FarmLens Ltd

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

Crop details

Canola / Rapeseed

Brassica napus

Family: Brassicaceae

Categories

Oil & Industrial

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Quick stats

Family	Brassicaceae
Typical harvest	2.6 t/ha
Varieties	48
Pests and diseases	80
Seasons	48

Crop profile

Growth habit	annual
Days to harvest	110
Main uses	Oilseed for edible oil and high-protein meal; sometimes used as forage or green manure.
Pollination	insect
Origin and where it grows	Cool-season oilseed widely grown in temperate and high-altitude subtropical regions.

Weather, soil and spacing

Best temperature	12 - 22 °C
Rainfall	450 - 750 mm/yr
Altitude	800 - 2600 m
Best pH	6 - 7.5
Soil type	Deep, well-drained loams or clay loams with good water-holding capacity and moderate fertility.
Row spacing	30 cm
Plant spacing	10 cm
Planting depth	2 cm
Seed rate	3 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 110 days after planting.

Main use: Farmers mostly grow this crop for oilseed for edible oil and high-protein meal; sometimes used as forage or green manure..

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

Where it grows: Cool-season oilseed widely grown in temperate and high-altitude subtropical regions.. Grouped under: Oil & Industrial.

Best climate: 12 - 22 °C; 450 - 750 mm/yr; up to about 2600 m a.s.l.

Soil: Best at pH 6 - 7.5; deep, well-drained loams or clay loams with good water-holding capacity and moderate fertility..

Farmer guide (Mwongozo wa Mkulima)

Planting	Direct drill into a fine, firm seedbed when soils are moist and cool. Seed shallow (1.5–2 cm) for uniform emergence.
Transplanting	Transplanting is rare; direct seeding is recommended to avoid root check.
Irrigation	Aim for adequate soil moisture from emergence to pod fill. Water stress at flowering and early podding sharply reduces yield.
Fertigation	Where fertigation is available, split N into small doses up to early flowering. Avoid heavy late N that delays maturity and raises lodging risk.
Pest scouting	Scout regularly for flea beetles, aphids, diamondback moth, sclerotinia stem rot and blackleg. Monitor insect thresholds and disease risk.
Pruning and training	No pruning; ensure even stands and avoid over-thick crops that are prone to lodging and disease.
Harvest	Harvest when most pods are firm and dull, with seeds dark and ?10–12% moisture. Swathing or direct combining may be used depending on system.
Postharvest	Dry grain promptly to safe storage moisture (~8–9%). Clean sample to remove green plant pieces and avoid heating in storage.

Nutrient schedule (Mbolea kwa Hatua)

#	Stage	DAP	Product	Rate	Targets (kg/ha)	Notes
1	Basal at planting	0	NPK 17-17-17	120 kg/ha	N: 20, P?O?: 20, K?O: 20	Drill or band apply slightly below and to the side of the seed row to avoid seed burn.
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2	Early topdress	25	CAN 26% N	100 kg/ha	N: 26, P?O?: 0, K?O: 0	Broadcast or band along rows when plants are at 4–6 leaf stage on moist soil.
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2	Early topdress	25	CAN 26% N	100 kg/ha	N: 26, P?O?: 0, K?O: 0	Broadcast or band along rows when plants are at 4–6 leaf stage on moist soil.
3	Pre-flowering K boost	45	MOP (KCl)	60 kg/ha	N: 0, P?O?: 0, K?O: 36	Apply where soils are low in K or yield targets are high; time before bud initiation.
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Nutrient requirements

Nutrient	Stage	Amount	Unit
N	Basal	40	kg/ha
P?O?	Basal	30	kg/ha
K?O	Basal	30	kg/ha
N	Topdress_early	40	kg/ha
P?O?	Topdress_early	0	kg/ha
K?O	Topdress_early	20	kg/ha
N	Pre_flowering	20	kg/ha
P?O?	Pre_flowering	0	kg/ha
K?O	Pre_flowering	20	kg/ha
N	Basal	40	kg/ha
P?O?	Basal	30	kg/ha
K?O	Basal	30	kg/ha
N	Topdress_early	40	kg/ha
P?O?	Topdress_early	0	kg/ha
K?O	Topdress_early	20	kg/ha
N	Pre_flowering	20	kg/ha
P?O?	Pre_flowering	0	kg/ha
K?O	Pre_flowering	20	kg/ha
N	Basal	40	kg/ha
P?O?	Basal	30	kg/ha
K?O	Basal	30	kg/ha
N	Topdress_early	40	kg/ha
P?O?	Topdress_early	0	kg/ha
K?O	Topdress_early	20	kg/ha
N	Pre_flowering	20	kg/ha
P?O?	Pre_flowering	0	kg/ha

Nutrient	Stage	Amount	Unit
K?O	Pre_flowering	20	kg/ha
N	Basal	40	kg/ha
P?O?	Basal	30	kg/ha
K?O	Basal	30	kg/ha
N	Topdress_early	40	kg/ha
P?O?	Topdress_early	0	kg/ha
K?O	Topdress_early	20	kg/ha
N	Pre_flowering	20	kg/ha
P?O?	Pre_flowering	0	kg/ha
K?O	Pre_flowering	20	kg/ha
N	Basal	40	kg/ha
P?O?	Basal	30	kg/ha
K?O	Basal	30	kg/ha
N	Topdress_early	40	kg/ha
P?O?	Topdress_early	0	kg/ha
K?O	Topdress_early	20	kg/ha
N	Pre_flowering	20	kg/ha
P?O?	Pre_flowering	0	kg/ha
K?O	Pre_flowering	20	kg/ha
N	Basal	40	kg/ha
P?O?	Basal	30	kg/ha
K?O	Basal	30	kg/ha
N	Topdress_early	40	kg/ha
P?O?	Topdress_early	0	kg/ha
K?O	Topdress_early	20	kg/ha
N	Pre_flowering	20	kg/ha
P?O?	Pre_flowering	0	kg/ha
K?O	Pre_flowering	20	kg/ha
N	Basal	40	kg/ha
P?O?	Basal	30	kg/ha

Nutrient	Stage	Amount	Unit
K?O	Basal	30	kg/ha
N	Topdress_early	40	kg/ha
P?O?	Topdress_early	0	kg/ha
K?O	Topdress_early	20	kg/ha
N	Pre_flowering	20	kg/ha
P?O?	Pre_flowering	0	kg/ha
K?O	Pre_flowering	20	kg/ha
N	Basal	40	kg/ha
P?O?	Basal	30	kg/ha
K?O	Basal	30	kg/ha
N	Topdress_early	40	kg/ha
P?O?	Topdress_early	0	kg/ha
K?O	Topdress_early	20	kg/ha
N	Pre_flowering	20	kg/ha
P?O?	Pre_flowering	0	kg/ha
K?O	Pre_flowering	20	kg/ha
N	Basal	40	kg/ha
P?O?	Basal	30	kg/ha
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N	Topdress_early	40	kg/ha
P?O?	Topdress_early	0	kg/ha
K?O	Topdress_early	20	kg/ha
N	Pre_flowering	20	kg/ha
P?O?	Pre_flowering	0	kg/ha
K?O	Pre_flowering	20	kg/ha
N	Basal	40	kg/ha
P?O?	Basal	30	kg/ha
K?O	Basal	30	kg/ha
N	Topdress_early	40	kg/ha
P?O?	Topdress_early	0	kg/ha

Nutrient	Stage	Amount	Unit
K?O	Topdress_early	20	kg/ha
N	Pre_flowering	20	kg/ha
P?O?	Pre_flowering	0	kg/ha
K?O	Pre_flowering	20	kg/ha
N	Basal	40	kg/ha
P?O?	Basal	30	kg/ha
K?O	Basal	30	kg/ha
N	Topdress_early	40	kg/ha
P?O?	Topdress_early	0	kg/ha
K?O	Topdress_early	20	kg/ha
N	Pre_flowering	20	kg/ha
P?O?	Pre_flowering	0	kg/ha
K?O	Pre_flowering	20	kg/ha
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N	Pre_flowering	20	kg/ha
P?O?	Pre_flowering	0	kg/ha
K?O	Pre_flowering	20	kg/ha
N	Basal	40	kg/ha
P?O?	Basal	30	kg/ha
K?O	Basal	30	kg/ha
N	Topdress_early	40	kg/ha
P?O?	Topdress_early	0	kg/ha
K?O	Topdress_early	20	kg/ha
N	Pre_flowering	20	kg/ha
P?O?	Pre_flowering	0	kg/ha
K?O	Pre_flowering	20	kg/ha

Field images

Varieties

Name	Country	Maturity (days)	Traits
Mid-altitude canola hybrid	KE	105	High oil content and good standability; suited to cool highland environments.
Early-maturing rapeseed type	TZ	95	Earlier flowering and harvest for shorter rainy seasons.
Local rapeseed selection	UG	110	Adapted to mid- and high-altitude smallholder systems, used for oil and feed.
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Fertilizer recommendations

Stage	Product	Rate	Notes
Basal	NPK 17-17-17	120	Apply at seeding in band or drill; adjust downwards on fertile soils.
Early vegetative	CAN 26% N	100	At 4–6 leaf stage when crop is well established.
Pre-flowering	MOP (KCl)	60	Apply in high-potential or K-deficient fields before flowering.

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Basal	NPK 17-17-17	120	Apply at seeding in band or drill; adjust downwards on fertile soils.
Early vegetative	CAN 26% N	100	At 4–6 leaf stage when crop is well established.
Pre-flowering	MOP (KCl)	60	Apply in high-potential or K-deficient fields before flowering.
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Pests and diseases

Name	Type	Symptoms	Management
Flea beetles / leaf-feeding beetles	pest	Shot holes in cotyledons and young leaves, severe damage can thin stands.	Sow into warm, moist soils for rapid emergence, maintain good seedbed preparation; treat seed where pressure is high.
Aphids	pest	Colonies on stems and pods, honeydew and sooty mould; can reduce pod fill and transmit viruses.	Encourage natural enemies, monitor thresholds, avoid unnecessary insecticides that harm beneficials.
Diamondback moth / caterpillars	pest	Feeding on leaves, buds and pods; skeletonised leaves and damaged pods in heavy infestations.	Scout flowering and podding crops, conserve natural enemies, rotate crops and manage volunteers.
Blackleg (phoma)	disease	Lesions on leaves and stems, canker at stem base leading to lodging and yield loss.	Use resistant varieties, rotate with non-brassica crops, manage infected residues.
Sclerotinia stem rot (white mould)	disease	White cottony growth on stems, bleached lesions, hollow stems with black sclerotia inside.	Avoid very dense canopies, rotate with non-hosts and manage broadleaf weeds; consider fungicide where risk is high.
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Yields

System	Typical	Min	Max	Notes
Low-input rainfed (grain)	1.2	0.8	1.8	Minimal fertilizer, basic weed control, adapted open-pollinated varieties in smallholder conditions.
Managed rainfed (grain)	2.5	1.5	3	Improved varieties/hybrids, balanced fertilization and good weed and pest management.
Intensive high-input (grain)	4	3	5	High-yielding hybrids under cool, moist conditions with optimal fertility and crop protection.
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Season calendars

Country	Region	Planting	Harvest

KE	Cool highlands and upper mid-altitudes	Early in the cool rainy season (often at start of long rains) to avoid heat at flowering.	About 3.5–4 months afte
TZ	Southern and northern highlands	With onset of main cool rains, avoiding very late sowing that pushes flowering into hot, dry spells.	Dry season harvest once
UG	Cooler high-altitude and mid-altitude zones	At onset of main rains during cooler months in highlands.	Roughly 3.5–4 months a
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TZ	Southern and northern highlands	With onset of main cool rains, avoiding very late sowing that pushes flowering into hot, dry spells.	Dry season harvest once
UG	Cooler high-altitude and mid-altitude zones	At onset of main rains during cooler months in highlands.	Roughly 3.5–4 months a

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Region suitability

Country	Region	Suitability
KE	Central and Rift Valley highlands with cool seasons	High
TZ	Southern highlands and northern cool highlands	High
UG	Highland and cool mid-altitude belts with reliable rainfall	High