FarmLens Ltd

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

Crop details

Alfalfa Lucerne

Medicago sativa

Family: Fabaceae

Categories

Forages & Fodder

Generated: 2026-04-13 11:17

Quick stats

Family	Fabaceae
Typical harvest	9.0 t/ha
Varieties	48
Pests and diseases	96
Seasons	48

Crop profile

Growth habit	perennial
Days to harvest	365
Main uses	High-protein forage: grazed pasture, hay, silage and haylage; also soil-improving ley.
Pollination	insect
Origin and where it grows	Temperate to subtropical forage crop grown under irrigation or reliable rainfall, often in cooler, drier highlands.

Weather, soil and spacing

Best temperature	15 - 25 °C
Rainfall	500 - 800 mm/yr
Altitude	800 - 2600 m
Best pH	6.5 - 7.5
Soil type	Deep, well-drained loams or sandy loams with good structure; sensitive to high acidity and waterlogging.
Row spacing	20 cm
Plant spacing	5 cm
Planting depth	1.5 cm
Seed rate	15 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 365 days after planting.

Main use: Farmers mostly grow this crop for high-protein forage: grazed pasture, hay, silage and haylage; also soil-improving ley..

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

Where it grows: Temperate to subtropical forage crop grown under irrigation or reliable rainfall, often in cooler, drier highlands.. Grouped under: Forages & Fodder.

Best climate: 15 - 25 °C; 500 - 800 mm/yr; up to about 2600 m a.s.l.

Soil: Best at pH 6.5 - 7.5; deep, well-drained loams or sandy loams with good structure; sensitive to high acidity and waterlogging..

Farmer guide (Mwongozo wa Mkulima)

Planting	Sow into a firm, fine seedbed with good moisture. Drill shallow (1–2 cm) or broadcast and lightly cover. Ensure seed is inoculated with the correct Rhizobium strain.
Transplanting	Usually direct seeded, not transplanted. Avoid cloddy or fluffy seedbeds that bury seed too deep.
Irrigation	Maintain adequate moisture during establishment. Once established, alfalfa is drought-tolerant but yields best with regular moisture between cuts.
Fertigation	Focus fertigation on P, K and S; avoid excess N since alfalfa fixes its own nitrogen when well nodulated.
Pest scouting	Scout for leafhoppers, aphids, weevils and root rots. Check crown and taproot health in older stands.
Pruning and training	Manage by cutting/grazing. Avoid very close grazing that damages crowns; allow regrowth to reach early bud stage before repeated cutting where possible.
Harvest	For hay, cut at early bloom (10–20% bloom) balancing yield and quality. For high-quality dairy feed, cut at late vegetative to early bud.
Postharvest	Dry hay gently to preserve leaves (most of the protein is in leaves). Avoid over-curing and leaf shatter; bale at safe moisture and store under cover.

Nutrient schedule (Mbolea kwa Hatua)

#	Stage	DAP	Product	Rate	Targets (kg/ha)	Notes
1	Basal at planting	0	NPK 10-20-20 (or similar) + lime/compost as needed	150 kg/ha	N: 15, P?O?: 30, K?O: 30	Apply and incorporate into top 10–15 cm before sowing; adjust lime separately based on soil test.
1	Basal at planting	0	NPK 10-20-20 (or similar) + lime/compost as needed	150 kg/ha	N: 15, P?O?: 30, K?O: 30	Apply and incorporate into top 10–15 cm before sowing; adjust lime separately based on soil test.
1	Basal at planting	0	NPK 10-20-20 (or similar) + lime/compost as needed	150 kg/ha	N: 15, P?O?: 30, K?O: 30	Apply and incorporate into top 10–15 cm before sowing; adjust lime separately based on soil test.
1	Basal at planting	0	NPK 10-20-20 (or similar) + lime/compost as needed	150 kg/ha	N: 15, P?O?: 30, K?O: 30	Apply and incorporate into top 10–15 cm before sowing; adjust lime separately based on soil test.
1	Basal at planting	0	NPK 10-20-20 (or similar) + lime/compost as needed	150 kg/ha	N: 15, P?O?: 30, K?O: 30	Apply and incorporate into top 10–15 cm before sowing; adjust lime separately based on soil test.
1	Basal at planting	0	NPK 10-20-20 (or similar) + lime/compost as needed	150 kg/ha	N: 15, P?O?: 30, K?O: 30	Apply and incorporate into top 10–15 cm before sowing; adjust lime separately based on soil test.

#	Stage	DAP	Product	Rate	Targets (kg/ha)	Notes
1	Basal at planting	0	NPK 10-20-20 (or similar) + lime/compost as needed	150 kg/ha	N: 15, P?O?: 30, K?O: 30	Apply and incorporate into top 10–15 cm before sowing; adjust lime separately based on soil test.
1	Basal at planting	0	NPK 10-20-20 (or similar) + lime/compost as needed	150 kg/ha	N: 15, P?O?: 30, K?O: 30	Apply and incorporate into top 10–15 cm before sowing; adjust lime separately based on soil test.
1	Basal at planting	0	NPK 10-20-20 (or similar) + lime/compost as needed	150 kg/ha	N: 15, P?O?: 30, K?O: 30	Apply and incorporate into top 10–15 cm before sowing; adjust lime separately based on soil test.
1	Basal at planting	0	NPK 10-20-20 (or similar) + lime/compost as needed	150 kg/ha	N: 15, P?O?: 30, K?O: 30	Apply and incorporate into top 10–15 cm before sowing; adjust lime separately based on soil test.
1	Basal at planting	0	NPK 10-20-20 (or similar) + lime/compost as needed	150 kg/ha	N: 15, P?O?: 30, K?O: 30	Apply and incorporate into top 10–15 cm before sowing; adjust lime separately based on soil test.
1	Basal at planting	0	NPK 10-20-20 (or similar) + lime/compost as needed	150 kg/ha	N: 15, P?O?: 30, K?O: 30	Apply and incorporate into top 10–15 cm before sowing; adjust lime separately based on soil test.
1	Basal at planting	0	NPK 10-20-20 (or similar) + lime/compost as needed	150 kg/ha	N: 15, P?O?: 30, K?O: 30	Apply and incorporate into top 10–15 cm before sowing; adjust lime separately based on soil test.
1	Basal at planting	0	NPK 10-20-20 (or similar) + lime/compost as needed	150 kg/ha	N: 15, P?O?: 30, K?O: 30	Apply and incorporate into top 10–15 cm before sowing; adjust lime separately based on soil test.
1	Basal at planting	0	NPK 10-20-20 (or similar) + lime/compost as needed	150 kg/ha	N: 15, P?O?: 30, K?O: 30	Apply and incorporate into top 10–15 cm before sowing; adjust lime separately based on soil test.
1	Basal at planting	0	NPK 10-20-20 (or similar) + lime/compost as needed	150 kg/ha	N: 15, P?O?: 30, K?O: 30	Apply and incorporate into top 10–15 cm before sowing; adjust lime separately based on soil test.
2	First production topdress	90	NPK 0-20-20 or equivalent (PK blend)	100 kg/ha	N: 0, P?O?: 20, K?O: 20	Apply after first or second cut, ideally just before rainfall or light irrigation.
2	First production topdress	90	NPK 0-20-20 or equivalent (PK blend)	100 kg/ha	N: 0, P?O?: 20, K?O: 20	Apply after first or second cut, ideally just before rainfall or light irrigation.
2	First production topdress	90	NPK 0-20-20 or equivalent (PK blend)	100 kg/ha	N: 0, P?O?: 20, K?O: 20	Apply after first or second cut, ideally just before rainfall or light irrigation.

#	Stage	DAP	Product	Rate	Targets (kg/ha)	Notes
2	First production topdress	90	NPK 0-20-20 or equivalent (PK blend)	100 kg/ha	N: 0, P?O?: 20, K?O: 20	Apply after first or second cut, ideally just before rainfall or light irrigation.
2	First production topdress	90	NPK 0-20-20 or equivalent (PK blend)	100 kg/ha	N: 0, P?O?: 20, K?O: 20	Apply after first or second cut, ideally just before rainfall or light irrigation.
2	First production topdress	90	NPK 0-20-20 or equivalent (PK blend)	100 kg/ha	N: 0, P?O?: 20, K?O: 20	Apply after first or second cut, ideally just before rainfall or light irrigation.
2	First production topdress	90	NPK 0-20-20 or equivalent (PK blend)	100 kg/ha	N: 0, P?O?: 20, K?O: 20	Apply after first or second cut, ideally just before rainfall or light irrigation.
2	First production topdress	90	NPK 0-20-20 or equivalent (PK blend)	100 kg/ha	N: 0, P?O?: 20, K?O: 20	Apply after first or second cut, ideally just before rainfall or light irrigation.
2	First production topdress	90	NPK 0-20-20 or equivalent (PK blend)	100 kg/ha	N: 0, P?O?: 20, K?O: 20	Apply after first or second cut, ideally just before rainfall or light irrigation.
2	First production topdress	90	NPK 0-20-20 or equivalent (PK blend)	100 kg/ha	N: 0, P?O?: 20, K?O: 20	Apply after first or second cut, ideally just before rainfall or light irrigation.
2	First production topdress	90	NPK 0-20-20 or equivalent (PK blend)	100 kg/ha	N: 0, P?O?: 20, K?O: 20	Apply after first or second cut, ideally just before rainfall or light irrigation.
2	First production topdress	90	NPK 0-20-20 or equivalent (PK blend)	100 kg/ha	N: 0, P?O?: 20, K?O: 20	Apply after first or second cut, ideally just before rainfall or light irrigation.
2	First production topdress	90	NPK 0-20-20 or equivalent (PK blend)	100 kg/ha	N: 0, P?O?: 20, K?O: 20	Apply after first or second cut, ideally just before rainfall or light irrigation.
2	First production topdress	90	NPK 0-20-20 or equivalent (PK blend)	100 kg/ha	N: 0, P?O?: 20, K?O: 20	Apply after first or second cut, ideally just before rainfall or light irrigation.
2	First production topdress	90	NPK 0-20-20 or equivalent (PK blend)	100 kg/ha	N: 0, P?O?: 20, K?O: 20	Apply after first or second cut, ideally just before rainfall or light irrigation.
2	First production topdress	90	NPK 0-20-20 or equivalent (PK blend)	100 kg/ha	N: 0, P?O?: 20, K?O: 20	Apply after first or second cut, ideally just before rainfall or light irrigation.

#	Stage	DAP	Product	Rate	Targets (kg/ha)	Notes
3	Mid-season K boost	150	MOP (KCl) or sulfate of potash (where Cl-sensitive mixes)	80 kg/ha	N: 0, P?O?: 0, K?O: 48	Apply to heavy-cut systems where many hay cuts remove large amounts of K.
3	Mid-season K boost	150	MOP (KCl) or sulfate of potash (where Cl-sensitive mixes)	80 kg/ha	N: 0, P?O?: 0, K?O: 48	Apply to heavy-cut systems where many hay cuts remove large amounts of K.
3	Mid-season K boost	150	MOP (KCl) or sulfate of potash (where Cl-sensitive mixes)	80 kg/ha	N: 0, P?O?: 0, K?O: 48	Apply to heavy-cut systems where many hay cuts remove large amounts of K.
3	Mid-season K boost	150	MOP (KCl) or sulfate of potash (where Cl-sensitive mixes)	80 kg/ha	N: 0, P?O?: 0, K?O: 48	Apply to heavy-cut systems where many hay cuts remove large amounts of K.
3	Mid-season K boost	150	MOP (KCl) or sulfate of potash (where Cl-sensitive mixes)	80 kg/ha	N: 0, P?O?: 0, K?O: 48	Apply to heavy-cut systems where many hay cuts remove large amounts of K.
3	Mid-season K boost	150	MOP (KCl) or sulfate of potash (where Cl-sensitive mixes)	80 kg/ha	N: 0, P?O?: 0, K?O: 48	Apply to heavy-cut systems where many hay cuts remove large amounts of K.
3	Mid-season K boost	150	MOP (KCl) or sulfate of potash (where Cl-sensitive mixes)	80 kg/ha	N: 0, P?O?: 0, K?O: 48	Apply to heavy-cut systems where many hay cuts remove large amounts of K.
3	Mid-season K boost	150	MOP (KCl) or sulfate of potash (where Cl-sensitive mixes)	80 kg/ha	N: 0, P?O?: 0, K?O: 48	Apply to heavy-cut systems where many hay cuts remove large amounts of K.
3	Mid-season K boost	150	MOP (KCl) or sulfate of potash (where Cl-sensitive mixes)	80 kg/ha	N: 0, P?O?: 0, K?O: 48	Apply to heavy-cut systems where many hay cuts remove large amounts of K.
3	Mid-season K boost	150	MOP (KCl) or sulfate of potash (where Cl-sensitive mixes)	80 kg/ha	N: 0, P?O?: 0, K?O: 48	Apply to heavy-cut systems where many hay cuts remove large amounts of K.
3	Mid-season K boost	150	MOP (KCl) or sulfate of potash (where Cl-sensitive mixes)	80 kg/ha	N: 0, P?O?: 0, K?O: 48	Apply to heavy-cut systems where many hay cuts remove large amounts of K.
3	Mid-season K boost	150	MOP (KCl) or sulfate of potash (where Cl-sensitive mixes)	80 kg/ha	N: 0, P?O?: 0, K?O: 48	Apply to heavy-cut systems where many hay cuts remove large amounts of K.
3	Mid-season K boost	150	MOP (KCl) or sulfate of potash (where Cl-sensitive mixes)	80 kg/ha	N: 0, P?O?: 0, K?O: 48	Apply to heavy-cut systems where many hay cuts remove large amounts of K.

#	Stage	DAP	Product	Rate	Targets (kg/ha)	Notes
3	Mid-season K boost	150	MOP (KCl) or sulfate of potash (where Cl-sensitive mixes)	80 kg/ha	N: 0, P?O?: 0, K?O: 48	Apply to heavy-cut systems where many hay cuts remove large amounts of K.
3	Mid-season K boost	150	MOP (KCl) or sulfate of potash (where Cl-sensitive mixes)	80 kg/ha	N: 0, P?O?: 0, K?O: 48	Apply to heavy-cut systems where many hay cuts remove large amounts of K.
3	Mid-season K boost	150	MOP (KCl) or sulfate of potash (where Cl-sensitive mixes)	80 kg/ha	N: 0, P?O?: 0, K?O: 48	Apply to heavy-cut systems where many hay cuts remove large amounts of K.

Nutrient requirements

Nutrient	Stage	Amount	Unit
N	Basal	10	kg/ha
P?O?	Basal	40	kg/ha
K?O	Basal	60	kg/ha
N	Mid_season	0	kg/ha
P?O?	Mid_season	20	kg/ha
K?O	Mid_season	60	kg/ha
N	Late_season	0	kg/ha
P?O?	Late_season	10	kg/ha
K?O	Late_season	30	kg/ha
N	Basal	10	kg/ha
P?O?	Basal	40	kg/ha
K?O	Basal	60	kg/ha
N	Mid_season	0	kg/ha
P?O?	Mid_season	20	kg/ha
K?O	Mid_season	60	kg/ha
N	Late_season	0	kg/ha
P?O?	Late_season	10	kg/ha
K?O	Late_season	30	kg/ha
N	Basal	10	kg/ha
P?O?	Basal	40	kg/ha
K?O	Basal	60	kg/ha

Nutrient	Stage	Amount	Unit
N	Mid_season	0	kg/ha
P?O?	Mid_season	20	kg/ha
K?O	Mid_season	60	kg/ha
N	Late_season	0	kg/ha
P?O?	Late_season	10	kg/ha
K?O	Late_season	30	kg/ha
N	Basal	10	kg/ha
P?O?	Basal	40	kg/ha
K?O	Basal	60	kg/ha
N	Mid_season	0	kg/ha
P?O?	Mid_season	20	kg/ha
K?O	Mid_season	60	kg/ha
N	Late_season	0	kg/ha
P?O?	Late_season	10	kg/ha
K?O	Late_season	30	kg/ha
N	Basal	10	kg/ha
P?O?	Basal	40	kg/ha
K?O	Basal	60	kg/ha
N	Mid_season	0	kg/ha
P?O?	Mid_season	20	kg/ha
K?O	Mid_season	60	kg/ha
N	Late_season	0	kg/ha
P?O?	Late_season	10	kg/ha
K?O	Late_season	30	kg/ha
N	Basal	10	kg/ha
P?O?	Basal	40	kg/ha
K?O	Basal	60	kg/ha
N	Mid_season	0	kg/ha
P?O?	Mid_season	20	kg/ha
K?O	Mid_season	60	kg/ha

Nutrient	Stage	Amount	Unit
N	Late_season	0	kg/ha
P?O?	Late_season	10	kg/ha
K?O	Late_season	30	kg/ha
N	Basal	10	kg/ha
P?O?	Basal	40	kg/ha
K?O	Basal	60	kg/ha
N	Mid_season	0	kg/ha
P?O?	Mid_season	20	kg/ha
K?O	Mid_season	60	kg/ha
N	Late_season	0	kg/ha
P?O?	Late_season	10	kg/ha
K?O	Late_season	30	kg/ha
N	Basal	10	kg/ha
P?O?	Basal	40	kg/ha
K?O	Basal	60	kg/ha
N	Mid_season	0	kg/ha
P?O?	Mid_season	20	kg/ha
K?O	Mid_season	60	kg/ha
N	Late_season	0	kg/ha
P?O?	Late_season	10	kg/ha
K?O	Late_season	30	kg/ha
N	Basal	10	kg/ha
P?O?	Basal	40	kg/ha
K?O	Basal	60	kg/ha
N	Mid_season	0	kg/ha
P?O?	Mid_season	20	kg/ha
K?O	Mid_season	60	kg/ha
N	Late_season	0	kg/ha
P?O?	Late_season	10	kg/ha
K?O	Late_season	30	kg/ha

Nutrient	Stage	Amount	Unit
N	Basal	10	kg/ha
P?O?	Basal	40	kg/ha
K?O	Basal	60	kg/ha
N	Mid_season	0	kg/ha
P?O?	Mid_season	20	kg/ha
K?O	Mid_season	60	kg/ha
N	Late_season	0	kg/ha
P?O?	Late_season	10	kg/ha
K?O	Late_season	30	kg/ha
N	Basal	10	kg/ha
P?O?	Basal	40	kg/ha
K?O	Basal	60	kg/ha
N	Mid_season	0	kg/ha
P?O?	Mid_season	20	kg/ha
K?O	Mid_season	60	kg/ha
N	Late_season	0	kg/ha
P?O?	Late_season	10	kg/ha
K?O	Late_season	30	kg/ha
N	Basal	10	kg/ha
P?O?	Basal	40	kg/ha
K?O	Basal	60	kg/ha
N	Mid_season	0	kg/ha
P?O?	Mid_season	20	kg/ha
K?O	Mid_season	60	kg/ha
N	Late_season	0	kg/ha
P?O?	Late_season	10	kg/ha
K?O	Late_season	30	kg/ha
N	Basal	10	kg/ha
P?O?	Basal	40	kg/ha
K?O	Basal	60	kg/ha

Nutrient	Stage	Amount	Unit
N	Mid_season	0	kg/ha
P?O?	Mid_season	20	kg/ha
K?O	Mid_season	60	kg/ha
N	Late_season	0	kg/ha
P?O?	Late_season	10	kg/ha
K?O	Late_season	30	kg/ha
N	Basal	10	kg/ha
P?O?	Basal	40	kg/ha
K?O	Basal	60	kg/ha
N	Mid_season	0	kg/ha
P?O?	Mid_season	20	kg/ha
K?O	Mid_season	60	kg/ha
N	Late_season	0	kg/ha
P?O?	Late_season	10	kg/ha
K?O	Late_season	30	kg/ha
N	Basal	10	kg/ha
P?O?	Basal	40	kg/ha
K?O	Basal	60	kg/ha
N	Mid_season	0	kg/ha
P?O?	Mid_season	20	kg/ha
K?O	Mid_season	60	kg/ha
N	Late_season	0	kg/ha
P?O?	Late_season	10	kg/ha
K?O	Late_season	30	kg/ha
N	Basal	10	kg/ha
P?O?	Basal	40	kg/ha
K?O	Basal	60	kg/ha
N	Mid_season	0	kg/ha
P?O?	Mid_season	20	kg/ha
K?O	Mid_season	60	kg/ha

Nutrient	Stage	Amount	Unit
N	Late_season	0	kg/ha
P?O?	Late_season	10	kg/ha
K?O	Late_season	30	kg/ha

Field images



Varieties

Name	Country	Maturity (days)	Traits
Multicut lucerne selection	KE	365	Good persistence under cutting, suited to irrigated highland dairies.
Dryland-tolerant alfalfa type	TZ	365	Better persistence and yield in drier mid-altitude sites.
Local lucerne/alfalfa landrace	UG	365	Adapted to smallholder dairies and mixed cropping systems.
Multicut lucerne selection	KE	365	Good persistence under cutting, suited to irrigated highland dairies.
Dryland-tolerant alfalfa type	TZ	365	Better persistence and yield in drier mid-altitude sites.
Local lucerne/alfalfa landrace	UG	365	Adapted to smallholder dairies and mixed cropping systems.
Multicut lucerne selection	KE	365	Good persistence under cutting, suited to irrigated highland dairies.
Dryland-tolerant alfalfa type	TZ	365	Better persistence and yield in drier mid-altitude sites.
Local lucerne/alfalfa landrace	UG	365	Adapted to smallholder dairies and mixed cropping systems.
Multicut lucerne selection	KE	365	Good persistence under cutting, suited to irrigated highland dairies.
Dryland-tolerant alfalfa type	TZ	365	Better persistence and yield in drier mid-altitude sites.
Local lucerne/alfalfa landrace	UG	365	Adapted to smallholder dairies and mixed cropping systems.
Multicut lucerne selection	KE	365	Good persistence under cutting, suited to irrigated highland dairies.
Dryland-tolerant alfalfa type	TZ	365	Better persistence and yield in drier mid-altitude sites.
Local lucerne/alfalfa landrace	UG	365	Adapted to smallholder dairies and mixed cropping systems.
Multicut lucerne selection	KE	365	Good persistence under cutting, suited to irrigated highland dairies.
Dryland-tolerant alfalfa type	TZ	365	Better persistence and yield in drier mid-altitude sites.
Local lucerne/alfalfa landrace	UG	365	Adapted to smallholder dairies and mixed cropping systems.

Name	Country	Maturity (days)	Traits
Multicut lucerne selection	KE	365	Good persistence under cutting, suited to irrigated highland dairies.
Dryland-tolerant alfalfa type	TZ	365	Better persistence and yield in drier mid-altitude sites.
Local lucerne/alfalfa landrace	UG	365	Adapted to smallholder dairies and mixed cropping systems.
Multicut lucerne selection	KE	365	Good persistence under cutting, suited to irrigated highland dairies.
Dryland-tolerant alfalfa type	TZ	365	Better persistence and yield in drier mid-altitude sites.
Local lucerne/alfalfa landrace	UG	365	Adapted to smallholder dairies and mixed cropping systems.
Multicut lucerne selection	KE	365	Good persistence under cutting, suited to irrigated highland dairies.
Dryland-tolerant alfalfa type	TZ	365	Better persistence and yield in drier mid-altitude sites.
Local lucerne/alfalfa landrace	UG	365	Adapted to smallholder dairies and mixed cropping systems.
Multicut lucerne selection	KE	365	Good persistence under cutting, suited to irrigated highland dairies.
Dryland-tolerant alfalfa type	TZ	365	Better persistence and yield in drier mid-altitude sites.
Local lucerne/alfalfa landrace	UG	365	Adapted to smallholder dairies and mixed cropping systems.
Multicut lucerne selection	KE	365	Good persistence under cutting, suited to irrigated highland dairies.
Dryland-tolerant alfalfa type	TZ	365	Better persistence and yield in drier mid-altitude sites.
Local lucerne/alfalfa landrace	UG	365	Adapted to smallholder dairies and mixed cropping systems.
Multicut lucerne selection	KE	365	Good persistence under cutting, suited to irrigated highland dairies.
Dryland-tolerant alfalfa type	TZ	365	Better persistence and yield in drier mid-altitude sites.
Local lucerne/alfalfa landrace	UG	365	Adapted to smallholder dairies and mixed cropping systems.
Multicut lucerne selection	KE	365	Good persistence under cutting, suited to irrigated highland dairies.
Dryland-tolerant alfalfa type	TZ	365	Better persistence and yield in drier mid-altitude sites.
Local lucerne/alfalfa landrace	UG	365	Adapted to smallholder dairies and mixed cropping systems.
Multicut lucerne selection	KE	365	Good persistence under cutting, suited to irrigated highland dairies.
Dryland-tolerant alfalfa type	TZ	365	Better persistence and yield in drier mid-altitude sites.
Local lucerne/alfalfa landrace	UG	365	Adapted to smallholder dairies and mixed cropping systems.
Multicut lucerne selection	KE	365	Good persistence under cutting, suited to irrigated highland dairies.
Dryland-tolerant alfalfa type	TZ	365	Better persistence and yield in drier mid-altitude sites.
Local lucerne/alfalfa landrace	UG	365	Adapted to smallholder dairies and mixed cropping systems.
Multicut lucerne selection	KE	365	Good persistence under cutting, suited to irrigated highland dairies.
Dryland-tolerant alfalfa type	TZ	365	Better persistence and yield in drier mid-altitude sites.
Local lucerne/alfalfa landrace	UG	365	Adapted to smallholder dairies and mixed cropping systems.

Fertilizer recommendations

Stage	Product	Rate	Notes
Basal	NPK 10-20-20 (or similar)	150	Apply and incorporate before seeding; combine with lime or manure according to soil tests.
Production (between cuts)	PK blend (e.g. 0-20-20)	100	Apply after one of the early cuts once stand is well established.
K replenishment	MOP (KCl) or sulfate of potash	80	Use on intensively cut or hay-export fields with high K removal.
Basal	NPK 10-20-20 (or similar)	150	Apply and incorporate before seeding; combine with lime or manure according to soil tests.
Production (between cuts)	PK blend (e.g. 0-20-20)	100	Apply after one of the early cuts once stand is well established.
K replenishment	MOP (KCl) or sulfate of potash	80	Use on intensively cut or hay-export fields with high K removal.
Basal	NPK 10-20-20 (or similar)	150	Apply and incorporate before seeding; combine with lime or manure according to soil tests.
Production (between cuts)	PK blend (e.g. 0-20-20)	100	Apply after one of the early cuts once stand is well established.
K replenishment	MOP (KCl) or sulfate of potash	80	Use on intensively cut or hay-export fields with high K removal.
Basal	NPK 10-20-20 (or similar)	150	Apply and incorporate before seeding; combine with lime or manure according to soil tests.
Production (between cuts)	PK blend (e.g. 0-20-20)	100	Apply after one of the early cuts once stand is well established.
K replenishment	MOP (KCl) or sulfate of potash	80	Use on intensively cut or hay-export fields with high K removal.
Basal	NPK 10-20-20 (or similar)	150	Apply and incorporate before seeding; combine with lime or manure according to soil tests.
Production (between cuts)	PK blend (e.g. 0-20-20)	100	Apply after one of the early cuts once stand is well established.
K replenishment	MOP (KCl) or sulfate of potash	80	Use on intensively cut or hay-export fields with high K removal.
Basal	NPK 10-20-20 (or similar)	150	Apply and incorporate before seeding; combine with lime or manure according to soil tests.
Production (between cuts)	PK blend (e.g. 0-20-20)	100	Apply after one of the early cuts once stand is well established.
K replenishment	MOP (KCl) or sulfate of potash	80	Use on intensively cut or hay-export fields with high K removal.

Stage	Product	Rate	Notes
Basal	NPK 10-20-20 (or similar)	150	Apply and incorporate before seeding; combine with lime or manure according to soil tests.
Production (between cuts)	PK blend (e.g. 0-20-20)	100	Apply after one of the early cuts once stand is well established.
K replenishment	MOP (KCl) or sulfate of potash	80	Use on intensively cut or hay-export fields with high K removal.
Basal	NPK 10-20-20 (or similar)	150	Apply and incorporate before seeding; combine with lime or manure according to soil tests.
Production (between cuts)	PK blend (e.g. 0-20-20)	100	Apply after one of the early cuts once stand is well established.
K replenishment	MOP (KCl) or sulfate of potash	80	Use on intensively cut or hay-export fields with high K removal.
Basal	NPK 10-20-20 (or similar)	150	Apply and incorporate before seeding; combine with lime or manure according to soil tests.
Production (between cuts)	PK blend (e.g. 0-20-20)	100	Apply after one of the early cuts once stand is well established.
K replenishment	MOP (KCl) or sulfate of potash	80	Use on intensively cut or hay-export fields with high K removal.
Basal	NPK 10-20-20 (or similar)	150	Apply and incorporate before seeding; combine with lime or manure according to soil tests.
Production (between cuts)	PK blend (e.g. 0-20-20)	100	Apply after one of the early cuts once stand is well established.
K replenishment	MOP (KCl) or sulfate of potash	80	Use on intensively cut or hay-export fields with high K removal.
Basal	NPK 10-20-20 (or similar)	150	Apply and incorporate before seeding; combine with lime or manure according to soil tests.
Production (between cuts)	PK blend (e.g. 0-20-20)	100	Apply after one of the early cuts once stand is well established.
K replenishment	MOP (KCl) or sulfate of potash	80	Use on intensively cut or hay-export fields with high K removal.
Basal	NPK 10-20-20 (or similar)	150	Apply and incorporate before seeding; combine with lime or manure according to soil tests.
Production (between cuts)	PK blend (e.g. 0-20-20)	100	Apply after one of the early cuts once stand is well established.
K replenishment	MOP (KCl) or sulfate of potash	80	Use on intensively cut or hay-export fields with high K removal.
Basal	NPK 10-20-20 (or similar)	150	Apply and incorporate before seeding; combine with lime or manure according to soil tests.

Stage	Product	Rate	Notes
Production (between cuts)	PK blend (e.g. 0-20-20)	100	Apply after one of the early cuts once stand is well established.
K replenishment	MOP (KCl) or sulfate of potash	80	Use on intensively cut or hay-export fields with high K removal.
Basal	NPK 10-20-20 (or similar)	150	Apply and incorporate before seeding; combine with lime or manure according to soil tests.
Production (between cuts)	PK blend (e.g. 0-20-20)	100	Apply after one of the early cuts once stand is well established.
K replenishment	MOP (KCl) or sulfate of potash	80	Use on intensively cut or hay-export fields with high K removal.
Basal	NPK 10-20-20 (or similar)	150	Apply and incorporate before seeding; combine with lime or manure according to soil tests.
Production (between cuts)	PK blend (e.g. 0-20-20)	100	Apply after one of the early cuts once stand is well established.
K replenishment	MOP (KCl) or sulfate of potash	80	Use on intensively cut or hay-export fields with high K removal.
Basal	NPK 10-20-20 (or similar)	150	Apply and incorporate before seeding; combine with lime or manure according to soil tests.
Production (between cuts)	PK blend (e.g. 0-20-20)	100	Apply after one of the early cuts once stand is well established.
K replenishment	MOP (KCl) or sulfate of potash	80	Use on intensively cut or hay-export fields with high K removal.

Pests and diseases

Name	Type	Symptoms	Management
Aphids	pest	Clusters on stems and undersides of leaves, honeydew and sooty mould, reduced vigour.	Encourage natural enemies; avoid stress from drought or overgrazing; cut heavily infested stands earlier if needed.
Alfalfa weevils / leaf-chewing weevils (local complexes)	pest	Chewed leaves, skeletonisation and reduced leaf area; yield decline in severe attacks.	Monitoring near early spring/flush growth, timely cutting, conserve predators and parasitoids.
Leafhoppers	pest	“Hopperburn”: yellowing and tip burn, stunted growth, reduced regrowth after cutting.	Avoid mowing only very short stubble that stresses plants; rotate and maintain diverse swards; treat only severe outbreaks.
Root and crown rots	disease	Thinning stands, stunted plants, rotted crowns and discoloured taproots.	Ensure good drainage, avoid waterlogging, allow recovery periods between cuts/grazing and rotate stands after several years.
Leaf spots / blights	disease	Small brown or black spots on leaves, premature leaf drop, loss of quality in older leaves.	Promote airflow with appropriate cutting/stand density, avoid excessive late irrigation and remove very old, diseased stands from rotation.

Name	Type	Symptoms	Management
Nodule failure / poor rhizobia	disorder	Pale, stunted plants with few nodules on roots; nodules pale instead of pink/red inside.	Use high-quality inoculated seed or peat inoculant, avoid acidic soils (lime where needed) and minimise unnecessary N fertilizer.
Aphids	pest	Clusters on stems and undersides of leaves, honeydew and sooty mould, reduced vigour.	Encourage natural enemies; avoid stress from drought or overgrazing; cut heavily infested stands earlier if needed.
Alfalfa weevils / leaf-chewing weevils (local complexes)	pest	Chewed leaves, skeletonisation and reduced leaf area; yield decline in severe attacks.	Monitoring near early spring/flush growth, timely cutting, conserve predators and parasitoids.
Leafhoppers	pest	“Hopperburn”: yellowing and tip burn, stunted growth, reduced regrowth after cutting.	Avoid mowing only very short stubble that stresses plants; rotate and maintain diverse swards; treat only severe outbreaks.
Root and crown rots	disease	Thinning stands, stunted plants, rotted crowns and discoloured taproots.	Ensure good drainage, avoid waterlogging, allow recovery periods between cuts/grazing and rotate stands after several years.
Leaf spots / blights	disease	Small brown or black spots on leaves, premature leaf drop, loss of quality in older leaves.	Promote airflow with appropriate cutting/stand density, avoid excessive late irrigation and remove very old, diseased stands from rotation.
Nodule failure / poor rhizobia	disorder	Pale, stunted plants with few nodules on roots; nodules pale instead of pink/red inside.	Use high-quality inoculated seed or peat inoculant, avoid acidic soils (lime where needed) and minimise unnecessary N fertilizer.
Aphids	pest	Clusters on stems and undersides of leaves, honeydew and sooty mould, reduced vigour.	Encourage natural enemies; avoid stress from drought or overgrazing; cut heavily infested stands earlier if needed.
Alfalfa weevils / leaf-chewing weevils (local complexes)	pest	Chewed leaves, skeletonisation and reduced leaf area; yield decline in severe attacks.	Monitoring near early spring/flush growth, timely cutting, conserve predators and parasitoids.
Leafhoppers	pest	“Hopperburn”: yellowing and tip burn, stunted growth, reduced regrowth after cutting.	Avoid mowing only very short stubble that stresses plants; rotate and maintain diverse swards; treat only severe outbreaks.
Root and crown rots	disease	Thinning stands, stunted plants, rotted crowns and discoloured taproots.	Ensure good drainage, avoid waterlogging, allow recovery periods between cuts/grazing and rotate stands after several years.
Leaf spots / blights	disease	Small brown or black spots on leaves, premature leaf drop, loss of quality in older leaves.	Promote airflow with appropriate cutting/stand density, avoid excessive late irrigation and remove very old, diseased stands from rotation.
Nodule failure / poor rhizobia	disorder	Pale, stunted plants with few nodules on roots; nodules pale instead of pink/red inside.	Use high-quality inoculated seed or peat inoculant, avoid acidic soils (lime where needed) and minimise unnecessary N fertilizer.
Aphids	pest	Clusters on stems and undersides of leaves, honeydew and sooty mould, reduced vigour.	Encourage natural enemies; avoid stress from drought or overgrazing; cut heavily infested stands earlier if needed.

Name	Type	Symptoms	Management
Alfalfa weevils / leaf-chewing weevils (local complexes)	pest	Chewed leaves, skeletonisation and reduced leaf area; yield decline in severe attacks.	Monitoring near early spring/flush growth, timely cutting, conserve predators and parasitoids.
Leafhoppers	pest	“Hopperburn”: yellowing and tip burn, stunted growth, reduced regrowth after cutting.	Avoid mowing only very short stubble that stresses plants; rotate and maintain diverse swards; treat only severe outbreaks.
Root and crown rots	disease	Thinning stands, stunted plants, rotted crowns and discoloured taproots.	Ensure good drainage, avoid waterlogging, allow recovery periods between cuts/grazing and rotate stands after several years.
Leaf spots / blights	disease	Small brown or black spots on leaves, premature leaf drop, loss of quality in older leaves.	Promote airflow with appropriate cutting/stand density, avoid excessive late irrigation and remove very old, diseased stands from rotation.
Nodule failure / poor rhizobia	disorder	Pale, stunted plants with few nodules on roots; nodules pale instead of pink/red inside.	Use high-quality inoculated seed or peat inoculant, avoid acidic soils (lime where needed) and minimise unnecessary N fertilizer.
Aphids	pest	Clusters on stems and undersides of leaves, honeydew and sooty mould, reduced vigour.	Encourage natural enemies; avoid stress from drought or overgrazing; cut heavily infested stands earlier if needed.
Alfalfa weevils / leaf-chewing weevils (local complexes)	pest	Chewed leaves, skeletonisation and reduced leaf area; yield decline in severe attacks.	Monitoring near early spring/flush growth, timely cutting, conserve predators and parasitoids.
Leafhoppers	pest	“Hopperburn”: yellowing and tip burn, stunted growth, reduced regrowth after cutting.	Avoid mowing only very short stubble that stresses plants; rotate and maintain diverse swards; treat only severe outbreaks.
Root and crown rots	disease	Thinning stands, stunted plants, rotted crowns and discoloured taproots.	Ensure good drainage, avoid waterlogging, allow recovery periods between cuts/grazing and rotate stands after several years.
Leaf spots / blights	disease	Small brown or black spots on leaves, premature leaf drop, loss of quality in older leaves.	Promote airflow with appropriate cutting/stand density, avoid excessive late irrigation and remove very old, diseased stands from rotation.
Nodule failure / poor rhizobia	disorder	Pale, stunted plants with few nodules on roots; nodules pale instead of pink/red inside.	Use high-quality inoculated seed or peat inoculant, avoid acidic soils (lime where needed) and minimise unnecessary N fertilizer.
Aphids	pest	Clusters on stems and undersides of leaves, honeydew and sooty mould, reduced vigour.	Encourage natural enemies; avoid stress from drought or overgrazing; cut heavily infested stands earlier if needed.
Alfalfa weevils / leaf-chewing weevils (local complexes)	pest	Chewed leaves, skeletonisation and reduced leaf area; yield decline in severe attacks.	Monitoring near early spring/flush growth, timely cutting, conserve predators and parasitoids.
Leafhoppers	pest	“Hopperburn”: yellowing and tip burn, stunted growth, reduced regrowth after cutting.	Avoid mowing only very short stubble that stresses plants; rotate and maintain diverse swards; treat only severe outbreaks.

Name	Type	Symptoms	Management
Root and crown rots	disease	Thinning stands, stunted plants, rotted crowns and discoloured taproots.	Ensure good drainage, avoid waterlogging, allow recovery periods between cuts/grazing and rotate stands after several years.
Leaf spots / blights	disease	Small brown or black spots on leaves, premature leaf drop, loss of quality in older leaves.	Promote airflow with appropriate cutting/stand density, avoid excessive late irrigation and remove very old, diseased stands from rotation.
Nodule failure / poor rhizobia	disorder	Pale, stunted plants with few nodules on roots; nodules pale instead of pink/red inside.	Use high-quality inoculated seed or peat inoculant, avoid acidic soils (lime where needed) and minimise unnecessary N fertilizer.
Aphids	pest	Clusters on stems and undersides of leaves, honeydew and sooty mould, reduced vigour.	Encourage natural enemies; avoid stress from drought or overgrazing; cut heavily infested stands earlier if needed.
Alfalfa weevils / leaf-chewing weevils (local complexes)	pest	Chewed leaves, skeletonisation and reduced leaf area; yield decline in severe attacks.	Monitoring near early spring/flush growth, timely cutting, conserve predators and parasitoids.
Leafhoppers	pest	“Hopperburn”: yellowing and tip burn, stunted growth, reduced regrowth after cutting.	Avoid mowing only very short stubble that stresses plants; rotate and maintain diverse swards; treat only severe outbreaks.
Root and crown rots	disease	Thinning stands, stunted plants, rotted crowns and discoloured taproots.	Ensure good drainage, avoid waterlogging, allow recovery periods between cuts/grazing and rotate stands after several years.
Leaf spots / blights	disease	Small brown or black spots on leaves, premature leaf drop, loss of quality in older leaves.	Promote airflow with appropriate cutting/stand density, avoid excessive late irrigation and remove very old, diseased stands from rotation.
Nodule failure / poor rhizobia	disorder	Pale, stunted plants with few nodules on roots; nodules pale instead of pink/red inside.	Use high-quality inoculated seed or peat inoculant, avoid acidic soils (lime where needed) and minimise unnecessary N fertilizer.
Aphids	pest	Clusters on stems and undersides of leaves, honeydew and sooty mould, reduced vigour.	Encourage natural enemies; avoid stress from drought or overgrazing; cut heavily infested stands earlier if needed.
Alfalfa weevils / leaf-chewing weevils (local complexes)	pest	Chewed leaves, skeletonisation and reduced leaf area; yield decline in severe attacks.	Monitoring near early spring/flush growth, timely cutting, conserve predators and parasitoids.
Leafhoppers	pest	“Hopperburn”: yellowing and tip burn, stunted growth, reduced regrowth after cutting.	Avoid mowing only very short stubble that stresses plants; rotate and maintain diverse swards; treat only severe outbreaks.
Root and crown rots	disease	Thinning stands, stunted plants, rotted crowns and discoloured taproots.	Ensure good drainage, avoid waterlogging, allow recovery periods between cuts/grazing and rotate stands after several years.
Leaf spots / blights	disease	Small brown or black spots on leaves, premature leaf drop, loss of quality in older leaves.	Promote airflow with appropriate cutting/stand density, avoid excessive late irrigation and remove very old, diseased stands from rotation.

Name	Type	Symptoms	Management
Nodule failure / poor rhizobia	disorder	Pale, stunted plants with few nodules on roots; nodules pale instead of pink/red inside.	Use high-quality inoculated seed or peat inoculant, avoid acidic soils (lime where needed) and minimise unnecessary N fertilizer.
Aphids	pest	Clusters on stems and undersides of leaves, honeydew and sooty mould, reduced vigour.	Encourage natural enemies; avoid stress from drought or overgrazing; cut heavily infested stands earlier if needed.
Alfalfa weevils / leaf-chewing weevils (local complexes)	pest	Chewed leaves, skeletonisation and reduced leaf area; yield decline in severe attacks.	Monitoring near early spring/flush growth, timely cutting, conserve predators and parasitoids.
Leafhoppers	pest	“Hopperburn”: yellowing and tip burn, stunted growth, reduced regrowth after cutting.	Avoid mowing only very short stubble that stresses plants; rotate and maintain diverse swards; treat only severe outbreaks.
Root and crown rots	disease	Thinning stands, stunted plants, rotted crowns and discoloured taproots.	Ensure good drainage, avoid waterlogging, allow recovery periods between cuts/grazing and rotate stands after several years.
Leaf spots / blights	disease	Small brown or black spots on leaves, premature leaf drop, loss of quality in older leaves.	Promote airflow with appropriate cutting/stand density, avoid excessive late irrigation and remove very old, diseased stands from rotation.
Nodule failure / poor rhizobia	disorder	Pale, stunted plants with few nodules on roots; nodules pale instead of pink/red inside.	Use high-quality inoculated seed or peat inoculant, avoid acidic soils (lime where needed) and minimise unnecessary N fertilizer.
Aphids	pest	Clusters on stems and undersides of leaves, honeydew and sooty mould, reduced vigour.	Encourage natural enemies; avoid stress from drought or overgrazing; cut heavily infested stands earlier if needed.
Alfalfa weevils / leaf-chewing weevils (local complexes)	pest	Chewed leaves, skeletonisation and reduced leaf area; yield decline in severe attacks.	Monitoring near early spring/flush growth, timely cutting, conserve predators and parasitoids.
Leafhoppers	pest	“Hopperburn”: yellowing and tip burn, stunted growth, reduced regrowth after cutting.	Avoid mowing only very short stubble that stresses plants; rotate and maintain diverse swards; treat only severe outbreaks.
Root and crown rots	disease	Thinning stands, stunted plants, rotted crowns and discoloured taproots.	Ensure good drainage, avoid waterlogging, allow recovery periods between cuts/grazing and rotate stands after several years.
Leaf spots / blights	disease	Small brown or black spots on leaves, premature leaf drop, loss of quality in older leaves.	Promote airflow with appropriate cutting/stand density, avoid excessive late irrigation and remove very old, diseased stands from rotation.
Nodule failure / poor rhizobia	disorder	Pale, stunted plants with few nodules on roots; nodules pale instead of pink/red inside.	Use high-quality inoculated seed or peat inoculant, avoid acidic soils (lime where needed) and minimise unnecessary N fertilizer.
Aphids	pest	Clusters on stems and undersides of leaves, honeydew and sooty mould, reduced vigour.	Encourage natural enemies; avoid stress from drought or overgrazing; cut heavily infested stands earlier if needed.

Name	Type	Symptoms	Management
Alfalfa weevils / leaf-chewing weevils (local complexes)	pest	Chewed leaves, skeletonisation and reduced leaf area; yield decline in severe attacks.	Monitoring near early spring/flush growth, timely cutting, conserve predators and parasitoids.
Leafhoppers	pest	“Hopperburn”: yellowing and tip burn, stunted growth, reduced regrowth after cutting.	Avoid mowing only very short stubble that stresses plants; rotate and maintain diverse swards; treat only severe outbreaks.
Root and crown rots	disease	Thinning stands, stunted plants, rotted crowns and discoloured taproots.	Ensure good drainage, avoid waterlogging, allow recovery periods between cuts/grazing and rotate stands after several years.
Leaf spots / blights	disease	Small brown or black spots on leaves, premature leaf drop, loss of quality in older leaves.	Promote airflow with appropriate cutting/stand density, avoid excessive late irrigation and remove very old, diseased stands from rotation.
Nodule failure / poor rhizobia	disorder	Pale, stunted plants with few nodules on roots; nodules pale instead of pink/red inside.	Use high-quality inoculated seed or peat inoculant, avoid acidic soils (lime where needed) and minimise unnecessary N fertilizer.
Aphids	pest	Clusters on stems and undersides of leaves, honeydew and sooty mould, reduced vigour.	Encourage natural enemies; avoid stress from drought or overgrazing; cut heavily infested stands earlier if needed.
Alfalfa weevils / leaf-chewing weevils (local complexes)	pest	Chewed leaves, skeletonisation and reduced leaf area; yield decline in severe attacks.	Monitoring near early spring/flush growth, timely cutting, conserve predators and parasitoids.
Leafhoppers	pest	“Hopperburn”: yellowing and tip burn, stunted growth, reduced regrowth after cutting.	Avoid mowing only very short stubble that stresses plants; rotate and maintain diverse swards; treat only severe outbreaks.
Root and crown rots	disease	Thinning stands, stunted plants, rotted crowns and discoloured taproots.	Ensure good drainage, avoid waterlogging, allow recovery periods between cuts/grazing and rotate stands after several years.
Leaf spots / blights	disease	Small brown or black spots on leaves, premature leaf drop, loss of quality in older leaves.	Promote airflow with appropriate cutting/stand density, avoid excessive late irrigation and remove very old, diseased stands from rotation.
Nodule failure / poor rhizobia	disorder	Pale, stunted plants with few nodules on roots; nodules pale instead of pink/red inside.	Use high-quality inoculated seed or peat inoculant, avoid acidic soils (lime where needed) and minimise unnecessary N fertilizer.
Aphids	pest	Clusters on stems and undersides of leaves, honeydew and sooty mould, reduced vigour.	Encourage natural enemies; avoid stress from drought or overgrazing; cut heavily infested stands earlier if needed.
Alfalfa weevils / leaf-chewing weevils (local complexes)	pest	Chewed leaves, skeletonisation and reduced leaf area; yield decline in severe attacks.	Monitoring near early spring/flush growth, timely cutting, conserve predators and parasitoids.
Leafhoppers	pest	“Hopperburn”: yellowing and tip burn, stunted growth, reduced regrowth after cutting.	Avoid mowing only very short stubble that stresses plants; rotate and maintain diverse swards; treat only severe outbreaks.

Name	Type	Symptoms	Management
Root and crown rots	disease	Thinning stands, stunted plants, rotted crowns and discoloured taproots.	Ensure good drainage, avoid waterlogging, allow recovery periods between cuts/grazing and rotate stands after several years.
Leaf spots / blights	disease	Small brown or black spots on leaves, premature leaf drop, loss of quality in older leaves.	Promote airflow with appropriate cutting/stand density, avoid excessive late irrigation and remove very old, diseased stands from rotation.
Nodule failure / poor rhizobia	disorder	Pale, stunted plants with few nodules on roots; nodules pale instead of pink/red inside.	Use high-quality inoculated seed or peat inoculant, avoid acidic soils (lime where needed) and minimise unnecessary N fertilizer.
Aphids	pest	Clusters on stems and undersides of leaves, honeydew and sooty mould, reduced vigour.	Encourage natural enemies; avoid stress from drought or overgrazing; cut heavily infested stands earlier if needed.
Alfalfa weevils / leaf-chewing weevils (local complexes)	pest	Chewed leaves, skeletonisation and reduced leaf area; yield decline in severe attacks.	Monitoring near early spring/flush growth, timely cutting, conserve predators and parasitoids.
Leafhoppers	pest	“Hopperburn”: yellowing and tip burn, stunted growth, reduced regrowth after cutting.	Avoid mowing only very short stubble that stresses plants; rotate and maintain diverse swards; treat only severe outbreaks.
Root and crown rots	disease	Thinning stands, stunted plants, rotted crowns and discoloured taproots.	Ensure good drainage, avoid waterlogging, allow recovery periods between cuts/grazing and rotate stands after several years.
Leaf spots / blights	disease	Small brown or black spots on leaves, premature leaf drop, loss of quality in older leaves.	Promote airflow with appropriate cutting/stand density, avoid excessive late irrigation and remove very old, diseased stands from rotation.
Nodule failure / poor rhizobia	disorder	Pale, stunted plants with few nodules on roots; nodules pale instead of pink/red inside.	Use high-quality inoculated seed or peat inoculant, avoid acidic soils (lime where needed) and minimise unnecessary N fertilizer.
Aphids	pest	Clusters on stems and undersides of leaves, honeydew and sooty mould, reduced vigour.	Encourage natural enemies; avoid stress from drought or overgrazing; cut heavily infested stands earlier if needed.
Alfalfa weevils / leaf-chewing weevils (local complexes)	pest	Chewed leaves, skeletonisation and reduced leaf area; yield decline in severe attacks.	Monitoring near early spring/flush growth, timely cutting, conserve predators and parasitoids.
Leafhoppers	pest	“Hopperburn”: yellowing and tip burn, stunted growth, reduced regrowth after cutting.	Avoid mowing only very short stubble that stresses plants; rotate and maintain diverse swards; treat only severe outbreaks.
Root and crown rots	disease	Thinning stands, stunted plants, rotted crowns and discoloured taproots.	Ensure good drainage, avoid waterlogging, allow recovery periods between cuts/grazing and rotate stands after several years.
Leaf spots / blights	disease	Small brown or black spots on leaves, premature leaf drop, loss of quality in older leaves.	Promote airflow with appropriate cutting/stand density, avoid excessive late irrigation and remove very old, diseased stands from rotation.

Name	Type	Symptoms	Management
Nodule failure / poor rhizobia	disorder	Pale, stunted plants with few nodules on roots; nodules pale instead of pink/red inside.	Use high-quality inoculated seed or peat inoculant, avoid acidic soils (lime where needed) and minimise unnecessary N fertilizer.
Aphids	pest	Clusters on stems and undersides of leaves, honeydew and sooty mould, reduced vigour.	Encourage natural enemies; avoid stress from drought or overgrazing; cut heavily infested stands earlier if needed.
Alfalfa weevils / leaf-chewing weevils (local complexes)	pest	Chewed leaves, skeletonisation and reduced leaf area; yield decline in severe attacks.	Monitoring near early spring/flush growth, timely cutting, conserve predators and parasitoids.
Leafhoppers	pest	“Hopperburn”: yellowing and tip burn, stunted growth, reduced regrowth after cutting.	Avoid mowing only very short stubble that stresses plants; rotate and maintain diverse swards; treat only severe outbreaks.
Root and crown rots	disease	Thinning stands, stunted plants, rotted crowns and discoloured taproots.	Ensure good drainage, avoid waterlogging, allow recovery periods between cuts/grazing and rotate stands after several years.
Leaf spots / blights	disease	Small brown or black spots on leaves, premature leaf drop, loss of quality in older leaves.	Promote airflow with appropriate cutting/stand density, avoid excessive late irrigation and remove very old, diseased stands from rotation.
Nodule failure / poor rhizobia	disorder	Pale, stunted plants with few nodules on roots; nodules pale instead of pink/red inside.	Use high-quality inoculated seed or peat inoculant, avoid acidic soils (lime where needed) and minimise unnecessary N fertilizer.

Yields

System	Typical	Min	Max	Notes
Low-input rainfed (hay, DM basis)	5	3	7	2–3 cuts per year, moderate stand density and limited fertilization on upland sites.
Managed irrigated or high rainfall (hay, DM)	8	6	12	3–6 cuts per year with good fertility and weed control.
Intensive dairy forage (hay/silage, DM)	14	10	18	High-density stands under irrigation with multiple cuts and strong fertility/stand management.
Low-input rainfed (hay, DM basis)	5	3	7	2–3 cuts per year, moderate stand density and limited fertilization on upland sites.
Managed irrigated or high rainfall (hay, DM)	8	6	12	3–6 cuts per year with good fertility and weed control.
Intensive dairy forage (hay/silage, DM)	14	10	18	High-density stands under irrigation with multiple cuts and strong fertility/stand management.
Low-input rainfed (hay, DM basis)	5	3	7	2–3 cuts per year, moderate stand density and limited fertilization on upland sites.
Managed irrigated or high rainfall (hay, DM)	8	6	12	3–6 cuts per year with good fertility and weed control.

System	Typical	Min	Max	Notes
Intensive dairy forage (hay/silage, DM)	14	10	18	High-density stands under irrigation with multiple cuts and strong fertility/stand management.
Low-input rainfed (hay, DM basis)	5	3	7	2–3 cuts per year, moderate stand density and limited fertilization on upland sites.
Managed irrigated or high rainfall (hay, DM)	8	6	12	3–6 cuts per year with good fertility and weed control.
Intensive dairy forage (hay/silage, DM)	14	10	18	High-density stands under irrigation with multiple cuts and strong fertility/stand management.
Low-input rainfed (hay, DM basis)	5	3	7	2–3 cuts per year, moderate stand density and limited fertilization on upland sites.
Managed irrigated or high rainfall (hay, DM)	8	6	12	3–6 cuts per year with good fertility and weed control.
Intensive dairy forage (hay/silage, DM)	14	10	18	High-density stands under irrigation with multiple cuts and strong fertility/stand management.
Low-input rainfed (hay, DM basis)	5	3	7	2–3 cuts per year, moderate stand density and limited fertilization on upland sites.
Managed irrigated or high rainfall (hay, DM)	8	6	12	3–6 cuts per year with good fertility and weed control.
Intensive dairy forage (hay/silage, DM)	14	10	18	High-density stands under irrigation with multiple cuts and strong fertility/stand management.
Low-input rainfed (hay, DM basis)	5	3	7	2–3 cuts per year, moderate stand density and limited fertilization on upland sites.
Managed irrigated or high rainfall (hay, DM)	8	6	12	3–6 cuts per year with good fertility and weed control.
Intensive dairy forage (hay/silage, DM)	14	10	18	High-density stands under irrigation with multiple cuts and strong fertility/stand management.
Low-input rainfed (hay, DM basis)	5	3	7	2–3 cuts per year, moderate stand density and limited fertilization on upland sites.
Managed irrigated or high rainfall (hay, DM)	8	6	12	3–6 cuts per year with good fertility and weed control.
Intensive dairy forage (hay/silage, DM)	14	10	18	High-density stands under irrigation with multiple cuts and strong fertility/stand management.
Low-input rainfed (hay, DM basis)	5	3	7	2–3 cuts per year, moderate stand density and limited fertilization on upland sites.
Managed irrigated or high rainfall (hay, DM)	8	6	12	3–6 cuts per year with good fertility and weed control.
Intensive dairy forage (hay/silage, DM)	14	10	18	High-density stands under irrigation with multiple cuts and strong fertility/stand management.

System	Typical	Min	Max	Notes
Low-input rainfed (hay, DM basis)	5	3	7	2–3 cuts per year, moderate stand density and limited fertilization on upland sites.
Managed irrigated or high rainfall (hay, DM)	8	6	12	3–6 cuts per year with good fertility and weed control.
Intensive dairy forage (hay/silage, DM)	14	10	18	High-density stands under irrigation with multiple cuts and strong fertility/stand management.
Low-input rainfed (hay, DM basis)	5	3	7	2–3 cuts per year, moderate stand density and limited fertilization on upland sites.
Managed irrigated or high rainfall (hay, DM)	8	6	12	3–6 cuts per year with good fertility and weed control.
Intensive dairy forage (hay/silage, DM)	14	10	18	High-density stands under irrigation with multiple cuts and strong fertility/stand management.
Low-input rainfed (hay, DM basis)	5	3	7	2–3 cuts per year, moderate stand density and limited fertilization on upland sites.
Managed irrigated or high rainfall (hay, DM)	8	6	12	3–6 cuts per year with good fertility and weed control.
Intensive dairy forage (hay/silage, DM)	14	10	18	High-density stands under irrigation with multiple cuts and strong fertility/stand management.
Low-input rainfed (hay, DM basis)	5	3	7	2–3 cuts per year, moderate stand density and limited fertilization on upland sites.
Managed irrigated or high rainfall (hay, DM)	8	6	12	3–6 cuts per year with good fertility and weed control.
Intensive dairy forage (hay/silage, DM)	14	10	18	High-density stands under irrigation with multiple cuts and strong fertility/stand management.
Low-input rainfed (hay, DM basis)	5	3	7	2–3 cuts per year, moderate stand density and limited fertilization on upland sites.
Managed irrigated or high rainfall (hay, DM)	8	6	12	3–6 cuts per year with good fertility and weed control.
Intensive dairy forage (hay/silage, DM)	14	10	18	High-density stands under irrigation with multiple cuts and strong fertility/stand management.
Low-input rainfed (hay, DM basis)	5	3	7	2–3 cuts per year, moderate stand density and limited fertilization on upland sites.
Managed irrigated or high rainfall (hay, DM)	8	6	12	3–6 cuts per year with good fertility and weed control.
Intensive dairy forage (hay/silage, DM)	14	10	18	High-density stands under irrigation with multiple cuts and strong fertility/stand management.
Low-input rainfed (hay, DM basis)	5	3	7	2–3 cuts per year, moderate stand density and limited fertilization on upland sites.

System	Typical	Min	Max	Notes
Managed irrigated or high rainfall (hay, DM)	8	6	12	3–6 cuts per year with good fertility and weed control.
Intensive dairy forage (hay/silage, DM)	14	10	18	High-density stands under irrigation with multiple cuts and strong fertility/stand management.

Season calendars

Country	Region	Planting	Harvest
KE	Cool, irrigated or high rainfall highlands	At onset of long or short rains on well-prepared, weed-free seedbeds, or under irrigation in cooler months.	Light first cut 3–
TZ	Northern and southern highlands with irrigation or reliable rainfall	Start of rainy season on cool upland sites or as irrigated forage where water is available.	Repeated cuts thr
UG	Highland and cooler mid-altitude dairy belts	At onset of main rains on deep, well-drained soils with near-neutral pH.	Multiple cuts thr
KE	Cool, irrigated or high rainfall highlands	At onset of long or short rains on well-prepared, weed-free seedbeds, or under irrigation in cooler months.	Light first cut 3–
TZ	Northern and southern highlands with irrigation or reliable rainfall	Start of rainy season on cool upland sites or as irrigated forage where water is available.	Repeated cuts thr

Country	Region	Planting	Harvest
UG	Highland and cooler mid-altitude dairy belts	At onset of main rains on deep, well-drained soils with near-neutral pH.	Multiple cuts thr
KE	Cool, irrigated or high rainfall highlands	At onset of long or short rains on well-prepared, weed-free seedbeds, or under irrigation in cooler months.	Light first cut 3–
TZ	Northern and southern highlands with irrigation or reliable rainfall	Start of rainy season on cool upland sites or as irrigated forage where water is available.	Repeated cuts thr
UG	Highland and cooler mid-altitude dairy belts	At onset of main rains on deep, well-drained soils with near-neutral pH.	Multiple cuts thr
KE	Cool, irrigated or high rainfall highlands	At onset of long or short rains on well-prepared, weed-free seedbeds, or under irrigation in cooler months.	Light first cut 3–
TZ	Northern and southern highlands with irrigation or reliable rainfall	Start of rainy season on cool upland sites or as irrigated forage where water is available.	Repeated cuts thr

Country	Region	Planting	Harvest
UG	Highland and cooler mid-altitude dairy belts	At onset of main rains on deep, well-drained soils with near-neutral pH.	Multiple cuts thr
KE	Cool, irrigated or high rainfall highlands	At onset of long or short rains on well-prepared, weed-free seedbeds, or under irrigation in cooler months.	Light first cut 3–
TZ	Northern and southern highlands with irrigation or reliable rainfall	Start of rainy season on cool upland sites or as irrigated forage where water is available.	Repeated cuts thr
UG	Highland and cooler mid-altitude dairy belts	At onset of main rains on deep, well-drained soils with near-neutral pH.	Multiple cuts thr
KE	Cool, irrigated or high rainfall highlands	At onset of long or short rains on well-prepared, weed-free seedbeds, or under irrigation in cooler months.	Light first cut 3–
TZ	Northern and southern highlands with irrigation or reliable rainfall	Start of rainy season on cool upland sites or as irrigated forage where water is available.	Repeated cuts thr

Country	Region	Planting	Harvest
UG	Highland and cooler mid-altitude dairy belts	At onset of main rains on deep, well-drained soils with near-neutral pH.	Multiple cuts thr
KE	Cool, irrigated or high rainfall highlands	At onset of long or short rains on well-prepared, weed-free seedbeds, or under irrigation in cooler months.	Light first cut 3–
TZ	Northern and southern highlands with irrigation or reliable rainfall	Start of rainy season on cool upland sites or as irrigated forage where water is available.	Repeated cuts thr
UG	Highland and cooler mid-altitude dairy belts	At onset of main rains on deep, well-drained soils with near-neutral pH.	Multiple cuts thr
KE	Cool, irrigated or high rainfall highlands	At onset of long or short rains on well-prepared, weed-free seedbeds, or under irrigation in cooler months.	Light first cut 3–
TZ	Northern and southern highlands with irrigation or reliable rainfall	Start of rainy season on cool upland sites or as irrigated forage where water is available.	Repeated cuts thr

Country	Region	Planting	Harvest
UG	Highland and cooler mid-altitude dairy belts	At onset of main rains on deep, well-drained soils with near-neutral pH.	Multiple cuts thr
KE	Cool, irrigated or high rainfall highlands	At onset of long or short rains on well-prepared, weed-free seedbeds, or under irrigation in cooler months.	Light first cut 3–
TZ	Northern and southern highlands with irrigation or reliable rainfall	Start of rainy season on cool upland sites or as irrigated forage where water is available.	Repeated cuts thr
UG	Highland and cooler mid-altitude dairy belts	At onset of main rains on deep, well-drained soils with near-neutral pH.	Multiple cuts thr
KE	Cool, irrigated or high rainfall highlands	At onset of long or short rains on well-prepared, weed-free seedbeds, or under irrigation in cooler months.	Light first cut 3–
TZ	Northern and southern highlands with irrigation or reliable rainfall	Start of rainy season on cool upland sites or as irrigated forage where water is available.	Repeated cuts thr

Country	Region	Planting	Harvest
UG	Highland and cooler mid-altitude dairy belts	At onset of main rains on deep, well-drained soils with near-neutral pH.	Multiple cuts thr
KE	Cool, irrigated or high rainfall highlands	At onset of long or short rains on well-prepared, weed-free seedbeds, or under irrigation in cooler months.	Light first cut 3–
TZ	Northern and southern highlands with irrigation or reliable rainfall	Start of rainy season on cool upland sites or as irrigated forage where water is available.	Repeated cuts thr
UG	Highland and cooler mid-altitude dairy belts	At onset of main rains on deep, well-drained soils with near-neutral pH.	Multiple cuts thr
KE	Cool, irrigated or high rainfall highlands	At onset of long or short rains on well-prepared, weed-free seedbeds, or under irrigation in cooler months.	Light first cut 3–
TZ	Northern and southern highlands with irrigation or reliable rainfall	Start of rainy season on cool upland sites or as irrigated forage where water is available.	Repeated cuts thr

Country	Region	Planting	Harvest
UG	Highland and cooler mid-altitude dairy belts	At onset of main rains on deep, well-drained soils with near-neutral pH.	Multiple cuts thr
KE	Cool, irrigated or high rainfall highlands	At onset of long or short rains on well-prepared, weed-free seedbeds, or under irrigation in cooler months.	Light first cut 3–
TZ	Northern and southern highlands with irrigation or reliable rainfall	Start of rainy season on cool upland sites or as irrigated forage where water is available.	Repeated cuts thr
UG	Highland and cooler mid-altitude dairy belts	At onset of main rains on deep, well-drained soils with near-neutral pH.	Multiple cuts thr
KE	Cool, irrigated or high rainfall highlands	At onset of long or short rains on well-prepared, weed-free seedbeds, or under irrigation in cooler months.	Light first cut 3–
TZ	Northern and southern highlands with irrigation or reliable rainfall	Start of rainy season on cool upland sites or as irrigated forage where water is available.	Repeated cuts thr

Country	Region	Planting	Harvest
UG	Highland and cooler mid-altitude dairy belts	At onset of main rains on deep, well-drained soils with near-neutral pH.	Multiple cuts thr
KE	Cool, irrigated or high rainfall highlands	At onset of long or short rains on well-prepared, weed-free seedbeds, or under irrigation in cooler months.	Light first cut 3–
TZ	Northern and southern highlands with irrigation or reliable rainfall	Start of rainy season on cool upland sites or as irrigated forage where water is available.	Repeated cuts thr
UG	Highland and cooler mid-altitude dairy belts	At onset of main rains on deep, well-drained soils with near-neutral pH.	Multiple cuts thr
KE	Cool, irrigated or high rainfall highlands	At onset of long or short rains on well-prepared, weed-free seedbeds, or under irrigation in cooler months.	Light first cut 3–
TZ	Northern and southern highlands with irrigation or reliable rainfall	Start of rainy season on cool upland sites or as irrigated forage where water is available.	Repeated cuts thr

Country	Region	Planting	Harvest
UG	Highland and cooler mid-altitude dairy belts	At onset of main rains on deep, well-drained soils with near-neutral pH.	Multiple cuts thr

Region suitability

Country	Region	Suitability
KE	Highland dairy zones with irrigation or reliable rainfall and good drainage	High
TZ	Northern/southern highlands and irrigated dairy belts	High
UG	Highland and upper mid-altitude dairy regions with neutral soils	High

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