutrient</u></b>	<b><u>Stage</u></b>	<b><u>Amount</u></b>	<b><u>Unit</u></b>
N	Basal	30	kg/ha
P?O?	Basal	30	kg/ha
K?O	Basal	60	kg/ha
N	Vegetative	30	kg/ha
P?O?	Vegetative	10	kg/ha
K?O	Vegetative	40	kg/ha

<u>Nutrient</u>	<u>Stage</u>	<u>Amount</u>	<u>Unit</u>
N	Flowering_fill	20	kg/ha
P?O?	Flowering_fill	0	kg/ha
K?O	Flowering_fill	50	kg/ha

### Field images



### Varieties

<u>Name</u>	<u>Country</u>	<u>Maturity (days)</u>	<u>Traits</u>
Karimunda-type selection	TZ	1095	Adapted to humid coastal/island zones; good spike set.
Panniyur-type selection	TZ	1095	High-yielding where adapted; needs good support and moisture.
Local coastal black pepper	KE	1095	Locally adapted selection for coastal belts/live standards.

### Fertilizer recommendations

<u>Stage</u>	<u>Product</u>	<u>Rate</u>	<u>Notes</u>
Basal	NPK 15-15-15 + compost	150	Apply with heavy organic mulch.
Vegetative	CAN 26% N	120	Supports vine growth; split if rainy season is long.
Spike set/filling	SOP (K?SO?)	120	Improves berry size and quality.

### Pests and diseases

<u>Name</u>	<u>Type</u>	<u>Symptoms</u>	<u>Management</u>
Pollu beetle / spike borers	pest		Sanitation of infested spikes; shade regulation; recommended targeted controls if needed.
Thrips & mites	pest		Maintain humidity via mulch; conserve natural enemies; spot sprays if severe.
Mealybugs/scales (at nodes/roots)	pest		Control ants, prune and destroy heavily infested parts; oils/soap sprays when required.
Foot rot / quick wilt (Phytophthora)	disease		Excellent drainage, mounded basins, sanitation, and prevent standing water.

<u>Name</u>	<u>Type</u>	<u>Symptoms</u>	<u>Management</u>
Anthracnose/leaf spots	disease		Improve airflow and shade balance; protectants during long wet spells if advised.
Root-knot nematodes	pest		Use clean planting material, organic amendments, and crop rotation; solarise nursery media.

## **Yields**

<u>System</u>	<u>Typical</u>	<u>Min</u>	<u>Max</u>	<u>Notes</u>
Smallholder rainfed (live standards)	0.6	0.3	1	Bearing from year 3; peaks around years 6–10 with good care.
Managed plantations (mulch + manuring + irrigation)	1.2	0.8	2	Good clones, staking, shade and pest control.

## **Region suitability**

<u>Country</u>	<u>Region</u>	<u>Suitability</u>
KE	Coastal humid pockets	N/A
KE	Cool highlands	N/A
TZ	Zanzibar & coastal humid zones	N/A
UG	Humid lakeshore pockets	N/A

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