

FarmLens Ltd

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



Crop details

Black Eyed Pea

Vigna unguiculata

Family: Fabaceae

Categories

Legumes & Pulses

Generated: 2026-04-11 08:17

Quick stats

Family	Fabaceae
Typical harvest	1.6 t/ha
Varieties	48
Pests and diseases	96
Seasons	48

Crop profile

Growth habit	annual
Days to harvest	75
Main uses	Dry grain for stews, boiled beans and flour; young leaves and haulms used as livestock feed.
Pollination	self
Origin and where it grows	Black-eyed pea is a type of cowpea grown widely in warm, semi-arid and subhumid areas of East Africa, often intercropped with maize or sorghum.

Weather, soil and spacing

Best temperature	22 - 30 °C
Rainfall	400 - 700 mm/yr
Altitude	0 - 1600 m
Best pH	5.5 - 7
Soil type	Light to medium, well-drained sandy loam or loam. Black-eyed pea tolerates poorer soils better than many beans.
Row spacing	60 cm
Plant spacing	15 cm
Planting depth	3 cm
Seed rate	20 kg/ha

Simple notes for farmers

About the crop: This crop is annual; it grows and is harvested in one season. Harvest typically starts about 75 days after planting.

Main use: Farmers mostly grow this crop for dry grain for stews, boiled beans and flour; young leaves and haulms used as livestock feed..

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

Where it grows: Black-eyed pea is a type of cowpea grown widely in warm, semi-arid and subhumid areas of East Africa, often intercropped with maize or sorghum.. Grouped under: Legumes & Pulses.

#	Stage	DAP	Product	Rate	Targets (kg/ha)	Notes
1	Basal at planting	0	NPK with P (e.g., 0-23-19) or TSP + K source	50 kg/ha	N: 0, P?O?: 12, K?O: 10	Apply in small bands or spots near, but not touching, the seed row.
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2	Optional K topdress (early flowering)	30	Muriate of potash (MOP) or K-containing NPK	20 kg/ha	N: 0, P?O?: 0, K?O: 10	Use mainly where crop residues are removed and soils test low in potassium.
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Nutrient requirements

Nutrient	Stage	Amount	Unit
N	Basal	8	kg/ha
P?O?	Basal	20	kg/ha
K?O	Basal	15	kg/ha
N	Topdress_early	0	kg/ha
P?O?	Topdress_early	0	kg/ha
K?O	Topdress_early	10	kg/ha
N	Basal	8	kg/ha
P?O?	Basal	20	kg/ha

<u>Nutrient</u>	<u>Stage</u>	<u>Amount</u>	<u>Unit</u>
K?O	Basal	15	kg/ha
N	Topdress_early	0	kg/ha
P?O?	Topdress_early	0	kg/ha
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N	Basal	8	kg/ha
P?O?	Basal	20	kg/ha
K?O	Basal	15	kg/ha
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K?O	Basal	15	kg/ha
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P?O?	Basal	20	kg/ha

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N	Basal	8	kg/ha
P?O?	Basal	20	kg/ha
K?O	Basal	15	kg/ha
N	Topdress_early	0	kg/ha
P?O?	Topdress_early	0	kg/ha
K?O	Topdress_early	10	kg/ha

Field images



Varieties

<u>Name</u>	<u>Country</u>	<u>Maturity (days)</u>	<u>Traits</u>
Early Black-eyed pea (bush type)	KE	65	Early maturing, upright plants, suited to short rains and relay cropping.
Medium-duration Black-eyed pea	TZ	75	Good grain size and cooking quality; tolerant to moderate drought.
Local Black-eyed pea landrace	KE	80	Traditional taste and adaptation; moderate yield.
Early Black-eyed pea (bush type)	KE	65	Early maturing, upright plants, suited to short rains and relay cropping.
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Fertilizer recommendations

<u>Stage</u>	<u>Product</u>	<u>Rate</u>	<u>Notes</u>
Basal	NPK with P (e.g., 0-23-19) or TSP + K source	50	Provides phosphorus and potassium to support rooting and early growth.
Topdress (optional K)	Muriate of potash (MOP) or K-rich NPK	20	Used mainly in fields low in potassium or with frequent residue removal.
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Pests and diseases

<u>Name</u>	<u>Type</u>	<u>Symptoms</u>	<u>Management</u>
Flower thrips	pest	Brown or silvery flowers, poor pod set and small pods on Black-eyed pea plants.	Plant early, avoid very late planting and use recommended insecticides only when damage is severe.
Aphids	pest	Clusters of small insects on young leaves and stems, leaf curling and sticky honeydew.	Encourage natural enemies and apply selective sprays only when aphids are very many.
Pod borers	pest	Holes in pods, webbing inside pods and damaged, eaten seeds.	Scout during flowering and early podding and treat early when first damage is seen.
Leaf spots and blights	disease	Brown or dark spots on leaves; leaves may dry and fall early.	Use clean seed, rotate with non-legume crops and avoid continuous cropping on the same land.
Root rots (in poorly drained soils)	disease	Stunted, yellowing plants; roots blackened or rotten.	Improve drainage, avoid waterlogging and rotate crops.
Storage weevils and bruchids	pest	Small holes and powder in stored Black-eyed pea grain.	Dry grain well and store in airtight or treated bags; clean stores between seasons.
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Aphids	pest	Clusters of small insects on young leaves and stems, leaf curling and sticky honeydew.	Encourage natural enemies and apply selective sprays only when aphids are very many.
Pod borers	pest	Holes in pods, webbing inside pods and damaged, eaten seeds.	Scout during flowering and early podding and treat early when first damage is seen.
Leaf spots and blights	disease	Brown or dark spots on leaves; leaves may dry and fall early.	Use clean seed, rotate with non-legume crops and avoid continuous cropping on the same land.
Root rots (in poorly drained soils)	disease	Stunted, yellowing plants; roots blackened or rotten.	Improve drainage, avoid waterlogging and rotate crops.

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Yields

<u>System</u>	<u>Typical</u>	<u>Min</u>	<u>Max</u>	<u>Notes</u>
Smallholder rainfed (low input)	0.8	0.5	1.2	Local seed, little fertilizer, basic weeding and limited pest control.
Smallholder rainfed (improved management)	1.5	1	2	Improved Black-eyed pea/cowpea varieties, good spacing, starter P, timely weed and pest control.
High input / irrigated	2.5	1.8	3	Reliable moisture, balanced nutrients and well-managed pests and diseases.
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Season calendars

<u>Country</u>	<u>Region</u>	<u>Planting</u>	<u>Harvest</u>
KE	Semi-arid and coastal Black-eyed pea zones (short rains)	Oct–Nov	Jan–Feb
KE	Semi-arid and coastal Black-eyed pea zones (long rains)	Mar–Apr	Jun–Jul
TZ	Central and northern drier areas	Dec–Jan	Mar–Apr
KE	Semi-arid and coastal Black-eyed pea zones (short rains)	Oct–Nov	Jan–Feb
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Region suitability

<u>Country</u>	<u>Region</u>	<u>Suitability</u>
KE	ASAL (arid and semi-arid lands)	High
KE	Eastern and coastal mixed farming zones	High
KE	Very wet highland zones with heavy soils	Low
TZ	Central plateau and northern dry zones	High
UG	Drier mixed farming and cattle corridor areas	Medium

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