

FarmLens Ltd

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



Crop details

Velvet Bean

Mucuna pruriens

Family: Fabaceae

Categories

Legumes & Pulses

Forages & Fodder

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Quick stats

Family	Fabaceae
Typical harvest	2.0 t/ha
Varieties	1
Pests and diseases	2
Seasons	1

Crop profile

Growth habit	annual
Days to harvest	150
Main uses	Cover crop, forage, and green manure for soil fertility improvement.
Pollination	insect
Origin and where it grows	Used in tropical East African conservation agriculture and fodder systems.

Weather, soil and spacing

Best temperature	20 - 32 °C
Rainfall	450 - 800 mm/yr
Altitude	800 - 2800 m
Best pH	6 - 7
Soil type	Fertile well-drained loam rich in organic matter.
Row spacing	40 cm
Plant spacing	20 cm
Planting depth	1.5 cm
Seed rate	4 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 150 days after planting.

Main use: Farmers mostly grow this crop for cover crop, forage, and green manure for soil fertility improvement..

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

Where it grows: Used in tropical East African conservation agriculture and fodder systems.. Grouped under: Legumes & Pulses, Forages & Fodder.

Best climate: 20 - 32 °C; 450 - 800 mm/yr; up to about 2800 m a.s.l.

Soil: Best at pH 6 - 7; fertile well-drained loam rich in organic matter..

Farmer guide (Mwongozo wa Mkulima)

<u>Planting</u>	Establish Velvet Bean in a fine weed-free seedbed and keep emergence moisture steady.
<u>Transplanting</u>	Direct seed or transplant depending on production system.
<u>Irrigation</u>	Maintain even soil moisture for steady Velvet Bean growth and quality.
<u>Fertigation</u>	Use split nitrogen and potassium for market-quality Velvet Bean.
<u>Pest scouting</u>	Scout Velvet Bean weekly for chewing pests, sap suckers, and foliar diseases.
<u>Pruning and training</u>	No pruning required unless sanitation or staking is needed.
<u>Harvest</u>	Harvest Velvet Bean at market maturity for the intended use.
<u>Postharvest</u>	Cool and shade Velvet Bean promptly after harvest.

Nutrient schedule (Mbolea kwa Hatua)

#	Stage	DAP	Product	Rate	Targets (kg/ha)	Notes
1	Basal	0	NPK 17-17-17	200 kg/ha	N: 34, P ₂ O ₅ : 34, K ₂ O: 34	Basal fertilizer for Velvet Bean.
2	Topdress	21	CAN	100 kg/ha	N: 26, P ₂ O ₅ : N/A, K ₂ O: N/A	Support active Velvet Bean vegetative growth.

Nutrient requirements

Nutrient	Stage	Amount	Unit
N	Basal	35	kg/ha
P ₂ O ₅	Basal	30	kg/ha
K ₂ O	Basal	35	kg/ha
N	Topdress	25	kg/ha
K ₂ O	Topdress	20	kg/ha

Field images



Varieties

Name	Country	Maturity (days)	Traits
Mucuna Cover Type	KE	150	Fast biomass cover and nitrogen fixation.

Fertilizer recommendations

<u>Stage</u>	<u>Product</u>	<u>Rate</u>	<u>Notes</u>
Planting	Well-rotted manure	5000	Improve soil structure before Velvet Bean planting.
Vegetative growth	CAN	100	Split topdress for Velvet Bean production.

Pests and diseases

<u>Name</u>	<u>Type</u>	<u>Symptoms</u>	<u>Management</u>
Aphids	pest	Leaf curling and sticky honeydew.	Scout frequently and use selective control when pressure builds.
Leaf spot complex	disease	Necrotic spotting and reduced leaf quality.	Improve airflow, rotate crops, and avoid prolonged leaf wetness.

Yields

<u>System</u>	<u>Typical</u>	<u>Min</u>	<u>Max</u>	<u>Notes</u>
Managed fresh-market production	2	1.4	3	Typical marketable Velvet Bean yield under irrigated or well-managed conditions.

Season calendars

<u>Country</u>	<u>Region</u>	<u>Planting</u>	<u>Harvest</u>
KE	Highland Vegetable Zones	Mar-Apr or Oct-Nov	Year-round depending on irrigation

Region suitability

<u>Country</u>	<u>Region</u>	<u>Suitability</u>
KE	Highland Vegetable Zones	High

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