

FarmLens Ltd

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



Crop details

Lupin

Lupinus spp.

Family: Fabaceae

Categories

Legumes & Pulses

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Quick stats

Family	Fabaceae
Typical harvest	1.5 t/ha
Varieties	2
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Crop profile

Growth habit	annual
Days to harvest	100–150
Main uses	Pulse; forage; soil improvement (N fixation)
Pollination	self
Origin and where it grows	Temperate & Mediterranean; adapted highland tropics

Weather, soil and spacing

Best temperature	10 - 20 °C
Rainfall	500 - 800 mm/yr
Altitude	800 - 2600 m
Best pH	5.5 - 6.8
Soil type	Well-drained; tolerates low P acidic soils
Row spacing	40 cm
Plant spacing	15 cm
Planting depth	3 cm
Seed rate	80 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 100–150 days after planting.

Main use: Farmers mostly grow this crop for pulse; forage; soil improvement (n fixation).

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

Where it grows: Temperate & Mediterranean; adapted highland tropics. Grouped under: Legumes & Pulses.

Best climate: 10 - 20 °C; 500 - 800 mm/yr; up to about 2600 m a.s.l.

Soil: Best at pH 5.5 - 6.8; well-drained; tolerates low p acidic soils.

Farmer guide (Mwongozo wa Mkulima)

<u>Planting</u>	Direct-drill into moist, cool-season window; inoculate with lupin rhizobia.
<u>Transplanting</u>	Not transplanted; keep inoculated seed shaded until sowing.
<u>Irrigation</u>	Mostly rainfed; avoid saturation; supplement at flower/pod fill if dry.
<u>Fertigation</u>	Minimal N; focus on P, K, S to support nodulation and seed fill.
<u>Pest scouting</u>	Early weed control; scout for aphids and anthracnose from early vegetative stage.
<u>Pruning and training</u>	Not applicable.
<u>Harvest</u>	Harvest when pods are brown and seeds hard; minimize shattering.
<u>Postharvest</u>	Dry to ~10–12% moisture; cool, dry storage. De-bitter bitter types before food use.

Nutrient schedule (Mbolea kwa Hatua)

<u>#</u>	<u>Stage</u>	<u>DAP</u>	<u>Product</u>	<u>Rate</u>	<u>Targets (kg/ha)</u>	<u>Notes</u>
1	Seed dressing & inoculation	-1	Lupin Rhizobium inoculant	1 per label	N: N/A, P?O?: N/A, K?O: N/A	Coat just before sowing; avoid sun
2	Basal P at planting	0	TSP 0-46-0 or SSP	80 kg/ha (product)	N: N/A, P?O?: 30, K?O: N/A	Band below seed; keep separate from inoculant
3	Early vegetative S/Ca	20	Gypsum (CaSO ₄ ·2H ₂ O)	100 kg/ha	N: N/A, P?O?: N/A, K?O: N/A	Supports nodulation; seed quality
4	K top-up (if needed)	35	MOP or SOP	60 kg/ha (product)	N: N/A, P?O?: N/A, K?O: 20	Prefer SOP on chloride-sensitive soils

Nutrient requirements

<u>Nutrient</u>	<u>Stage</u>	<u>Amount</u>	<u>Unit</u>
N	Basal	10	kg/ha
P?O?	Basal	30	kg/ha
K?O	Basal	20	kg/ha
N	Topdress	0	kg/ha
P?O?	Topdress	10	kg/ha
K?O	Topdress	20	kg/ha
N	Pod_fill	0	kg/ha
P?O?	Pod_fill	0	kg/ha
K?O	Pod_fill	20	kg/ha

Field images



Varieties

<u>Name</u>	<u>Country</u>	<u>Maturity (days)</u>	<u>Traits</u>
Sweet Lupin	KE	130	Low-alkaloid; grain quality
Narrow-leaf lupin (local)	ET	110	Early; drought tolerant

Fertilizer recommendations

<u>Stage</u>	<u>Product</u>	<u>Rate</u>	<u>Notes</u>
Basal	NPK 15-15-15	50	
Basal	TSP 0-46-0 (or SSP)	65	Starter P; banded
Vegetative	Gypsum	100	Supplies Ca and S; supports nodulation
Pod fill	Sulfate of potash	50	Only if K is deficient

Pests and diseases

<u>Name</u>	<u>Type</u>	<u>Symptoms</u>	<u>Management</u>
Aphids	pest	Honeydew; virus risk; leaf curl	Early monitoring; conserve predators; threshold sprays
Pod borers (<i>Helicoverpa</i> spp.)	pest	Pod/seed feeding	Flower-pod scouting; targeted control if needed
Anthracnose	disease	Stem crooks; lesions; dieback	Clean seed; avoid spread; resistant types; fungicide if severe
Sclerotinia stem rot	disease	Wilting; white mycelium; sclerotia	Rotation; canopy airflow; targeted sprays
Root rots (<i>Rhizoctonia</i> / <i>Phytophthora</i>)	disease	Damping-off; root lesions	Well-drained fields; avoid compaction; seed treatments
Weed competition	pest	Stunting; yield loss	Pre/post-emergence control; narrow rows

Yields

<u>System</u>	<u>Typical</u>	<u>Min</u>	<u>Max</u>	<u>Notes</u>
rainfed highland	1.5	0.8	2.5	Inoculation + P improve yields

Season calendars

<u>Country</u>	<u>Region</u>	<u>Planting</u>	<u>Harvest</u>
KE	Highlands	May–Jun	Sep–Nov
KE	Highlands (long rains)	Mar–Apr	Aug–Sep
KE	Highlands (short rains)	Oct–Nov	Feb–Mar

Region suitability

<u>Country</u>	<u>Region</u>	<u>Suitability</u>
KE	Highlands	Medium
KE	Highlands & cool mid-altitudes	High
KE	Hot lowlands (>28 °C mean)	Low
TZ	Northern highlands	High

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