



SPRING FORAGE GUIDE

Your seed guide with practical,
technical advice to help plan
and grow reliable spring and
summer feed

NOTMAN
PASTURE SEEDS



NOTMAN
PASTURE SEEDS

**REAL
FARM
VALUE**
SINCE 1987

WELCOME TO OUR SPRING FORAGE GUIDE

Inside you'll find a wide range of spring-sown forage options designed to keep quality feed in front of stock when perennial pastures slow down in growth or feed value. From fast summer bulk to specialist blends, this guide highlights cultivars and management tips to help you make the most of every paddock.

We've trialled and tested many of these options across real farms to give you practical, proven advice. Whether you're looking to fill a summer feed gap, add diversity to your system, or push animal performance, you'll find clear information here to support your decisions. Thanks for taking the time to read through – and all the best for a productive season ahead.

ABOUT NOTMAN PASTURE SEEDS

We're a family business led by Peter and Elaine Notman with our roots firmly in Australian farming. From humble beginnings in a garden shed on the home farm, Notman Pasture Seeds has grown into a close-knit team working alongside hundreds of farmers each year to lift pasture and crop performance.

Our focus has always been simple: helping farmers grow more productive, efficient feed in a practical, prompt, cost effective way.

We're proud to partner with leading seed breeding companies – Cropmark Seeds, DLF Seeds and Pioneer Seeds – and to back that up with independent testing services across purity, germination, vigour, endophyte status and more. That way, you can be confident our seed is quality-checked and ready to perform on farm.

Importantly, we're local and experienced. At Poowong, Peter Notman, Gavin Notman, Adam Fisher and Jason Hibbs work directly with Gippsland farmers, while at Purnim, Jonathan Town and Andrew Allsop support farmers across western Victoria. Their knowledge of local conditions, backed by real farm trial results, ensures you get practical advice tailored to your farm system.

KEEPING UP TO DATE

At Notman Pasture Seeds, research, demonstrating and trialling are at the heart of what we do. For decades we've been running real farm trials across the eastern seaboard – from our Purnim and Longwarry sites through to on-farm demonstrations with local farmers in Victoria and New South Wales. This commitment keeps us at the forefront of new varieties and pasture technology as they come through.

Many of the pasture and forage options we offer have been thoroughly tested not only in research plots but also under practical farm conditions across Australia and New Zealand. Listening closely with our key suppliers, we continue to keep an ear to the ground on new seed and pasture technology so farmers can keep up to date first-hand on how they perform.

We look at dry matter yield, seasonal growth, feed quality (ME, digestibility, protein, fibre), plant persistence, tolerance to pests and disease and more.



USING SUMMER CROPS

Spring and summer presents an opportunity to plant a forage crop for summer, autumn & winter feed. As part of your pasture management program, spring & summer crops can grow valuable feed at key times when pastures are of low quality or quantity.

Dependent on a variety of factors, including environment, planting time, stock needs & water availability, there is a range of varieties available to suit your needs.

Forage brassicas are an extremely valuable, high protein, highly digestible feed source— offering establishment into cooler soils & the ability to mix pasture herbs and clovers into your summer forage blends.

Our **Top Crop forage blends** are an excellent summer/spring option, producing high quality, high yielding, reliable feed. Companion species provide greater paddock reliability, flexibility and robustness, without compromising high quality feed.

Chicory is a highly palatable forage that is an excellent feed source for high livestock growth rates from late spring to late autumn. It's deep taproot is a premier feature of it's drought tolerance

Plantain's deep, fibrous roots tap into moisture and minerals. Research shows it improves nitrogen cycling by lowering urine N and reducing leaching, while delivering highly digestible feed rich in essential minerals.

In a pasture mixture, **Red Clover** provides spring and autumn productivity ideal for increased animal performance, enhancing pasture and fixing nitrogen, making the most of stored soil moisture.

Forage Sorghum & Millet with the right conditions—heat, moisture & fertility—can deliver strong early growth & large quantities of highly digestible dry matter that can be grazed or harvested for silage or hay.

Our proven range of **Pioneer Maize hybrids** deliver outstanding maize genetics to Australian farmers, with leading maize hybrids showcasing very good drought tolerance, staygreen, stalk strength & balanced agronomy traits.

KEY BENEFITS

- **Lower cost feed:** A cost-effective way to grow dry matter on farm compared with buying in hay, silage or grain.
- **High yield potential:** Produces large volumes of feed at a relatively low cost of production..
- **Responsive to summer rain:** Fast regrowth and higher summer production than traditional ryegrass pastures
- **Weed control tool:** Provides the chance to use non-selective herbicides to break perennial weed cycles and reset pastures.
- **Pest and disease break:** Interrupts clover nematode and virus lifecycle, setting up stronger clover content in future pastures.

PETER'S TOP TIPS

- Good agronomic advice is paramount
- High germination seeds (90% +) are a must.
- Control weeds and have an excellent cultivated seed-bed.
- Soil clump size generally smaller than 50 mm.
- Address acidity problems, apply complete NPKS before planting, plus top up fertiliser after germination.
- Monitor for pests and take action if problems occur.
- Introduce stock slowly to enable the rumen to adapt.
- Good seed soil contact a must.

QUICK COMPARISON

Species	Varieties	Comments	Ready to graze	Grazing type	Sowing rate (kg/ha)	Mix Rate (kg/ha)	Sowing depth (mm)	Soil temp
Top Crop Blends	Various	Balanced summer forage that performs in most conditions. Provides fibre and protein, responds well to rainfall, and delivers reliable regrowth to keep feed coming.	50-70 days	Multi				
Chicory	Chico Puna II Top Crop	High quality summer–autumn feed. Drought tolerant and insect hardy. Adds energy and protein to the diet when ryegrass slows down.	50-70 days	Multi	6-10	2-4	0-15	12+
Plantain	Oracle	Year-round option in a pasture mix. High energy and minerals, deep rooting for dry conditions, and tough once established.	50-70 days	Multi	8-10	1-3	0-15	10+
Red clover	Reaper Amigain USA Red	Companion species to add quality to forage blend. Palatable legume, enhance pasture quality, nitrogen fixing capability	60-100 days	Multi	10-15	5	0-15	10+
Lucerne	Warrego Stamina	Deep-rooted perennial legume; high protein, fixes N, persistent under irrigation	Varied	Hay / Graze	20-25	4-6	5-15	12+
Bulb Turnip	Marco Barkant MPT	Quick, low-cost summer feed. Suits one grazing with high yield and quality – handy for filling short feed gaps.	60-110 days	Single	1-2	0.5	10-15	12+
Leafy Turnip	Pasja II	Flexible brassica that grows fast and recovers well after grazing. Good option for multiple grazings through summer.	42-70 days	Multi	3-6	1-3	10-15	12+
Forage Rape	Rifleman Pillar Mainstar	Leafy feed with strong summer performance. High yielding, multiple grazing potential, and reliable regrowth.	70-110 days	Multi Cover Crop	3-6	1-2	10-15	12+
Raphano brassica	Pallaton	Multi-graze brassica that bridges autumn–winter gaps. Water efficient, drought tolerant, and holds feed quality.	56-100 days	Multi	8		10	10+
Kale	Regal	Heavy feed source in late autumn. Ideal for single grazing, high energy and yield, best under irrigation.	150 days	Single	6		10-15	12+

Species	Varieties	Comments	Ready to graze	Grazing type	Sowing rate (kg/ha)	Mix Rate (kg/ha)	Sowing depth (mm)	Soil temp
Fodder beet	Geronimo	Very high yielding crop for late autumn harvest. Suits intensive systems with irrigation; provides energy-dense feed.	150-220 days	Single	100,000 seeds/ha		20	10+
Radish	Forage Radish	Long taproot breaks compaction, captures nutrients, improves soil structure	56	Single Cover Crop	8-10	3-6	10-15	10+
CleanCrop Brassicas	Multiple	Herbicide tolerant brassicas; flexible multi-graze feed option						
Millet	Shirohie Japanese	Fast summer bulk with no prussic acid risk. Low animal health issues, cheap to grow, and water efficient.	50-70 days	Multi	20-35	10-15	10-15	14+
Sorghum & Sudan Grass	Betta Graze SSS Mega Feed	Produces bulk feed in hot, dry summers. Suits hay or silage, quick to establish, and water efficient.	45-60 days	Multi	15-30 (Betta Graze) 8-15 (SSS)		20-30	15+
Maize for silage	Pioneer hybrids	High yielding silage or grain option. Fast growing, high dry matter production, and consistent under tough conditions.	Harvest 75-123 CRM	Silage harvest	80-100,000 seeds/ha		50-60	12+

The sowing rates, timings and management guidelines provided in this table are general recommendations only. Results can vary depending on soil type, seasonal conditions, rainfall and management practices. For specific advice tailored to your farm system, please contact Notman Pasture Seeds or your local agronomist.



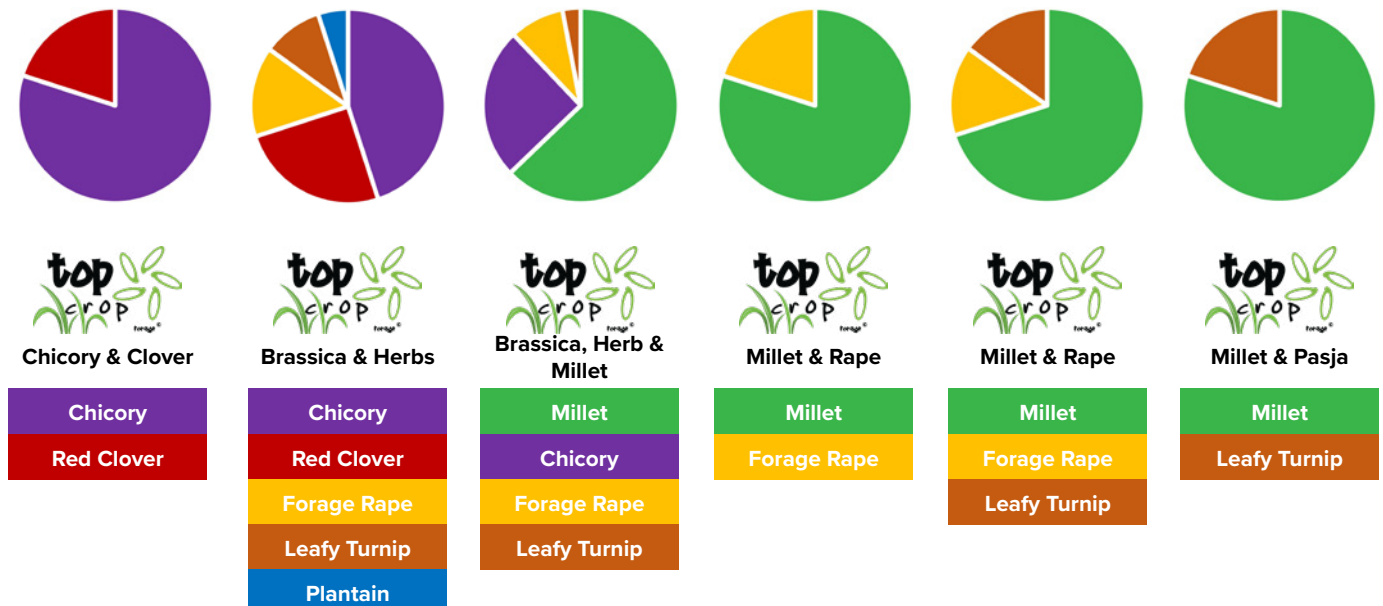
TOP CROP BLENDS



Our Top Crop Forage Blends are exclusive mixes of forage species designed to deliver robust, high-quality balanced feed with strong regrowth and reliability across a wide range of farming soil types and operations.

With a proven track record, Top Crop blends consistently provide feed when pastures taper off, producing more dry matter per hectare than underperforming perennial pastures. Alongside dependable animal performance, they also serve as an effective break crop, setting paddocks up for re-sowing in autumn.

- **High energy, high mineral feed** – supports milk and meat production, growth rates, and animal health.
- **Proven livestock performance** – designed to drive weight gain and milk solids through summer.
- **Excellent regrowth** – multiple grazings possible with strong recovery after rainfall.
- **Reliable in dry spells** – better summer tolerance than ryegrass-based pastures.
- **More tonnes of feed per hectare** – higher dry matter yield than traditional pasture methods.
- **Practical break crop** – fits neatly into summer rotations and sets up paddocks for autumn re-grassing.





TOP CROP CHICORY & CLOVER

 Multiple Grazings  50-70 days grazing  10-12 kg/ha

It's all about high quality with Top Crop Chicory and Clover. This blend offers a distinct nutritional profile compared to traditional dryland ryegrass and white clover pastures, designed to maximise animal health and performance with superior nutrition from high energy chicory and perennial red clover,

TOP CROP BRASSICA & HERBS

 Multiple Grazings  50-70 days grazing  10-12 kg/ha

Top Crop Brassica & Herbs is the earliest blend you can sow, starting in September, making it a great option to get high-quality feed growing quickly. Fast to establish, it delivers grazeable forage just 6–8 weeks after sowing. This mix combines leafy turnip and forage rape with red clover, chicory and plantain. The brassicas provide early bulk and cover, while the herbs and clovers bring persistence, protein, and quality feed through the warmer months. Chicory and plantain in particular add highly digestible, leafy forage with strong regrowth, good drought tolerance, and insect resistance.

TOP CROP BRASSICA, HERB & MILLET

 Multiple Grazings  50-70 days grazing  12-20 kg/ha

Top Crop Brassica, Herb & Millet forage blend of forage millet, chicory, forage rape and leafy turnip can produce good summer feed with excellent regrowth under hot conditions given moisture availability. Shirohie Millet added into the blend adds fibre to the diet reducing potential animal health issues associated with grazing forage brassicas.

TOP CROP MILLET & RAPE

 Multiple Grazings  50-70 days grazing  12-20 kg/ha

Top Crop Millet & Rape, one of our most popular and versatile summer forage blends, offers flexibility with very good yield potentials with forage rape in cooler conditions & Forage Millet in hotter, dryer conditions. A fast establishing summer blend with strong regrowth potential (subject to moisture availability) offers multi-graze blend with good balance of fibre and protein.

TOP CROP MILLET & BRASSICA

 Multiple Grazings  50-70 days grazing  12-20 kg/ha

Top Crop Millet & Brassica is a summer forage blend specifically designed to provide robust early feed and exceptional regrowth potential, ensuring a reliable source of high-quality nutrition. Leafy turnip drives early bulk and, with its ability to regrow rapidly from the crown, can provide multiple grazings when moisture is available. Where conditions are drier, Millet & Rape is the better choice – millet offers dependable bulk under limited rainfall, while forage rape adds quality and recovery.

TOP CROP MILLET & PASJA II

 Multiple Grazings  50-70 days grazing  12-20 kg/ha

Top Crop Millet and Pasja forage blend that is a very fast establishing forage crop that gives farmers access to fast, animal safe feed. It's high-quality feed has minimal ripening with regards to the Pasja II so can be ready for grazing within 42 days of sowing or delayed for up to 70 days when feed is required.



MULTI SPECIES BLENDS

Our 'multi species pasture cropping' blends that produce good quality forage, have a range of different root systems, includes nutritious legume species, flowering plants and species that will add organic matter to the soil surface and in the soil as root mass.

Certain species of multi specie blends are highly competitive with other species in a mixed sward, so we have suggested sowing rates to ensure that all species are well-represented in the pasture blends.

MANAGEMENT

Start small and trial different blends to see which species thrive on your farm. Observe the results and adjust as needed.

When sowing multi-species mixes that include broadleaf plants like chicory and plantain, avoid using post-emergent herbicides such as 2,4-D Amine or MCPA, as these will damage or kill the broadleaf component. In practice, diverse blends naturally do a good job of suppressing weeds without herbicide.

As with any new forage crop, introduce stock gradually to reduce the risk of animal health issues. We're continually learning about the interactions between species in multi-species blends and will share more management and adapt blend ratios as new information from on farms emerge.

SOIL BUILDING

The combination of different species anchors soil and provides weed suppression with its diverse canopy, also protecting soil erosion. The mixture of diverse root structures also builds soil organic matter and feeds soil microbes, leading to long term soil health and fertility. Deep rooted plants in our multi specie blends can break up soil compaction layers also.

SUMMER FORAGE MULTI SPECIES

Summer active diverse blend

 Diversity  15-25 kg/ha  Paddock ecosystem

Our Summer Forage Multi-Species Blend is built to do more than just grow feed – it's designed to improve the whole paddock system. Each species is carefully balanced so all cultivars play their part, with ratios selected to make sure no single plant dominates. The result is a diverse, resilient sward that provides stock with a choice of high-quality feed right through the warmer months.

Unlike single-species summer crops that focus on sheer dry matter yield, this blend is about function, diversity, and potential animal performance. The variety of rooting depths helps condition the soil, improve water use efficiency, and capture nutrients that might otherwise be lost. Above ground, the mix offers a broad range of energy, protein, fibre, and minerals shading weeds and protecting soil from erosion.

- **Millet & Sorghum** – fast summer bulk, quick regrowth, reliable warm-season base.
- **Forage Rape** – leafy, high-energy with strong regrowth
- **Perennial Red Clover** – high protein legume, fixes nitrogen, supports pasture fertility.
- **Forage Radish** – deep taproots break compaction, recycle nutrients, and open soil.
- **Chicory & Plantain** – nutritious herbs, highly digestible, rich in minerals, and drought resilient.
- **Black Sunflower** – deep rooting, adds diversity, attract beneficial insects.

Together, these species deliver a practical summer blend.



COVER CROPS

Cover crops are living plants grown between cash crops or during fallow periods to deliver multiple system benefits. They are known to reduce erosion, suppress weeds, recycle nutrients, build soil structure, improve water infiltration, and boost biological activity. In spring, Notman Pasture Seeds mixes a range of cover crop species together to complement their strengths.

When these crops are terminated or slashed and incorporated, they return organic matter and nutrients — acting as “green manure” to benefit the following crop. At Purnim, we’ve regularly cover cropped winter annual legumes - balansa, shaftal, arrowleaf and crimson – ahead of summer grown cash crops like maize and sorghum.

Choosing the right species or mix, timing sowing and termination correctly, and matching to your soil and rainfall zone are essential for successful contribution of each species

Pollinating plants and beneficial insects

Our multi-species blends and cover crop options are not only about producing feed – they also play a role in supporting beneficial insects and pollinators on farm. By including species that flower through the season, we provide a food source that naturally occurring insect populations can access. This helps strengthen their numbers and encourages them to stay active within the farming system.

Key pollinator-friendly species include Mantra White Clover, Reaper Red Clover, Arrowleaf Clover and Crimson Clover – all of which produce flowers that beneficial insects can utilise. The more diversity in the mix, the more opportunity there is to feed bees and other beneficials, helping both pasture performance and the wider farm environment.

Benefits of a diverse forage or cover crop

- **Improve soil and root structure**
- **Improve pasture persistence**
- **Use water and nutrients more efficiently**
- **Interrupt pest and disease life cycles**
- **Prevent soil erosion.**
- **Improve moisture holding capacity**
- **Increase nitrogen with introduction of legume**
- **Prepare soil/paddock for following crop**
- **High quality forage for livestock**
- **Increase production, healthier stock, faster weight gains over traditional ryegrass pastures**

Diversity - Same Mix, Different Results

Planting the same cover crop blend across multiple years won't always look the same, because seasonal conditions — particularly rainfall — determine which species thrive. In one season legumes or leafy herbs may dominate, while in another the deeper-rooted brassicas or summer grasses take over. Sometimes a species barely appears one year but flourishes the next.

That's the value of diversity: a well-built mix adapts to seasonal variation, spreads the risk, and helps ensure the paddock still benefits regardless of which plants prosper.

COVER CROP INSIGHTS

Species	Standalone Rate (kg/ha)	Mix Rate (kg/ha)	Key Comments in Cover Crop Systems
Shirohie Millet	20–35	10–15	Fast summer bulk. Useful as a short-season filler; quick regrowth, adds grass bulk to brassica/legume blends
Sorghum & Sudan Grass	20–35	8–15	Provides canopy cover and biomass; mixes well with legumes for balanced feed. Drought tolerant grass, high yield potential.
Forage Radish	8-10	3–6	Excellent in mixes for soil conditioning; breaks compaction, nutrient capture, decays to leave root channels
Forage Rape	3–6	1–2	Works well in multi-species blends for fast green feed and canopy closure. High-energy leafy feed, flexible grazing
Sunn Hemp	20–25	8–12	Warm season legume, rapid biomass./ Adds N and organic matter; valuable in soil-building or green manure blends
Buckwheat	40-80	10–15	Great in short rotations; improves pollinator habitat and early ground cover. Good weed suppression.
Teff Grass	10-25	5–8	Adds diversity to cover mixes; reduces sugar load; better suited to hay than grazing. Soft, fine hay option, low sugar levels (horse-safe)
Leafy Turnip	3–6	1–3	Useful in short-term mixes for rapid grazing options; complements grasses. Quick regrowth
Sunflower	25	5-10	Pollinator value. Adds height and rooting depth diversity; strong attraction for beneficial insects.
Linseed / Flax	25–50	3-6	Soil conditioning, Improves soil organic matter; not for bulk grazing, but valuable in multi-species for soil cover
Red Clover	10-15	5	Provides nitrogen for following crops; extends life of mixes if left beyond summer. Needs summer moisture to thrive.

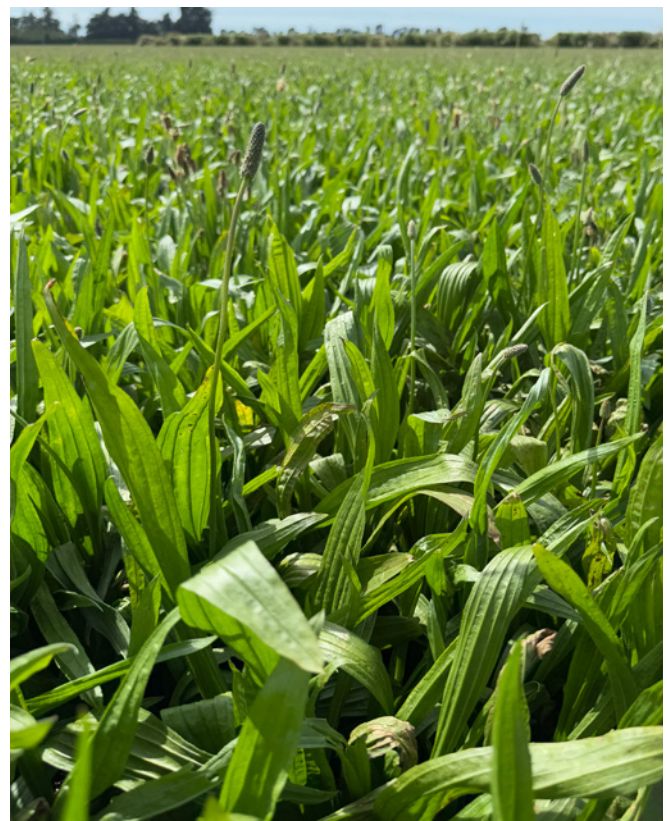
Reduced Nitrogen (N) Leaching with Plantain

Narrow-leaved plantain is increasingly recognised for its role in reducing nitrate (NO₃) leaching when grown in combination with ryegrass, chicory and clover. As part of a diverse pasture mix such as our premium VATBUSTER Plus Herbs, plantain contributes both to feed quality and environmental outcomes.

The effect is predominantly attributed to the low DM% of plantain relative to pasture grasses and legumes. Its low dry matter content, high water soluble carbohydrates: crude protein ratio, and low soluble N lead to higher urine volume, lower urinary nitrogen concentration, and a reduced nitrogen load in each urine patch. Research has shown this improves the efficiency of nitrogen cycling, with more N available for plant uptake and less susceptible to leaching losses.

Plantain also has a fibrous root system that increases water uptake, which can reduce drainage volumes. This complements ryegrass, which provides strong year-round feed, chicory for high-energy summer growth, and clover for nitrogen fixation. Together, these species create a productive and resilient mix while lowering environmental risk.

Although research is ongoing to fully quantify the mechanisms, evidence consistently shows that including plantain in pasture swards can help reduce nitrate leaching while supporting sustainable, profitable grazing systems.





FORAGE BRASSICA

Forage brassicas are a handy backup when grass quality and growth fall away. Highly digestible and low in fibre, they deliver bulk, high-value feed right when it's needed most. Brassicas also fit neatly into pasture renewal programs, providing feed while helping reset paddocks for the next rotation.

TURNIP (TANKARD OR GLOBE BULB)

Tankard type summer turnips are popular as a milking feed due to the exceptionally high yield potential from a single graze. We recommend proven varieties with good leaf to bulb ratio which means high quality feed that offers good utilisation, reduced wastage & ease of harvesting.

LEAFY TURNIP

These are generally a multi-graze option with a very low ripening period. Leafy turnips offer quick spring, summer and autumn feed, with high yields in higher rainfall summers. They are more prone to stress during summer than forage rapes as they have a less prominent tap root.

FORAGE RAPE

Forage rapes provide leafy, high quality feed which require a longer maturity time than hybrid leafy turnips. Forage rapes generally grow more dry matter from each grazing than leafy turnips and offer multiple grazing opportunities if moisture is available and the rapes are given the chance to re-grow.

KALE

Kale is a species that can produce large amounts of high-quality feed. Tall-growing types provide a cost-effective bulk of forage through late autumn and winter, with both leaf and stem readily eaten by cattle. Kale generally performs best under irrigation or effluent where yields can be maximised.

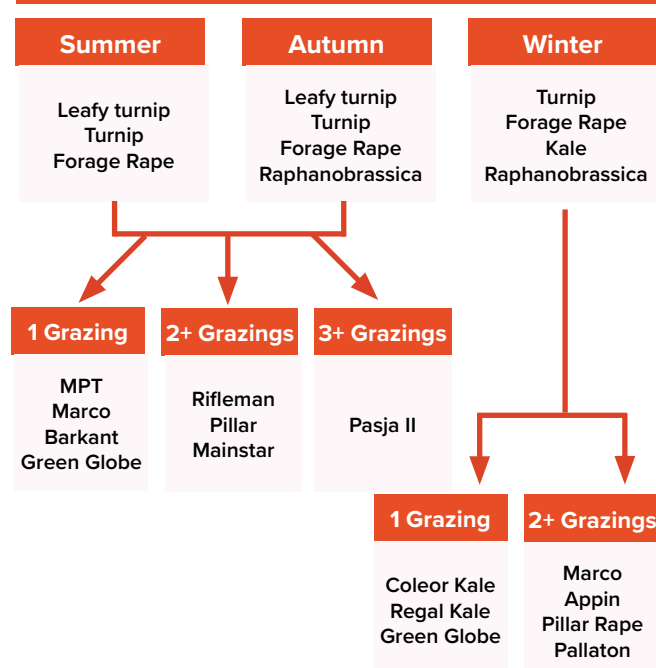
RAPHANOBRASSICA

Raphanobrassica is a kale × radish hybrid that offers strong yields and flexible grazing. Stock can be on it from 56 days, but its real value is holding quality feed into late summer and autumn—where forage rape often runs out. Persistent under multiple grazings and highly palatable, it's a reliable option to carry feed later in the season.

Key benefits of brassicas

- **Grow feed when ryegrass slows** – brassicas stay productive in the heat, keeping feed up to stock through dry spells
- **Fast, flexible feed** – quick to establish and ready to graze in weeks, filling the summer feed gap.
- **Regrow after rain** – many brassica types bounce back quickly with summer showers, giving multiple grazings.
- **High energy in dry times** – leafy, palatable feed that drives milk and weight gain when pasture quality drops.
- **Pasture clean-up** – a brassica break crop helps knock down weeds and reset paddocks before re-sowing in autumn.

When do you require your brassica crop?





Grazing forage rape

- Introduce livestock to crop (1-2 hours a day), building up to a maximum allowance over at least a 7-10 day period to allow rumen microbes to adjust to the high quality forage.
- Feed dry stock and dairy cows no more than 70-80% and 33% of the diet as brassicas
- Prevent gorging & help rumen microbes adjust by feeding extra fibre prior to and while grazing forage rape crops
- Do not feed frozen brassica to stock, feed silage/hay in the morning then shift the break in the late-morning/early after-noon.

FERTILISER

Fertiliser is essential especially if paddock has a low fertility history. Generally sow with 100–150 kg/ha of D.A.P. Nitrogen can be applied in 3 weeks if the crop appears pale in colour, approximately 80-100 kg/ha.

If broadcasting with seed 100 kg/ha of DAP could be used, and spread within 4 hours to avoid seed damage.

WEED & INSECT CONTROL

Spray old pasture out early with glyphosate and any pasture residue should ideally be grazed off hard or removed by other means before cultivation.

Control broadleaf weeds before sowing, as registered herbicide options are limited in forage brassicas. If the paddock has a history of weeds then a pre emergent herbicide is essential. Trifluralin 480 can be incorporated into soil pre-sowing as a pre-emergent to broadleaf weeds. Incorporation of Trifluralin into moist soil within four hours of spraying is ideal, and a clump size no larger than 50mm.

Control brassica pests such as Lucerne flea, Earth mite and slugs with insecticide when planting as these pests can have serious impacts on seedling establishment.

Diamondback moth can cause serious damage to forage brassicas if untreated. Read more below on Diamondback moth control measures.

Combining forage brassicas with other companion species such as forage millet in our **Top Crop blends** can reduce the impact of insect damage on the entire crop.

DIRECT DRILLING

Following chemical pasture control with glyphosate, direct drilling can be used with the following varieties: Leafy Turnip, all Forage Rapes, Chicory & Plantain. If direct drilling, its recommended to increase sowing rate by 50% to ensure adequate plant density.

SOWING

Mouldboard plough can be used on deeper soils where you won't be bringing up poor subsoil's such as clay, or alternatively disc then power-harrow.

The use of the plough tends to reduce the amount of weeds germinating due to the soil inversion (weed seeds are buried to a depth of 75-100mm) deep.

Sow into a cultivated seedbed. Broadcast from a power harrow, then harrow with light mesh, and roll. If direct drilling, surface needs to be even and sow no deeper than 1cm using 2 kg/ha. In dry soils, reduce rate.

GRAZING MANAGEMENT

Older forage rape types were grazed once leaves turned bronze-purple, but with modern varieties stock can go in earlier — the key is how you manage entry. Never give unrestricted access straight away, as this can upset rumen balance and cause scouring or acidosis.

Introduce stock gradually: start with 1–2 hours per day and build up over a week. Break-feeding or strip grazing is recommended, as it balances leaf with stalks or bulbs, improves utilisation, and helps crops regrow. Brassicas also work well fed alongside dry summer pasture to even out the diet.

ANIMAL HEALTH

Most animal health issues with brassicas can be managed by careful monitoring. Check nitrate levels after overcast weather, drought, or frost. Vaccinate young stock against pulpy kidney before grazing, and watch for red water in cattle, which can occasionally occur with kale. Limit excess nitrogen and sulphur fertiliser, particularly on high-sulphur soils, and avoid grazing flowering crops.

FORAGE RAPE

Leafy, high-quality feed with strong regrowth potential.

RIFLEMAN

Star of regrowth, leafier for longer



Ready to Graze
70-90 days



Fast regrowth
Leaf-stem ratio



3-6 kg/ha

Rifleman is a modern, quick-growing forage rape that reaches maturity in 70–90 days, delivering high-quality leafy feed fast. With excellent regrowth, it can be grazed multiple times through summer, keeping reliable feed in the system when pastures dry off and helping drive animal performance.

One of Rifleman's key strengths is its very good leaf-to-stem ratio. Unlike older brassicas with thick, less palatable stalks, Rifleman produces softer stems and more leafy forage, ensuring better utilisation by stock. After grazing, regrowth is leafy, with new shoots emerging from nodes low on the main stem.



PILLAR

High yielding, persistent brassica



Ready to Graze
80-110 days



Robust, reliable
High yielding



3-6 kg/ha

Pillar Forage Rape is an fast establishing, high yielding multi-graze giant-type forage rape with strong re-growth potential, good aphid tolerance and disease resistance. The dry matter yield potential of Pillar is proving on farm to be a real highlight.

Pillar Forage Brassica is key variety in marginal dryland growing areas having successfully been used from low summer rainfall cropping zones to high rainfall southern Victoria regions.

MAINSTAR

Balanced performer with excellent palatability.



Ready to Graze
70-90 days



Fast regrowth
Leaf-stem ratio



3-6 kg/ha

Bred for improved palatability and grazing recovery, Mainstar has a high leaf-to-stem ratio, making it a great option for finishing stock or bridging summer and autumn feed gaps. Mainstar is a well-balanced forage rape, delivering leafy, high-quality feed with strong regrowth potential. It's ideal for rotational grazing, especially in dairy and sheep systems looking to stretch feed supply over multiple grazings.

LEAFY TURNIP

Fast feed, grazing in as little as six weeks

PASJA II LEAFY TURNIP

One of the fastest brassica options around



Ready to Graze
42-70 days



3-6 kg/ha



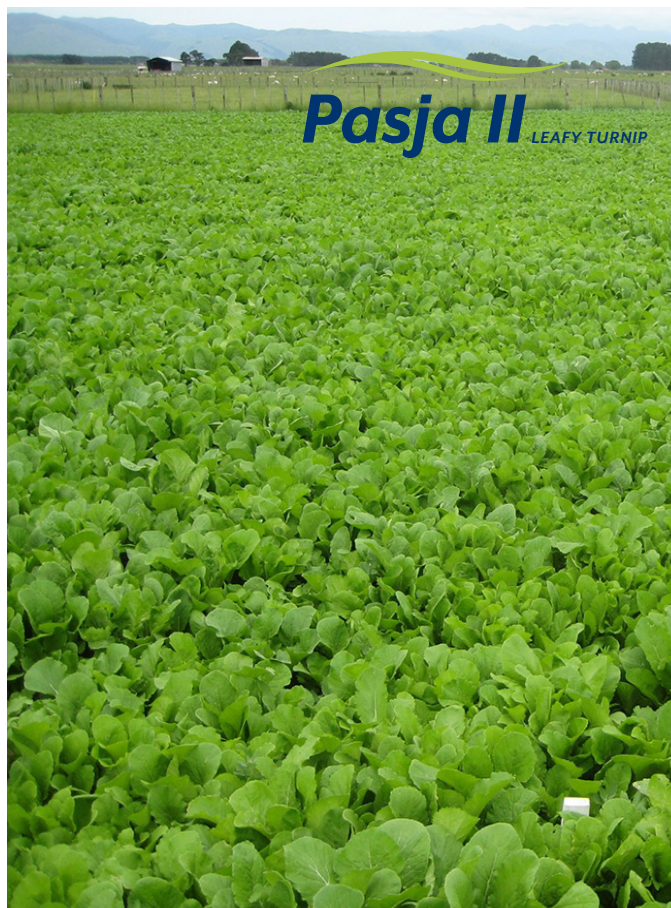
Fast establishment

Pasja II is a go-to brassica for fast, high-quality feed through spring, summer and autumn. It delivers rapid growth, high yield, and reliable regrowth when moisture is available – making it a flexible option for all classes of stock.

An early maturing hybrid, Pasja II can be grazed 6–8 weeks after sowing. Standalone crops are best strip grazed alongside dry summer pasture, providing valuable protein and energy at a time when ryegrass quality falls away.

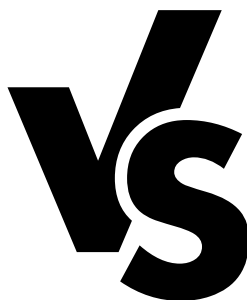
One of the key improvements over the original Pasja is its reduced bolting. By staying vegetative longer and delaying flower production, Pasja II maintains feed quality, intake and yield – ensuring consistent animal performance right through the season.

Pasja II is also available in our Top Crop Brassica & Millet blend, where it combines with forage rape and millet to balance leafy energy with fibre and bulk.



LEAFY TURNIP

Leafy turnip is ideal for quick, leafy feed in early–mid summer or in areas with reliable summer rainfall. It's great for finishing stock quickly, but may struggle under prolonged dry heat.



FORAGE RAPE

Forage rape is more robust in dry or marginal summer conditions, producing more bulk and offering better regrowth if managed well. It's a better fit for tougher summer environments. Its deeper taproot gives better soil moisture access

Diamondback Moth Control

A key pest in brassicas, the Diamondback Moth can cause severe damage (can occur in only a few days) if your crops are not monitored regularly. In extreme cases, damaged crops have been ploughed in and planted to forage millet or left to Autumn pasture re-sowing. Management starts with early detection to prevent the leaf-mining larva, detected by the silver markings on leaf surface.

Insecticide does not control adults or eggs, so it is essential to spray larvae before they have developed from an egg to adult—which can be as short as 14 days in warmer temperatures (see below).

Ensure good spray application and use equipment which gives good coverage of the plant, particularly on the undersides of the leaves. Before any spraying is undertaken, check grazing withholding periods.

HOW LONG IS A DBM LIFECYCLE?

Constant Temperature	12°C	15°C	25°C	28°C
Generation Time (egg to egg)	112 days	47 days	17 days	14 days

LIFE CYCLE

Eggs	Size 0.5mm	
Larvae	12 mm	
Pupa	12 mm	
Moth	10-12 mm	

BULB TURNIPS

Exception yield, low input, single graze

MARCO TETRAPLOID TURNIP

The fastest establishing turnip

 Ready to Graze 55-65 days  Fast Establishment  1-2.0 kg/ha

The earliest maturing summer bulb turnip available in Australia, Marco is a tetraploid, tankard type, having an interval from sowing to grazing of just 55-65 days.

Because of the quick maturity of Marco, it is an ideal crop where limited moisture is available post Christmas, an opportunity to plant a fast maturing crop.

Marco has a high root to leaf ratio, with large bulb size and good bulb storage ability. It is highly palatable, high ME content, has excellent bolting resistance and high club root resistance, and very good utilisation.

A summer Marco turnip crop makes an ideal preparation for the following autumn's pasture renovation program with chemical weed control options available.

BARKANT TURNIP

The perfect balance for summer pastures

 Ready to Graze 70-90 days  High yielding  1.0-2 kg/ha

Barkant mid maturing bulb turnip - the highest yielding summer bulb turnip in the business. Barkant turnips produce high quality feed with a high metabolisable energy (ME) value, meaning greater animal performance can be achieved. Ready to graze in 10-12 weeks. Feed quality peaks around 12 weeks, but can often be carried through until 17 weeks before grazing.

KALE



MAMMOTH PURPLE TOP

Cost effective late maturing turnip

 Ready to Graze 100-120 days  1-2 kg/ha  Low cost turnip

Mammoth Purple Top is an old school cost effective mid maturing tankard type turnip that has been widely used for many years.

REGAL KALE

Versatile all rounder

 Ready to Graze 150-220 days  4-6 kg/ha  Winter yields

Kale provides a bulk of high-quality feed through late summer and autumn. With its deep root system, kale is a hardy, drought-tolerant option once established, and most cultivars show good levels of aphid and clubroot tolerance.

Regal Kale is an intermediate-height type that delivers exceptional forage yields for stock. Selected for its soft stems and high leaf-to-stem ratio, Regal produces leafy forage that stock utilise well, driving animal performance. It also offers very good cool season hardiness and excellent pest and disease tolerance.

Under mainland dry Australian conditions, kale should be grown on irrigation or high-effluent paddocks during summer, where moisture supply allows it to reach its yield potential. In these systems, kale becomes a reliable bulk feed crop with dependable grazing value.

FORAGE RADISH

Regenerates soil by breaking compaction, suppressing weeds, capturing and releasing nutrients, improving water infiltration, and adding green manure.

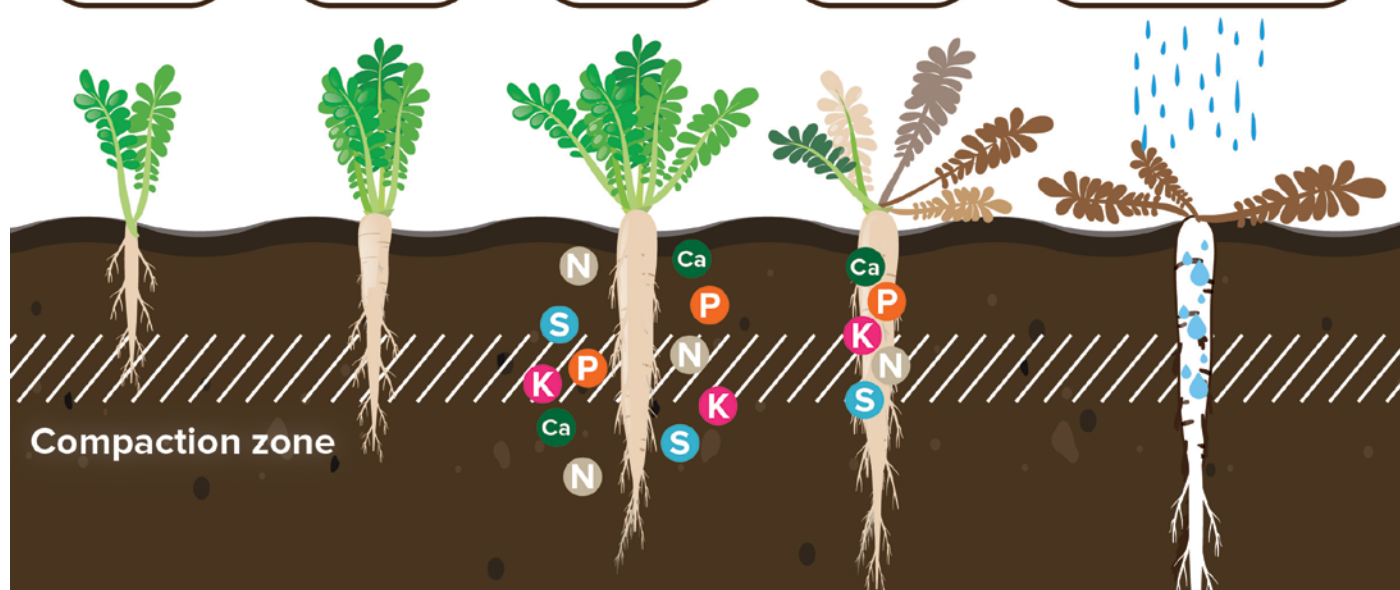
Sow radish at 5-8kg/ha, or in a Top Crop blend

Long fine taproot begins to drill through compaction zone.

Taproot draws N and key nutrients from all soil layers.

Nutrients absorbed and stored.

Thick foliage can suppress weeds, while decayed roots and perforated layers improve soil drainage, airflow and structure.



Forage Radish is a member of the brassica family that excels at breaking through compacted soils more deeply than most other cover crops.

Its strong taproot opens up soil channels, improving water infiltration and access to deeper moisture for following crops. As roots decompose, they release stored nutrients back into the soil, reducing nutrient losses and can feed the next rotation.

Sown as a standalone or as part of our Multi-Specie Pasture Blends (or your own custom blend), Forage Radish is a proven option for regenerating soils while also providing valuable forage alongside other diverse rooted species such as brassicas, herbs, and grasses.

Forage Radish is a versatile, soil-building tool that not only feeds stock but also enhances long-term paddock productivity.

Benefits of forage radish

- Long taproots penetrate several hundred millimetres into the soil, loosening compacted layers
- Best sown in early-mid spring for vigorous establishment with soil moisture available
- Rapid taproot growth mines and captures soil nutrients
- Nutrients are stored in the bulb during growth
- After the growing season, roots decompose to open soil channels
- These channels improve water infiltration and allow subsequent crop roots to reach deeper moisture





FODDER BEET

Fodder Beet, a cross between mangels and sugar beet, is potentially the highest yielding winter forage options available to farmers currently. Under Australian conditions Fodder Beet should be ideally under irrigation over summer. Fodder Beet is ideally used as a late summer/autumn feed option to bridge a feed gap.

It is an attractive option with its palatability, digestibility and very good disease tolerance. It aims to combine the ease of harvest of mangels with the high dry matter yields and high sugar levels of sugar beet. Fodder Beet is a long growing season crop that requires attention to detail from sowing through to grazing/harvest, but if done well, using fit for purpose beet (lifting vs grazing) and timely inputs the cost of production can be low.

Pre-emergent herbicide, applied immediately after sowing is highly recommended. Crops must be monitored frequently through the establishment phase as timely weed control is essential for good yield results.

Developed fodder beet plants are relatively tolerant of most brassica pests, although aphids need to be monitored and controlled as they damage the plant and also carry and spread disease. Continue to monitor crops for fungal disease and apply fungicide if deemed appropriate

KEY BENEFITS

- **Massive yields** – 20+ t DM/ha potential.
- **High feed value** – 12–13 MJ ME/kg DM, 90% utilisation.
- **Low cost feed** – very competitive cents/kg DM when yields achieved.
- **Reliable crop health** – generally unaffected by common brassica diseases.
- **Flexible use** – graze in situ or lift for feeding.

Grazing fodder beet

Before grazing it is important to get your crop yield measured so you have an idea of how much feed is available to help work out your break sizes. Acidosis can occur if animals are not restricted in the amount of fodder beet they consume over the first few days.

It is very important that animals are transitioned very carefully on to fodder beet over the first 14 days, slowly increasing their ration. Ensure adequate water and supplement is available. Fodder beet should be fed to stock at no more than approx. 70% of their ration.

GERONIMO FODDER BEET

Versatile all rounder



Ready to Graze
158-220 days



100,000 seeds/ha



Lifting & grazing

It has a yellow – orange tankard shaped bulb that sits approximately 45% above the ground. It is a high yielding variety with medium dry matter content at 15-17% DM, with very good tolerance to the diseases Rhizomania, Ramularia and Mildew.

Geronimo Fodder Beet is consistently high yielding with large top growth that can be grazed in-situ, or be lifted and fed whole or chopped. Seed is available in 50,000 seed units. Pre-order required, as air shipped in from NZ.





CHICORY

Chicory is a deep-rooted broad-leaved perennial herb, which has proven to be an excellent source of high quality & yielding feed from late spring to late autumn.

Chicory produces leafy top growth and has a thick, deep taproot—which can go down up to 1.5metres—giving it excellent drought tolerance and mineral extraction. Chicory has good disease resistance, insect tolerance, along with tolerance to acidity and has been successfully grown in soils with low pH soils.

Paddock Preparation

Chicory establishment is highly sensitive to competition, so effective weed control is critical. Eliminate broadleaf weeds before sowing, as post-emergence herbicide options are very limited. On cultivated paddocks, aim for a fine, firm, weed-free seedbed with no grass showing. Two passes with a disc cultivator will help break clods and level the soil. Fertiliser is best applied between the first and final cultivation, along with a pre-emergent herbicide. Chicory can also be drilled directly into a clean seedbed.

A general pre-plant fertiliser program (where soil test levels are not already high) includes: Urea @ 100kg/ha, MOP @ 50kg/ha and Single Superphosphate @ 100kg/ha.

Chicory has been proven to perform across a wide range of soil types, including heavy clays. The main challenge is managing pugging in winter and early spring, particularly where crop persistence beyond 18 months is expected.

Sowing

Chicory is cold-sensitive; spring sowing is recommended. Early autumn sowing is possible provided seedlings are well established before winter dormancy. Chicory prefers free-draining soils and does not tolerate prolonged waterlogging. On irrigated paddocks, water before sowing and plant once the topsoil has dried sufficiently.

Sow 6–10 kg/ha at 10mm depth (up to 2 cm in sandy or dry soils)

KEY BENEFITS

- **Highly palatable forage**
- **Excellent feed source for high livestock growth rates**
- **Provides high quality feed through summer using summer rain, irrigation or stored soil water**
- **Able to produce high quality forage on acid soils**
- **Recovers quickly after grazing**
- **Does not cause bloat**

with starter fertiliser DAP @ 100kg/ha.

POWERHOUSE IN BLENDS

Chicory is a powerhouse in multi-species mixes. Its deep taproot mines moisture and nutrients from below the reach of grasses and clovers, helping drive growth when conditions turn dry. In blends, chicory adds highly digestible, leafy forage that lifts animal performance, complementing the roots of other species.

Chicory fits well in summer forage mixes such as Top Crop Brassica & Herbs or Top Crop Brassica, Herbs & Millet, typically sown at 2–4 kg/ha in the mix.

INSECT & WEED CONTROL

Pre-emergent herbicides such as trifluralin are strongly recommended, targeting annual ryegrass, barnyard grass, pigweed, amaranthus, winter grass, and wireweed. This is especially important given the lack of effective post-emergent options in chicory. Avoid sowing chicory into paddocks with known high broadleaf weed pressure until the problem is under control.

Monitor seedlings closely after sowing, as chicory is highly susceptible to Red-Legged Earth Mite, Lucerne Flea, and Slugs.

Where slugs are a risk (heavy stubbles, wet soils, or high organic matter paddocks), apply slug bait at sowing and continue monitoring until seedlings are well established. Apply registered insecticides if other pests are detected.



CHICO CHICORY

Rocket fuel for livestock performance



Ready to Graze
50-70 days



6-10 kg/ha



Summer active
Upright chicory

Chico Chicory is a proven, fast-growing, upright chicory that acts like rocket fuel for stock performance. It establishes quickly in spring, delivers leafy, high-quality forage through summer and autumn, and has been trusted by farmers for years.

Chico is noted for its strong summer activity and persistence under dry conditions. Its upright growth habit makes grazing easier and utilisation high.

Chico can be sown as a short-term annual crop for fast feed or built into a perennial, multi-year sward as part of a diverse pasture mix. Either way, it's a high-performance option for farmers looking to drive stock growth and production through challenging summer periods.

How is chicory used?

1. **As specialist late summer and autumn crop.** Chico provide a great amount of high quality feed over late summer and autumn, so it's plays a specialist role in filling a feed gap
2. **Summer forage pasture mix** – Chicory can be mixed with companion species such as red clover, plantain, and forage brassicas.
3. **Autumn pasture mix** – Chicory can also be added to a ryegrass pasture mix to improve summer production and quality enabling new pastures to carry higher quality feed later during dry summers.



Feed type (leaf)	Digestibility (%)	Energy (ME)	Crude protein (%)	Total N (%)
Chicory	70-80	9-11	14-24	2.2-4.3
Sub clover	53-80	8-10.5	13-21	2.08-3.42
Perennial ryegrass	50-77	7-9	9-27	1.4-5.26
White clover	54-82	8.8-12.3	17-24	1.65-4.7
Lucerne	48-77	7-11	13-24	1.6-4.6

Table: Feed quality analysis (NSW Department of Primary Industries)



Chicory for Young Stock – High Protein Energy, Animal Safe Summer Feed

Chicory drives weight gain in young stock by supplying energy and protein when perennial pastures lose feed value. Research has shown one hectare of chicory can feed around 25 calves, providing about 4 kg DM/calf/day. To achieve this, chicory should be sown promptly in mid-October for grazing from mid-December. An option to maximise summer availability is managed on a 20–22 day rotation, with consideration for back fencing and portable water troughs to protect regrowth and residuals.

Grazing chicory

The deep chicory tap root system can follow moisture through the soil profile during the establishment period resulting in chicory being anchored well and able to withstand the initial grazing pressure. Implement the pulling test to make sure that the chicory plants are established well enough to withstand grazing.

Chicory should be first grazed no earlier than the seven-leaf stage which is approximately 8 weeks after sowing in spring. Graze when the chicory has reached 35cm, applying 80 kg/ha Urea after each grazing if moisture is present. Aim to feed 3-4kg DM/cow

Dependent on rainfall, graze chicory at 35cm again – at approximately 20-35 days after first grazing. Where chicory is in a pasture mix the paddock should be managed as it would be as a normal grass/clover pasture, grazing to residuals of 1500-1600kg DM/ha.

As with most multi graze summer crops back-fencing is needed avoid grazing regrowth. Hard grazing, particularly after damage to the crown in wet conditions, may affect production and persistence. Ensure the crop is not grazed below 5cm or after flowering.

Chicory persistence is especially limited in pugged paddocks or where soils remain waterlogged through winter, as “wet feet” stress the plant and reduce longevity. Prolonged soil saturation weakens the crown and root system, leaving plants more vulnerable to disease, insect attack and winter kill. Once crowns are damaged, recovery in spring is poor, and stand life is often reduced to a single season rather than the 2–3 years possible under well-drained conditions.

CHICORY OR PLANTAIN?

Trait	CHICORY	PLANTAIN
Use	Specialist summer crop, or in pasture mixes	Year round grazing, specialist herb
Root system	Deep tap root - accesses subsoil moisture	Fibrous, course root system - spreads through soil
Drought tolerance	Good - maintains quality in hot conditions	Good - can wilt under stress
Soil type	Range of soils. Avoid waterlogged & heavy clay	Better suited to heavy soils than chicory. Still avoid
Growth peak	Spring - late Autumn	All year round - strongest in spring-autumn
Productive years	1-2 years under dairy grazing	2-3 years under dairy grazing
Energy	11.5-13 MJ/kg DM	11-12 MJ/kg DM
Crude protein	16-27% DM	16-28% DM
Grazing height	25-35cm. Graze to 5-10cm residual	25cm. Graze to 5-10cm residual

PLANTAIN



Plantain is a productive summer-active herb valued for both its nutritional qualities and its environmental benefits. With a fibrous root system, it can access moisture and nutrients deeper in the soil, helping it hold feed quality in hot conditions when ryegrass declines.

Plantain is rich in key minerals such as calcium, magnesium, potassium, phosphorus, copper and zinc, supporting animal health and performance. Research has also shown plantain can positively influence nitrogen cycling, lowering urine nitrogen concentrations and reducing the risk of nitrate leaching.

It can be grown as a standalone crop or included in multi-species blends such as Top Crop Brassica & Herbs, where it complements clovers, brassicas and chicory to provide balanced summer forage. While moderately drought tolerant, plantain still responds well to moisture and will slow growth under extended dry periods.

KEY BENEFITS

- Summer forage alternative to grasses
- Highly palatable year round growing pattern
- A herb that can grow in a range of soils and climatic conditions
- High nutritive & mineral contents
- Quick to establish

SOWING

Plantain can be sown across a wide range of soils and climates, but spring sowing is preferred to maximise summer and autumn growth. Use direct drilling at no deeper than 1 cm, as seed is small and depth-sensitive. Plantain performs best in free-draining soils and is not suited to heavy clays or paddocks prone to prolonged waterlogging. As a standalone crop, sow at 8–10 kg/ha.

PLANTAIN BLENDS

Plantain adds diversity and quality to forage mixes such as Top Crop Brassica & Herbs or Top Crop Brassica, Herbs & Millet. It is typically included at 1–3 kg/ha in blends, complementing clovers, chicory and temperate grasses with its mineral-rich, highly digestible forage.

ORACLE PLANTAIN

Late maturing and high forage yields



Ready to Graze
50–70 days



8–10 kg/ha



Rocket fuel for
livestock

A late heading, broad leaved plantain bred for high forage yields under grazing. Has very strong year-round growth, especially over the late spring, summer and autumn months. Has deep fibrous roots enabling good heat and drought tolerance. Highly suitable for all livestock types and for use as a specialist high quality forage crop, or as a component of permanent pasture mixes to improve summer quality. High forage quality for enhancing livestock performance.

FERTILISER

A general pre-plant fertiliser program includes 50 kg/ha of urea, 50 kg/ha of MOP and 100 kg/ha of superphosphate, unless soil test levels for phosphorus and nitrogen are already high. Establishment is significantly improved with the application of 70 kg/ha of urea after sowing, alongside effective broadleaf weed control.

INSECT & WEED CONTROL

Seedlings are particularly vulnerable to slugs, so slug bait should be applied at sowing and crops monitored through establishment.

GRAZING MANAGEMENT

Plantain forms a rosette of ribbed leaves, typically 8–20 cm long. First grazing should take place 7–8 weeks after sowing and no earlier than the six-leaf stage to avoid plants being pulled out. Graze at around 25 cm to maintain quality, as older leaves become fibrous and less digestible. In dairy systems, plantain is best fed at 3–4 kg DM per cow per day. With good management, productive growth can be expected for 2–3 years.



SUMMER LEGUMES

Enhance soil quality by improvements in soil fertility, physical soil attributes and paddock ecosystem with summer legume forage crops.

Summer legume forage & cover crops are an excellent way to improve soil nitrogen levels by significant fixation or by incorporating green manure crops into the soil in southern parts of Australia. Nitrogen fixation is the summer legumes ability to extract nitrogen from the air and convert it to a form plants usually obtain from the soil - and then using it for positive plant growth.

Legumes are also excellent companions to summer grasses in forage & cover crops. We can custom blend many different legumes and companion species.

Late spring and summer rainfall patterns have a significant impact on which legumes can be used for summer sowing. Pasture legumes need high constant levels of soil moisture for germination and early development so please always seek advice from our team on the best legume to use.

COWPEAS

On irrigated areas, Cowpeas are ideal legume companion species with forage sorghum and millet to add nutrient value for a more balanced feed ration animal production.

Cowpeas are fast growing multi purpose legumes with spreading to fairly erect growth habits, growing up to 50-100cm high. Cowpeas are safe grazing, low bloat risk and nil prussic acid and farmers can safely graze stressed cowpea crops. The ideal time to cut a cowpea is about 70-90 days after sowing. Cowpeas are adapted to a wide range of soil types, with a preference of heavier soils and are sown at 20-25kg/ha as a standalone and 8-12kg/ha in a mix.

LAB-LAB

More tolerant to heavy grazing than cowpeas, Lab-Lab is typically sown for grazing, forage conservation and as a break crop in sub-tropical and tropical farming systems.

Lab-lab is characterised by being easy to establish with thick, twining stems and large leaves. Lab Lab is short lived, however provides bulk dry matter over the warmer months. If grazing Lab Lab it should occur prior to flowering to maintain the maximum forage quality.

BUCKWHEAT

Buckwheat is a fast growing, short season spring, summer regeneration, cover crop, & potential grain cultivar that is planted for it's rapid growth to choke out weeds and attract beneficial insects & bees.

Buckwheat dense root system means it is a great mid summer soil conditioner before Autumn crops, with its abundant fine roots leaving the top soil loose before Autumn planting. Buckwheat grows well in low-fertility or acidic soils and can scavenge some phosphorus (P).

If used for a cover crop over summer, Buckwheat is ideally mown before seeds mature and left to decompose and protect the soil

until the next sowing. We've used Buckwheat in a number of ways, including as weed suppression in vineyards. Buckwheat is also available in your custom multi species pasture and cover crop blends.

Green manure crop

Soil conditioning characteristics

Buckwheat branches freely, as opposed to tillering

Fast growing, short season crop

Attract beneficial insects and bees when flowering

Grows well in low fertility or acidic soils

Buckwheat is not drought tolerant

RED CLOVER

Red clover is a tap-rooted, short-lived perennial (2–5 years) that delivers high-quality feed through spring, summer and autumn. Its ability to hold feed value in summer makes it a valuable addition to pasture mixes, boosting animal performance and improving feed quality when ryegrass slows down. With the right summer moisture, red clover adds both productivity and protein, while also contributing nitrogen fixation to benefit companion species.

SOWING

Red clover performs best in rainfall areas above 600 mm on fertile, well-drained soils. It is less suited to poorly drained or saline ground. As a standalone crop sow at 10-15 kg/ha. In blends with ryegrass or summer forage species, add red clover at 5 kg/ha to improve persistence and quality.

RED CLOVER BLENDS

Red clover partners well with a wide range of forage species including chicory, plantain, forage rape, leafy turnip, millet and ryegrass. In these mixes it lifts feed value, balances fibre and protein, and extends grazing through summer provided there is adequate soil moisture.

FERTILISER

Strong surface rooting means red clover requires good soil fertility. Pay particular attention to phosphorus, potassium, sulphur and molybdenum to sustain high production and persistence.

INSECT & WEED CONTROL

Weed competition can quickly thin red clover stands, so paddocks should be clean before sowing. In-crop herbicide options are limited, making pre-sowing control essential. Red-legged earth mite can severely damage seedlings and should be monitored closely, with insecticide applied if populations are high.



REAPER RED CLOVER

Palatable and persistent red clover



High quality feed



10-15 kg/ha
5kg/ha (mix)



Palatable, fine stems

Reaper Red Clover is a high-yielding, large-leafed, semi-erect diploid variety suited to grazing, hay and silage. Its fine stems make it more palatable and less stalky than older red clovers, while its low oestrogen levels make it safe for breeding stock.

With good disease resistance and persistence, Reaper offers reliable performance across a range of systems. Establishing in spring gives plants the best start for strong summer and autumn production, while oversowing in autumn into an existing perennial ryegrass sward is a cost-effective way to lift clover content and boost nitrogen fixation.

This flexibility, combined with palatability and feed quality, makes Reaper a practical choice for farmers wanting to drive performance in both dedicated stands and mixed pastures.

USA RED CLOVER

Spring silage and hay specialist



Spring Specialist



10-15 kg/ha
5kg/ha (mix)



Upright growth habit

USA Red Clover is a spring specialist with an upright growth habit that makes it particularly well suited to silage and hay systems. When used in pasture blends, it boosts overall forage quality, enhances palatability, and contributes valuable protein through the key spring production window.

Grazing red clover

Livestock perform well when fed clover. Feed quality is significantly higher than perennial ryegrass offering increased palatability, intake and higher stock growth rates from late spring through to autumn.

In a pasture blend red clover can persist for 2-3 years if the crown of the plant is managed well. Longevity of the crown will depend on its damage by cutting, grazing and trampling by livestock. Ideally red clover should be rotationally grazed or set stock for short periods at a time. As a standalone crop monitor red clover growth regularly especially in spring when growth is at its peak.. To maximise forage quality avoid grazing and or cutting beyond 25cm in height and graze down to a 5cm residual.



MAIZE

Maize is one of the world's most widely grown crops, offering very high yields for both grain and silage. The yield potential of maize will vary between districts and farms because of water availability, altitude, sunlight, soil structure and soil fertility.

Yield potential will also vary between seasons at the same site depending basically on the season (e.g. heat wave, drought) as well as choice of hybrid, sowing time and other associated management decisions (e.g. type and quantity of fertiliser applied and its timing).

The most profitable maize crop is obtained by optimising (rather than maximising) the key inputs such as seed, fertiliser and water.

Although too often farmers have effectively used the optimum level of inputs but have not achieved the optimum high yield – usually because of poor timing of inputs or poor crop management. The recommended steps will address each of these aspects of growing a profitable maize crop.

SEPT	OCT-NOV	DEC	JAN-FEB	MARCH	APRIL
Soil test Select maize variety Set yield targets Pre-order seed	Seedbed preparation Pre sowing fertiliser Pre emergent spray Powerharrowing	Nitrogen application Pest inspection Weed control Summer grass control	Regular crop inspections Prepare silage pit	Plan harvest logistics Select inoculant type Harvest Seal & roll silage stack	Sowing back to grass Feed test

SOWING TIME

To maximise potential yield we need to maximise the amount of sunshine energy (radiation) and heat units absorbed by the crop. In general, early sowing has higher yields than late sowing as the crop can reach full canopy cover earlier to take advantage of sunshine and heat units.

SEEDBED PREPARATION

Bring the seedbed to a clump size no larger than a maize seed. A well-prepared seedbed enables weed control chemicals and insecticides to give optimum results, enhances crop establishment and allows planting machinery to function more accurately.

Maize does not perform well in water-logging soils—encouraging weeds & summer grasses to invade the crop, reducing yields & contaminating the resulting silage crop. Waterlogged soils can impact harvest capabilities at the end of the crops life cycle.

Maize seed needs a minimum temperature of 12oC and rising to commence planting—so measure soil temperature (at depth of 5cm) at 9am over five consecutive days to determine appropriate planting time.

FERTILISER

Maize crops have a high requirement for fertiliser, so it is

important high rates of nitrogen, phosphorus and potash be applied before & during crop growth. Soil test is essential, and will indicate

A balanced fertility program is therefore a major step towards obtaining higher yields. As the roots begin to take over the job of nourishing the plant, shortages of major nutrients can seriously slow growth and development. Dairy effluent can be used as a nutrient source for maize provided the crop requires the nutrients and good effluent practices are followed.

A standard fertiliser application could entail 350 kg/ha Urea, 350kg/ha MOP (Potash) & 150kg/ha Superphosphate. At planting, apply 150-350kg/ha of DAP can be used.

PRE-EMERGENT

Pre-emergent Atrazine & S-Metolachlor herbicides will be most effective with 10mm of rain, irrigation or good soil moisture post application

SOWING

Maize hybrids must be precision planted—choose a competent contractor for sowing and harvesting your maize. Planting seed to a depth of 50-60mm is optimum for seed germination & development. If planted too shallow it can (1) delay or inhibit the development of brace roots which are the primary tools for water & nutrient uptake; and (2) expose seed to herbicide residues.



Each variety varies in seed size, so check the number seeds per kilogram & the optimum population of plants per hectare. This generally falls between 80-90,000 (dryland) & 95-110,000 (irrigation) plants.

Crop Emergence: From approx. 6 days after planting check crop emergence. Full emergence occurs 7 to 14 days from planting depending on temperature. Inspect daily for insect damage.

WEED & PEST MANAGEMENT

Weeds and pests have a major impact on the yield and performance of the crop - so regular crop inspections will limit major damage taking place.

Maize is quite sensitive to weed competition in the early stages of growth up until it reaches about 0.8 m in height. Inter-row cultivation can be done up until the Maize crop reaches about 0.75 m in height. After that the crop canopy closes over and the Maize competes well with weeds. High clearance sprayers or aerial application are now the only options from this point forward.

MILK LINE SELF CHECK

The whole plant dry matter can be estimated by looking at the milk line of the grain. To check whether your crop is in the range of 32-40 percent dry matter take a cob from a plant that is at least 20 rows into the crop. Break the cob in half and discard the end of the cob that was attached to the plant.

Hold the point of the cob downwards and remove a kernel from the snapped end. Keep the kernel the same way up as when you removed it from the cob. Slide your fingernail along the length

of the kernel starting at the flat (dented) end of the kernel. On a 1-5 scale, with 1 being containing no hard starch and 5 being black layer, the optimum chopping time is when the milk line is between position two and three on the kernel.

IRRIGATED CROP

Timing of the final irrigation should enable the crop to survive on moisture in the soil until the crop is harvested. Ensure the crop is not moisture stressed leading into harvest. Grain fill is occurring through to harvest and limiting water will reduce yield. See our Maize Water Management section for more information on water requirements.

HARVEST

The ideal time to harvest your maize silage crop is when the whole plant dry matter is between 32- 35%.

Harvesting too early will result in high losses as plant fluids run from the silage stack/bunker taking away valuable sugars. Late harvest may result in loss of quality—increasing in fibre and becoming less digestible.

Some hybrids only offer a 4-5 day harvest window, while others offer 8-15 days. This allows for harvest delays due to weather, machinery breakdown or contractor hold-ups. Harvest chop length should be 8-12mm average.

Ensure high quality inoculant are used. A good silage inoculant gives a faster, more efficient fermentation, resulting in less energy and drymatter loss and greater animal performance when compared to an untreated control.

CORN GROWTH STAGES



MAIZE HYBRIDS

Premium maize varieties from leading plant breeders



CRM 75

P7524

Early out, great late starter

P7524 is recognised as a reliable performer producing impressive silage yields with outstanding energy and whole-plant digestibility.



CRM 85

P8500

Southern standout silage

OUR TOP PICK Top-performing hybrid offering exceptional silage yields, drought tolerance, and robust agronomics for southern regions.



CRM 92

P92575

Stable, tall and tough

Reliable choice for cool climates, providing impressive silage yields, high starch content, and excellent standability.



CRM 99

P9978

Tonnes of feed, very popular

Dual-purpose hybrid offering unmatched silage performance, yield stability, and excellent staygreen for maximum starch content. Well suited to Southern VIC, Northern Victoria irrigation districts.



CRM 107

P07003

Game changing BMR corn hybrid

P07003 BMR is a brown-midrib maize hybrid bred for superior fibre digestibility and cow response. Ideal for quality-first silage in dairy systems, delivering more milk per tonne.



CRM 109

P0937

World record holder for grain

High-yielding silage hybrid with exceptional digestibility, strong staygreen, and robust disease resistance, perfect for southern Australian feed systems.



CRM 113

P1315-IT

Weed control, high output IT

Imidazolinone-tolerant (IT) hybrid that excels in weed control and silage quality, delivering high yields.



CRM 114

P1481

Bred for drought tolerance

Australian-bred hybrid offering excellent drought tolerance and silage performance, ideal for tough conditions.



CRM 118

P1888

Weed control, high output

A smart choice for integrated weed management, supporting cleaner, more productive silage paddocks.



Maize silage - playing its part in feed quality

Maize silage is increasing in popularity, with many first time growers taking up the challenge with Notman Pasture Seeds in investing in this high quality home grown ration successfully.

While it can yield high tonnages, it's maize silage feed quality—not bulk—that is popular among dairy farmers in driving rumen function and milk production. Growing high-quality maize silage offers starch and digestible fibre, supporting higher intake and energy availability.

A cow's rumen is central to feed conversion and milk production. When it's running well, cows make the most of their diet and stay in good condition. But if rumen function slips—due to poor-quality feed or acidosis—intake drops, and so does production. That's why supporting a stable, well-fed rumen is one of the most effective ways to keep cows productive and healthy.

Notman Pasture Seeds advocate for a systems-based approach to a balanced diet—using maize silage not in isolation, but as a key part of a well-structured ration that aligns with your pasture production and herd's feed supplements.

We know growing maize silage provides your farm with consistent, energy-rich source of fermentable carbohydrates, mainly starch, which supports rumen function and milk production. When well-made, it improves nutrient absorption, body condition, and rumen stability.

It's important to get the balance right. Maize silage is relatively low in protein and minerals. So to fully support cow health and production, it needs to be balanced with protein-rich feeds and mineral supplementation.

In further detail, fresh pasture is naturally high in unsaturated omega-3 fatty acids. In our pasture dominated systems, cows typically experience faster rumen passage rates, meaning more of these beneficial fats can bypass the rumen and be absorbed directly in the small intestine. These omega-3s have anti-inflammatory properties, supporting better immune function, fertility, and overall cow health.

In contrast, maize silage tends to have a higher proportion of omega-6 fatty acids. While vital for energy, omega-6 fats can promote more inflammatory responses if not balanced carefully within the diet. Too much maize, the rumen passage slows, more fats are fully hydrogenated, leading to a greater absorption of saturated fats.

That's why we recommend a balanced approach: maize silage as a high-energy cornerstone feed, alongside fresh pasture or targeted supplements to maintain a healthy balance of fats in the cow's diet. By doing so, farmers can optimise both production performance and cow health outcomes, particularly in supporting fertility and transition cow resilience.

Maize water management

The relationship between a crop's growth and water is best be shown by drawing the water requirement curve over the weight gain curve. Water requirements, % of total water needs,

- 20% in the first 5 weeks after emergence
- 33% in the next 3 weeks (the three weeks prior to silking)
- 31% during next 3 weeks during silking and early grain fill

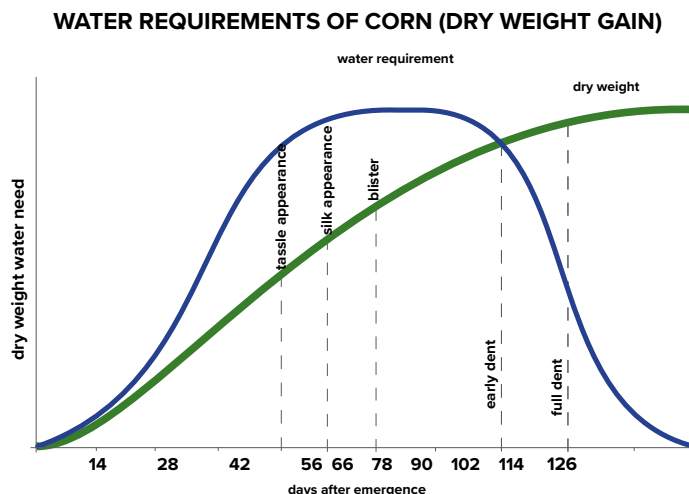
When is water needed?

Water need increases rapidly from about two weeks prior to tassel and ear appearance until about two weeks after full silk and then decreases rapidly. Figure A only compares water need & dry weight accumulation on a days after emergence basis. Research shows that the total amount of water used by high yielding crops is only slightly more than that used to produce low yields. Weed control, fertiliser, plant population & maize variety are crucial factors to minimising water usage.

Making the most of limited water

It is generally considered that yield is lost when corn is visibly wilted for four consecutive days. When corn plants become

stressed, the lower parts of the plant wilt and suffer damage proportionately more than the upper parts.



Maize feed out management

Keep the face of the maize silage stack tight throughout the feed-out period, preventing air to penetrate into the stack. Allowing (oxygen loving) bacteria access to break down the plant material will produce carbon dioxide, heat and water.

Careful use of the tractor bucket at feed-out time will minimise loosening of silage. Avoid digging into the stack as this loosens silage that will not be fed for several days. Scoop out the lowest section of silage, then using the bucket blade, chip down the silage one section at a time from bottom.

- **Keep face of maize silage stack tight**
- **Never feed mouldy or rotten silage to your animals.**
- **Careful use of the tractor bucket, minimise loosening of silage.**
- **Chip down the silage one section at a time starting at the bottom.**



Insects of maize

Knowing if insects are prevalent is the first management step—don't be caught unaware! Maize crops are most susceptible to serious damage from insects during establishment (soil insects can be so destructive that resowing is necessary) and from tasselling, silking until harvest. Insects attack all parts of the maize plant and attack the plant through all stages of plant growth, however its especially important to regularly monitor crops in the first two months of growth



- (1) False Fireworm
- (2) Black field earwig
- (3) Wireworms
- (4) Cutworms
- (5) Thrip damage
- (6) Spider mite damage
- (7) Corn Earworm
- (8) Corn aphids

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(J Wessels & D Ironside)



MILLET

Forage millets are quick to establish highly productive summer forages for dairy, beef, sheep & silage, with dry matter yields between 8-12 tonne/ha. The tall leafy grass with a thin stem grows to around 1.5m in height. Compared with forage sorghum, temperate Millets can be sown earlier and will grow into late summer/early autumn.

Millet, a low cost option for summer feed, is a safe forage for your animals—containing no prussic acid (HCN) and does not require supplementation with sulphur or salt blocks.

SOWING

In shallow soils there are a number of options including disc cultivation to level & break down clump size (two passes) followed by fertiliser spreading & pre-emergent spraying before final pass.

To optimise yields, target soils that have a high level of moisture retention and drill seed to a depth of 1cm (extend to 2cm in sandy, dry soils) at a rate between 10-12kg/ha (lighter/poorer soils) & 20-40kg/ha (heavier, fertile soils with irrigation).

MILLET FORAGE BLENDS

Forage millet combines well with summer active red clovers, chicory and brassicas to add quality to the pasture. Top Crop forage blends including Millet & Rape and Millet & Brassica combine millet at 70-80% with brassica at 20-30% mix ratio.

FERTILISER

To achieve peak yields, an application of 150kg/ha DAP fertiliser is recommended when sowing. Phosphorus and potassium fertilisers are also important to achieve optimum crop production.

To enhance quantity of grazing feed apply 80-100kg/ha of Urea following each grazing if moisture is available. This is especially relevant if chasing faster regrowth.

WEED CONTROL

Similar to forage sorghum, if Millet is sown into a weed-free seedbed, the rapid growth rate of forage millet usually overcomes any weed problem. Dicamba 500 can be sprayed as a post emergent broadleaf control up until millet is up to 30 cm in height. Weed control is limited if millet is combined with other cultivars such as herbs, legumes and brassicas

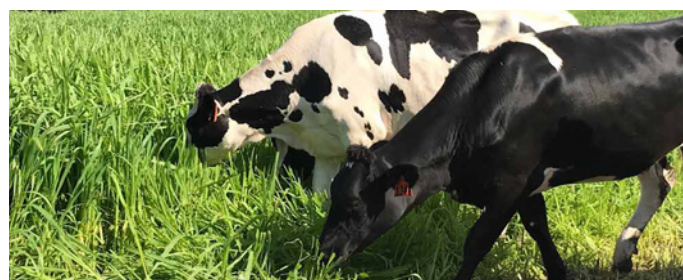
GRAZING MANAGEMENT

Forage quality is dependent on the soil type, fertility and maturity of plant. As the plant matures feed quality reduces. Forage palatability is high for millet. Shirohie Millet does not contain prussic acid which can be in sorghum

Forage millet should be grazed when plants are well anchored into the ground. To achieve this the first cut or graze should be when the plant has reached 30-35cm. Under ideal conditions this can be 6 weeks after sowing. Frequently thereafter graze at 30-35cm to prevent Millet running to head. Shirohie like all millets can run to head when under stress or high summer temperatures resulting in a decline in feed quality.

HARVEST

Millet is best cut at or before the early head emergence stage for silage and hay. This is at approximately 70cm with a mower conditioner in January. After conservation, consider applying 150kg/ha of Urea (if moisture available), if aiming for another harvest in early March.



SHIROHIE MILLET

Fast growing low cost summer feed



Ready to Graze
35-45 days



15-40 kg/ha



Cold tolerance

Shirohie Millet is a highly productive summer leafy forage crop that grows when you need it in summer. The fast growing versatile forage provides forage for grazing, hay and silage. Excellent regrowth potential when good moisture and nitrogen levels are available.



SORGHUM

Forage sorghum hybrids deliver large quantities of quality feed for grazing, hay or silage. There are large variety of forage sorghum to choose from, each with different characteristics—such as the cold tolerance fast early growth, re-growth capabilities, fodder conservation quality and more.

SOWING

Target planting date should be around mid-late November in most southern regions, earlier for northern Australia. Preparing a fine seedbed will greatly assist crop establishment. Target heavier soils with high moisture retention & no clay or impermeable layer close to the surface — giving you the best chance of high yields. If soil moisture retention is poor, we suggest planting millet as a summer grass crop.

Moldboard plough the paddock to a depth of 10cm ensuring that no grass is left showing. If soil is too shallow to use a moldboard plough, there would be a concern the paddock may not return a high yielding sorghum crop.

FERTILISER

The ideal soil pH range for this forage sorghum seed is 5.5 - 8, and the phosphate level should be greater than 20 ppm. In acidic soils, lime should be applied and incorporated during seedbed preparation.

To achieve peak yields, an application of 150kg/ha DAP fertiliser is recommended when sowing your forage sorghum seed. Power harrow (to a depth of 7cm) to incorporate fertiliser.

For grazing crops apply Urea after each grazing (100 kg/ha) if moisture is available - this will ensure quicker regrowth & maintain feed quality for your animals. For harvested crops apply Urea again (150 kg/ha) if moisture available if aiming for another harvest in early March.

The rate of nutrient removal from the soil can be huge if dry matter yields are high, so replacement is necessary.

INSECT & WEED CONTROL

If sown into a weed-free seedbed, the rapid growth rate of forage sorghum usually overcomes any weed problem. If weed control is required, atrazine can be applied post-planting pre-emergent. For broadleaf weeds, 2, 4-D can be used with care at the seedling stage when the crop is 7-15 cm high and secondary roots have developed. Care must be taken when spraying

herbicides, especially in sandy soils. Check crop regularly for pest infestation (e.g. wireworms & cutworms) that can affect germination & establishment.

Grazing & harvest

Forage sorghum × sudan-grass hybrids provide reliable summer feed with energy levels of 9.0–10.0 MJ ME/kg DM, depending on crop maturity.

Grazing: The best time to graze is when plants are 0.8–1.5 m tall (depending on variety), as this is when protein and energy are highest. Crops can be grazed again 30–35 days later once they return to at least 0.8 m. Avoid grazing too early, as fresh young plants carry a risk of prussic acid poisoning. Sudan-grass types like SSS have finer stems, more leaf, and a higher leaf-to-stem ratio than standard sorghum, which improves palatability and utilisation. Sweet sorghum types such as Mega Sweet and SSS maintain higher sugar levels in older growth, which can be used efficiently for finishing stock. Rotational or strip grazing is recommended to protect regrowth and maximise yield.

Harvest: These hybrids can also be taken as silage, offering bulk feed for later use. For silage, harvest at the soft-dough stage to balance yield and feed quality. Sweet sorghums are especially suited for silage, with high sugar levels improving fermentation and animal intake. Under irrigation or good summer rainfall, these crops produce large amounts of dry matter at relatively low cost, making them a another option for generating harvested feed.

Sorghum compared

Cold tolerance	Betta Graze
Intensive grazing	Super Sweet Sudan
Green chop	Super Sweet Sudan
Silage bales	Mega Feed Super Sweet Sudan
Hay bales	Mega Feed, Super Sweet Sudan
No prussic acid issues	Forage Millet



Betta Graze Sorghum

Cold tolerance king

Excellent recovery from grazing or cutting, the fast growing nature of Betta Graze and its cold tolerance, mean it is the first forage sorghum you can plant and the first you can feed to any type of livestock.



Super Sweet Sudan

Bred for harsh Australian conditions

The next generation hybrid. A unique Australian product, bred for Australian conditions. Super Sweet Sudan (SSS) is quick to graze and sustains multiple and intensive grazings. SSS produces high quality hay and round bale silage suitable for sheep and cattle.



Mega Feed

An ultra-late all rounder forage sorghum

Its ultra-late maturity means it retains its high quality feed later than anything else. Strong early vigour means it can be sown early in the season to reduce the Spring feed gap and provide a range of options from grazing and baling through to standover feed and silage.

What is prussic acid?

Forage sorghums can release the toxic compound hydrogen cyanide (HCN) causing prussic acid poisoning.

Prussic acid is a potent, rapidly acting poison, which enters the bloodstream of affected animals and is transported through the body. It then inhibits oxygen utilisation by the cells so that, in effect, the animal dies from asphyxia.

If you are concerned about (HCN) then the following information may be useful. Sorghum plants may be low in sulphur and feeding sulphur will reduce the risk of prussic acid problems.

Supplementation of sulphur is recommended if the pasture sulphur is low (less than 0.25%). To supplement sulfur, consider the use of sulfur blocks near watering points. Also ensure animals have a full stomach before the initial grazing commences.

Factors which increase the level of prussic acid include

Young plants	Avoid grazing crops under 0.8 m high.
Drought	Severe moisture stress.
Frost	Levels rise after light frosts. If crop is killed by frost, wait 5 days to graze.
Nitrogen	Very high available soil nitrogen may lead to higher levels, as does large amounts applied.
Low phosphorus	Inadequate or deficient soil phosphorus.
Re-growth	Cutting or grazing is a stress on plants, wait until plants are at least 80 cm high.
Herbicides	Applying 2, 4-D may raise HCN level.

Forage sorghum for silage

The optimum harvest window for precision chop forage sorghum is dependent on the target dry matter (see table). This will maximise yield, quality and stack fermentation.

Early harvest will result in yield losses and potentially poor fermentation whilst a late harvest may result in a loss of quality as plant stover (leaf & stalk) increase in fibre & becomes less digestible.

Wilted forage sorghums need to be harvested before forage quality starts to decline rapidly. This is normally around 0.8m – 1.2m in height. The forage will need to be wilted to achieve the target dry matter range (see table)

Mowing with a mower conditioner and using a crimper machine will be an advantage. The aim is to achieve the target dry matter within 48 hours to maximise quality. With baled silage and

wilted forage sorghum it is important to minimise contamination from dirt as the contamination will put the fermentation at risk.

Inoculants provide the right bacteria in ideal numbers for a fast, efficient fermentation. Use 1174 to improve dry matter recovery and 11GFT is designed to break down that fibre, releasing more energy from every mouthful.

Crop	Target harvest dry matter	Typical energy ME	Typical crude protein %
Precision chop	28-35% DM	9 - 10.5	6-9%
Wilted forage sorghum	35-40% DM	9.5- 10.5	10-16%



DUAL PURPOSE LUCERNE

Torrens GT8 is a versatile option that suits a wide range of farm systems thanks to its mix of winter activity, grazing tolerance, and durability. Its low crown height helps protect the plant from hoof damage, tyre traffic and heavy grazing, making it more persistent under pressure than traditional options. This means it can be run hard in grazing systems without quickly running out.

The same traits also make Torrens GT8 well suited to hay and silage production or as part of a cropping rotation, giving farmers multiple ways to use it depending on the season. With the ability to handle varied management and still produce reliable feed, it offers a flexible fit for mixed enterprises and provides confidence when conditions change.

Sowing rate of 20-25kg/ha. Lucerne will grow on a variety of soils, but does best on deep, well-drained soils of medium to

light texture. Poor weed control is one of the most common issues that can lead to poor lucerne establishment.

Grazing tolerance and winter activity – the ultimate combination:

- **The FIRST highly winter active grazing tolerant Lucerne***
- **A true dual-purpose lucerne**
- **Strong resistance to most lucerne pests and diseases**
- **Premium quality hay (high leaf to stem ratio)**
- **Suitable for a wide range of farming systems**
- **Ultra persistent under grazing with improved traffic tolerance**
- **Suited to dryland and irrigated systems**



HAYMAKING with TEFF

Teff Grass has become an important option for the horse hay market, where demand for low sugar, soft-leaved grasses continues to grow. Many horses are sensitive to high sugar and starch levels, with issues such as laminitis, colic, and metabolic disorders connected with high sugar grasses like ryegrass. As a warm-season annual grass, Teff naturally produces forage with lower sugar content than traditional ryegrass or cereal hays, making it safer and more desirable.

When cut for hay, Teff delivers a soft, fine-stemmed forage that is highly palatable and dust-free, with strong acceptance across horses of all classes. Its ability to produce multiple cuts through summer under irrigation or rainfall gives farmers flexibility to supply this specialised market. With demand for horse-safe hay outstripping supply in many regions, Teff offers a profitable niche, while still being a practical catch crop or forage option for broader livestock systems.

TACKLE WOODY WEEDS

Advice on growth, sprays and penetrating hard to kill woody weeds

Farmers are well aware that woody weeds can significantly impact the productivity and persistence of pastures long term if infested with woody weeds. Late spring and early summer presents an opportunity to tackle these weeds.

For sustainable results, integrate chemical methods with mechanical, biological, or cultural controls (like keeping dense pasture stands limiting weed establishment), monitor treated areas for effectiveness, and focus on protecting beneficial plants to maintain farm pasture balance.

TIMING

Weeds are best controlled when soil moisture is available and plants are actively growing, as this allows the chemical to be absorbed and moved through the vascular system down to the roots, with minimal drought stress limiting uptake.

TRICLOPYR PICLORAM

Use this for tougher woody weeds where you want deep knockdown — both foliage and roots. It is a good choice when you have problem shrubs, trees or tough perennial woody species that you need to suppress long-term. Because it acts on roots and has residual activity, it's best used where you want to prevent regrowth over the season. Be careful when sowing legumes afterwards, as residues may affect them.

CLOPYRALID

This is a good option where you want selective control of broadleaf weeds like thistles or ragwort without damaging most

grasses. Use it when you have patches of broadleaf weeds in pasture and want to preserve the grass base. Since it's translocated (moves to the roots), it helps reduce regrowth over time.

METSULFURON-METHYL

Choose this when woody weeds include tougher species like blackberry, dock, lantana etc. It is a broad-spectrum option and can be very effective on smaller juvenile woody plants. The tradeoff is that it will severely damage many ryegrass species, so use it where grasses are less critical or on less critical paddocks.

MCPA

This is a milder option suited to suppressing smaller emerging broadleaf weeds in pastures without harming the grass. Use it when populations of weeds have just started and you want to protect your pasture. It's a safer choice near valuable grasses or when you want minimal collateral damage.

PENETRANT

Adding a penetrant helps herbicides stick to and move through waxy or hairy leaf surfaces, which many woody weeds have. It improves spray uptake and makes each chemical more effective, especially in tougher conditions or on hard-to-wet foliage. For farmers, it means a better kill and fewer re-sprays.

SMARTER SPRAYS

A full range of herbicides and adjuvants backed by local pasture know-how

Complete range of knockdown sprays

We've got a complete range of knockdown sprays. Whether it's knocking out rundown pasture for a summer crop, or looking to control a Kikuyu infestation - we can find the right spray solution for you.



Targeted control for hard to kill species

When woody weeds, scrub or stubborn perennials are holding your pastures back, specialist herbicides deliver lasting results on hard to kill weeds like blackberry and tussocks.



SEED TREATMENT

SMARTER USE OF CHEMISTRY - targeting the seed means only tiny amounts of product go into the soil compared to broadcast sprays. It's a more efficient, responsible way to manage risks while looking after your environment.



The first 3-4 weeks

The first few weeks after sowing are make-or-break for new spring sown crops. Seedlings are at their most vulnerable as they push through the soil and set themselves up for the seasons ahead. Using insecticide treated seed is a straightforward, cost-effective way to give them the best chance of striking well and building a strong, even pasture from the start.



Precision protection where it counts

By placing protection on the seed itself, the treatment targets the pests and diseases that matter most in those first weeks of establishment. It's smart, localised defense without blanket spraying.



Fits into your whole farm system

Seed treatment is not a stand-alone fix — it works alongside other tools such as good paddock preparation, cultivar selection, and endophyte technology as part of an integrated pasture management approach.



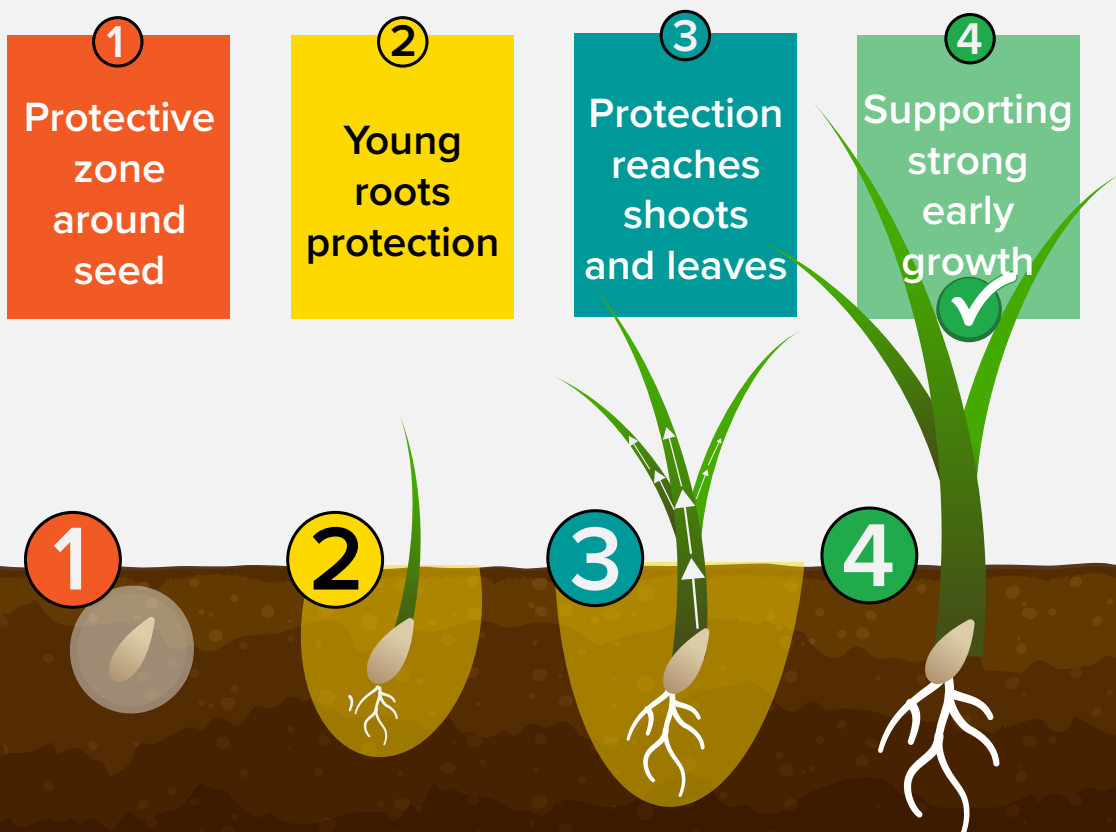
Safeguard your investment

Pasture seed is a big outlay, and poor strikes can be costly. Treated seed acts like an insurance policy, helping protect that investment by reducing the risk of early losses and supporting a full, even strike across the paddock.



Simple and practical

Treated seed comes ready to sow, reducing the need for on-farm handling of crop protection products. It's a convenient, farmer-friendly way to manage early crop risks without adding extra jobs at sowing.



SUMMER ADVANTAGE

Backed by Endophyte Protection

Elevate combines the strength of a modern tetraploid perennial ryegrass with the **CM142 endophyte**, delivering both persistence and animal safety.



Why are the bugs deterred?

Elevate's CM142's alkaloids act as feeding deterrents. When these insects attempt to feed on leaves or penetrate tiller bases, the compounds reduce their appetite and damage, and they can fly away to other non-endophytic pastures. Over time, this suppression reduces insect pressure in ryegrass pastures carrying the CM142.



How does CM142 protect tiller bases and crowns?

Many pest larvae tunnel into or feed on tiller bases, undermining the plant's growing points. Because CM142's deterrent compounds reach into those tissues, they can discourage larvae from feeding in crowns and basal tissues. This protection can preserving new leaf production, root stability.



How does this translate into pasture persistence?

By reducing insect damage at crowns and tiller bases, CM142 in Elevate helps prevent early plant death or loss of tillers. With more live tillers sustained, root systems remain intact, allowing the grass to hold density, resist abiotic stress (drought, heat) better and regenerate leaf growth into the hotter months.



When is Elevate's endophyte most effective in the season?

Its benefits are strongest in late spring and summer, when insect populations are active and feeding pressure is highest. This is the period when other ryegrass stands tend to fail. In early spring, benefits are present but less dramatic since insect stress is lower.



When do you make the call?

If your pastures repeatedly thin in summer due to insect damage, Elevate Perennial Ryegrass CM142 offers a great choice. Focus on integrating CM142 with good fertility, grazing management, especially when the plant is under stress in summer. It's not a silver bullet—but in a system, it helps improve pasture longevity.



What about animal safety — are there risks to livestock?

CM142 does not produce the major alkaloids associated with ryegrass staggers (lolitrem B) or heat stress (ergovaline). Because of this, animals grazing Elevate CM142 infected pastures are far less likely to suffer staggers or heat-stress symptoms compared to older endophyte types.



Australian owned & operated since 1987

NOTMAN PASTURE SEEDS

www.notmanpasture.com.au

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