

# FarmLens Ltd

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



Crop details

## Napier Grass

*Cenchrus purpureus* (syn. *Pennisetum purpureum*)

Family: Poaceae

Categories

Forages & Fodder

Generated: 2026-04-11 10:15

### Quick stats

<b>Family</b>	Poaceae
<b>Typical harvest</b>	57.5 t/ha
<b>Varieties</b>	2
<b>Pests and diseases</b>	3
<b>Seasons</b>	1

### Crop profile

<b>Growth habit</b>	perennial
<b>Days to harvest</b>	120-365+
<b>Main uses</b>	Forage (cut-and-carry)
<b>Pollination</b>	wind
<b>Origin and where it grows</b>	Africa; tropics

### Weather, soil and spacing

<b>Best temperature</b>	20 - 30 °C
<b>Rainfall</b>	1000 - 2000 mm/yr
<b>Altitude</b>	0 - 2000 m
<b>Best pH</b>	5.5 - 6.8
<b>Soil type</b>	Fertile loams; tolerates many soils
<b>Row spacing</b>	100 cm
<b>Plant spacing</b>	50 cm
<b>Planting depth</b>	5 cm
<b>Seed rate</b>	80 kg/ha

### Simple notes for farmers

**About the crop:** This crop is perennial; once planted it can keep producing for many years. Harvest typically starts about 120-365+ days after planting.

**Main use:** Farmers mostly grow this crop for forage (cut-and-carry).

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

**Where it grows:** Africa; tropics. Grouped under: Forages & Fodder.

**Best climate:** 20 - 30 °C; 1000 - 2000 mm/yr; up to about 2000 m a.s.l.

**Soil:** Best at pH 5.5 - 6.8; fertile loams; tolerates many soils.

### Farmer guide (Mwongozo wa Mkulima)

<b><u>Planting</u></b>	Plant canes/splits; harvest every 6–8 weeks at 1–1.5 m height.
<b><u>Transplanting</u></b>	Not transplanted.
<b><u>Irrigation</u></b>	Maintain moisture during establishment and grain filling where irrigation is used.
<b><u>Fertigation</u></b>	Split nitrogen between planting and early vegetative growth where moisture allows.
<b><u>Pest scouting</u></b>	Scout Napier Grass for aphids, armyworms, foliar diseases, and lodging risk.
<b><u>Pruning and training</u></b>	No pruning needed; keep weeds low during early establishment.
<b><u>Harvest</u></b>	Harvest Napier Grass when grains harden and heads dry down evenly.
<b><u>Postharvest</u></b>	Dry grain well before threshing and storage.

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

<b><u>#</u></b>	<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	Establishment	0	NPK 17-17-17	150 kg/ha	N: 18, P <sub>2</sub> O <sub>5</sub> : 46, K <sub>2</sub> O: N/A	Starter fertilizer for Napier Grass establishment.
2	After first cut	60	Urea	100 kg/ha	N: 26, P <sub>2</sub> O <sub>5</sub> : N/A, K <sub>2</sub> O: N/A	Topdress Napier Grass before rain or irrigation.

### **Nutrient requirements**

<b><u>Nutrient</u></b>	<b><u>Stage</u></b>	<b><u>Amount</u></b>	<b><u>Unit</u></b>
N	Basal	60	kg/ha
P <sub>2</sub> O <sub>5</sub>	Basal	40	kg/ha
K <sub>2</sub> O	Basal	60	kg/ha
N	Topdress	60	kg/ha
K <sub>2</sub> O	Topdress	40	kg/ha

### **Field images**



### **Varieties**

<b><u>Name</u></b>	<b><u>Country</u></b>	<b><u>Maturity (days)</u></b>	<b><u>Traits</u></b>
Kakamega 1	KE	180	High biomass; disease tolerant

<u>Name</u>	<u>Country</u>	<u>Maturity (days)</u>	<u>Traits</u>
Pakchong 1	KE	80	High biomass forage with frequent cutting.

### **Fertilizer recommendations**

<u>Stage</u>	<u>Product</u>	<u>Rate</u>	<u>Notes</u>
Planting	DAP	100	Basal phosphorus for Napier Grass establishment.
Topdress	CAN	100	Nitrogen support for Napier Grass vegetative growth.

### **Pests and diseases**

<u>Name</u>	<u>Type</u>	<u>Symptoms</u>	<u>Management</u>
Napier stunt	disease	Stunting; yellowing	Rogue infected clumps; clean planting material
Aphids	pest	Sap sucking on leaves and grain heads.	Scout early, preserve beneficial insects, and control when thresholds are exceeded.
Leaf rust	disease	Rust pustules on leaves reducing grain fill.	Use tolerant varieties, rotation, and timely disease control.

### **Yields**

<u>System</u>	<u>Typical</u>	<u>Min</u>	<u>Max</u>	<u>Notes</u>
cut-and-carry	80	40	120	Fresh biomass/year
Rainfed smallholder production	35	21	59.5	Typical grain yield under practical Napier Grass management.

### **Season calendars**

<u>Country</u>	<u>Region</u>	<u>Planting</u>	<u>Harvest</u>
KE	Highland Grain Zones	Mar-Apr	Jul-Aug

### **Region suitability**

<u>Country</u>	<u>Region</u>	<u>Suitability</u>
KE	Dairy belts	High
KE	Highland Grain Zones	Medium

Source: **FarmLens Ltd** - [farmlens.africa](http://farmlens.africa) and [app.farmlens.africa](http://app.farmlens.africa). Headquarters: Nairobi, Kenya. This guide was generated from the FarmLens database.