



Upper Murray Seeds®
Sow much better

Productive Pasture Guide

Our business is growing yours



Australian Seed Federation
SOWING SEEDS



UMS Productive Pasture Guide

Your guide to pasture renovation with purpose!

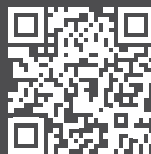
Plant Breeders Rights



Plant Breeders Rights is a national system of control which is similar to a patent or a trademark, and granted exclusively to the breeder of a new variety. When Upper Murray Seeds develops a new plant variety, we protect our intellectual property (IP) with Plant Breeders Rights (PBR).

The PBR logo is the hallmark of authenticity and displaying it demonstrates to the public that the plant breeder has exclusive control over the propagating material and harvested material of that variety for many years to come. A plant variety must be proven to be new, distinct, uniform and stable to qualify for the right to display the PBR logo.

All of which means the grower can be assured of reasonable product consistency, which is especially important when strategically planning pasture renovation.



Read our QR codes
with your smartphone
to open a link
to more detailed
product information.

DISCLAIMER: All information provided is intended as a guide only. Upper Murray Seeds has taken all due care to ensure the included information is accurate and use of this information is at the user's sole discretion and risk. Varying environmental conditions may alter the performance of products and plants. The sowing rates provided are a guide only. You should refer to your agronomist or advisor for sowing rates suited to your particular situation.

Our *Productive Pasture Guide* is designed to help you choose the right seed to solve your pasture challenges.

Sow good results

Productive and palatable pastures can optimise weight gain and realise a return on your investment in seed. UMS can help you strategically plan your pasture base and make better choices to solve your individual challenges. One pasture does not fit all situations.

Sow much history

Upper Murray Seeds (UMS) is an Australian seed business established over 25 years ago. Family-owned and vertically-integrated, we breed, produce, clean, treat, blend and market seed in Australia and overseas.

Sow on time

A national wholesaler, UMS delivers seed daily to major centres and forwards seed to regional resellers from several warehouses. Our customer service team is centrally located in Albury, NSW and we get our seed on the road towards your farm as fast as possible.

Sow much knowledge

You're welcome to access our team's extensive industry and agronomic knowledge to help you select the right seed from our premium product range to strategically manage your pasture challenges. You'll find detailed product information sheets on our website or just ask us!

UMS regional contact details are on the back cover. Please feel free to call us. Find out more about UMS on our website, or follow us on social media.

www.uppermurrayseeds.com.au



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Atomic is exceptionally fast out of the ground and has prolific winter growth. A late-maturing, annual tetraploid, Atomic produces excellent hay and silage and is a variety you can trust and rely on every time you sow it.

Key Features

- Excellent winter production
- Extremely rapid growth
- Ideal for both hay and silage production
- Highly palatable and nutritious
- Strong vigorous seedling

Plant Characteristics

- Broadleaf tetraploid
- High tiller count
- Wide leaves and dense tillers

Maturity

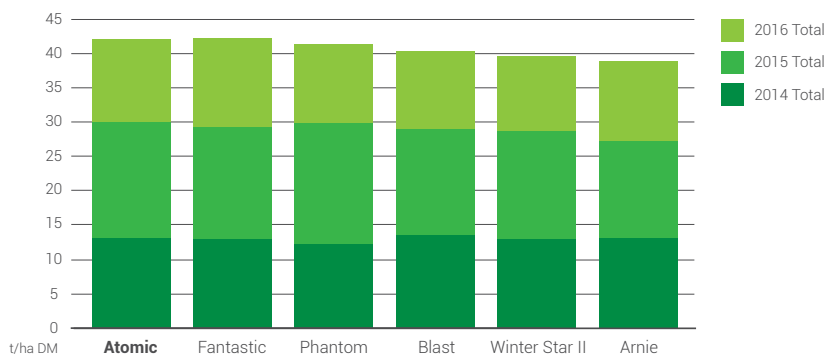
A late flowering variety.
Days to flowering relative to Nui (0) = +4.

Where can I grow it?

- Medium to high rainfall zones
- Suitable for irrigation



Sowing Rate: 25-30 kg/ha
Blend Rate: 5-15 kg/ha



Annual Ryegrass, Replicated Dry Matter Trial

Tooma Research Farm, NSW, 2014-2016



Fantastic is a dynamic, annual diploid ryegrass specifically bred for early winter feed and is ideal to oversow rundown pastures.

Key Features

- Very fast to first grazing
- Produces excellent quality silage and hay
- Very high winter growth rate
- Outstanding DM yields

Plant Characteristics

- Densely tillered diploid
- Characterised by fine leaves

Maturity

Early flowering date designed specifically for early winter feed.

Days to flowering relative to Nui (0) = -6

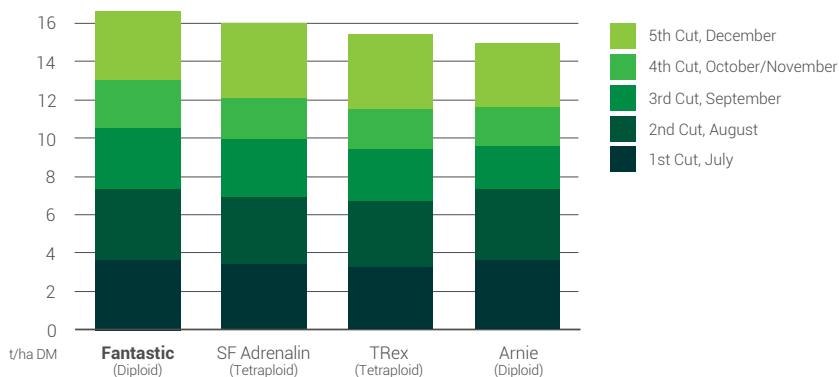
Where can I grow it?

- Medium to high rainfall zones
- Suitable for irrigation



Sowing Rate: 20-25 kg/ha

Blend Rate: 5-15 kg/ha



Annual Ryegrass, Replicated Dry Matter Trial

Tooma Research Farm, NSW, 2016



Blast is bred for the Australian cattle and sheep market. It is a late-maturing, highly productive and extremely hardy tetraploid annual ryegrass.

Key Features

- Provides abundant winter/spring feed
- High quality and very palatable feed
- Excellent choice to oversow run-down pastures
- Ideally suited to hay and silage production

Plant Characteristics

- Broadleaf tetraploid
- High tiller count
- Excellent leaf-to-stem ratio, ie very leafy

Maturity

A late flowering variety designed to produce DM later into the season than Tetila-type varieties. Days to flowering relative to Nui (0) = +7

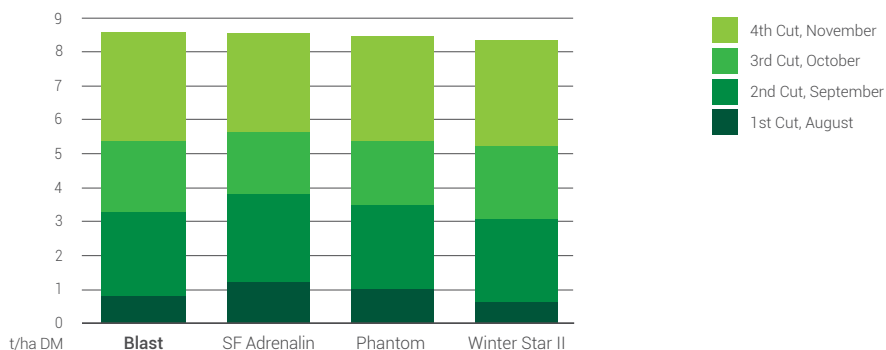
Where can I grow it?

- Medium to high rainfall zones
- Suitable for irrigation or dryland



Sowing Rate: 25-30 kg/ha

Blend Rate: 5-15 kg/ha



Annual Ryegrass, Replicated Dry Matter Trial

Tooma Research Farm, NSW, 2017



Phantom is an annual tetraploid ryegrass selected for maximum DM production during winter and spring.

Key Features

- Highly digestible and very palatable
- Ideally suited to hay and silage production
- Excellent choice for direct seeding new pastures
- Rejuvenates older, established pastures

Plant Characteristics

- Tetraploid annual type
- Very vigorous seedlings
- A perfect substitute for traditional winter forage crops such as oats

Maturity

An early maturing plant designed to produce good quality feed late into the spring. Excellent winter growth pattern.

Days to flowering relative to Nui (0) = -2

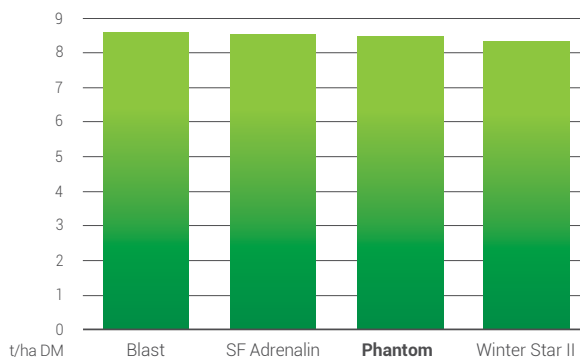
Where can I grow it?

- High rainfall and irrigation
- Highly adaptable across a diverse range of environments



Sowing Rate: 25-30 kg/ha

Blend Rate: 5-15 kg/ha



Annual Ryegrass, Replicated Dry Matter Trial

Tooma Research Farm, NSW, 2017



Awesome is a true Italian ryegrass designed for high yield and an extended season into summer. Awesome is easy to establish and recovers well after grazing.

Key Features

- Maintains quality late into season
- Produces high quality hay and silage
- Exceptionally rapid regrowth
- Ideal for oversowing

Plant Characteristics

- Diploid biennial type
- Italian parentage
- Densely tillered
- Will persist for 2 seasons in favourable conditions

Maturity

A late maturing plant designed to produce DM well into summer, if supplied with summer rainfall or irrigation.

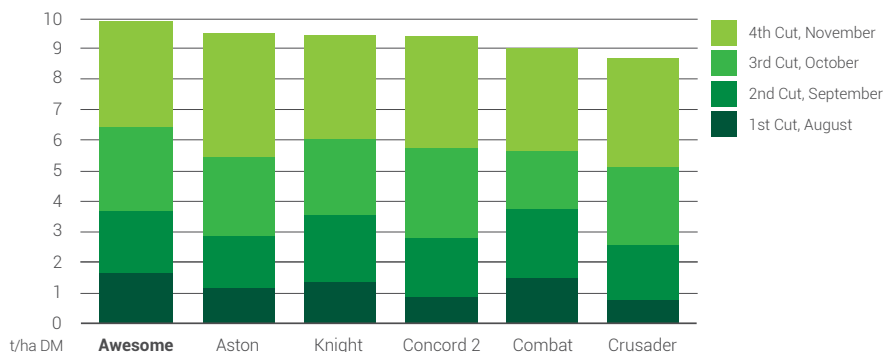
Days to flowering relative to Nui (0) = +18

Where can I grow it?

- Medium to high rainfall zones
- Suitable for irrigation



Sowing Rate: 20-25 kg/ha
Blend Rate: 5-15 kg/ha



Short Term Ryegrass, Replicated Dry Matter Trial

Tooma Research Farm, NSW, 2016



Charger is a diploid Italian ryegrass which provides excellent autumn/winter feed in the second and third years under favourable conditions.

Key Features

- Good disease resistance
- Vigorous seedlings which establish and grow rapidly
- Suits spray-drilling or oversowing
- Responds very well to irrigation and rainfall
- Recommended for beef fattening, prime lamb production and high-input cell or rotational grazing

Plant Characteristics

- Late flowering diploid Italian type
- Will persist for up to three seasons in favourable conditions
- Continuous DM production especially in the winter
- High levels of palatability and ME

Maturity

A later maturing plant which can extend the grazing season into late summer. Charger benefits from late season rains or irrigation.

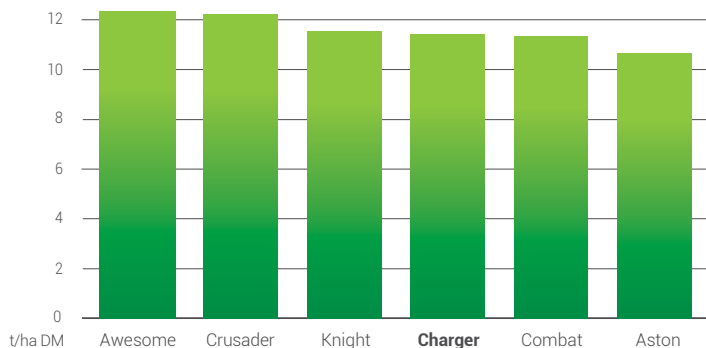
Days to flowering relative to Nui (0) = +12

Where can I grow it?

- Medium to high rainfall zones
- Suitable for irrigation



Sowing Rate: 20-25 kg/ha
Blend Rate: 5-15 kg/ha



Short Term Ryegrass, Replicated Dry Matter Trial

Tooma Research Farm, NSW, 2014



Combat is a diploid, Italian ryegrass with high production rates in winter and early spring, so is well suited to a wide range of farming enterprises.

Key Features

- Ideal for oversowing run-down pasture
- Excellent pasture quality and palatability
- Very good recovery from grazing and cutting
- Suited to a wide range of fertility levels and soil profiles

Plant Characteristics

- Densely tillered and well suited to bulk hay or silage
- Establishes very quickly
- Italian parentage

Maturity

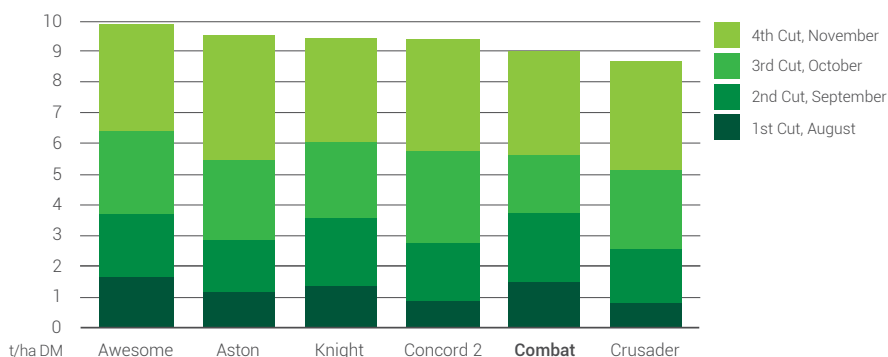
A mid-flowering Italian variety designed to produce DM well into spring and summer. If conditions are favourable may persist in a second season. Days to flowering relative to Nui (0) = +6

Where can I grow it?

- Medium to high rainfall zones
- Suitable for irrigation or dryland



Sowing Rate: 20-25 kg/ha
Blend Rate: 5-10 kg/ha



Short Term Ryegrass, Replicated Dry Matter Trial

Tooma Research Farm, NSW, 2014



Denver is a long-season, tetraploid Italian ryegrass selected for its seedling vigour and substantial winter growth.

Key Features

- Establishes rapidly
- Excellent palatability
- Dynamic recovery from grazing and cutting
- Extremely disease resistant

Plant Characteristics

- Tetraploid Italian-type plant
- Designed to persist for 2-3 years under suitable conditions

Maturity

A very late flowering plant designed to produce good quality feed late into the spring.
Days to flowering relative to Nui (0) = +16

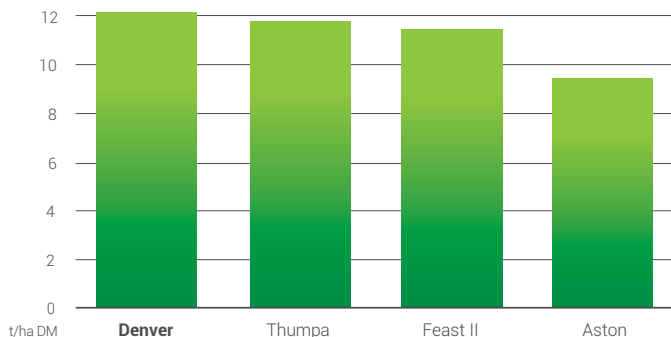
Where can I grow it?

- High rainfall and irrigation
- A reliable spring is essential to maximise production potential due to Denver's late flowering habit



Sowing Rate: 25-30 kg/ha

Blend Rate: 5-15 kg/ha



Short Term Ryegrass, Replicated Dry Matter Trial

Tooma Research Farm, NSW, 2014

AberNiche is an interspecies cross (Italian-type ryegrass x meadow fescue) ie a hybrid grass, adapted to a variety of stress conditions, particularly drought.

Key Features

- Significantly improved water use efficiency proven in simulated drought trials
- Can be combined in short term mixes with Italian or hybrid ryegrass
- For longer term mixes include cocksfoot alongside perennial or hybrid ryegrasses, plus white clover

Plant Characteristics

- Densely tillered and well suited to bulk hay or silage
- Rapid establishment
- Winter hardy
- Dense, deep root system to help in dry seasons

Maturity

A late maturing variety designed to produce DM later into the season.

Days to flowering relative to Nui (0) = +16

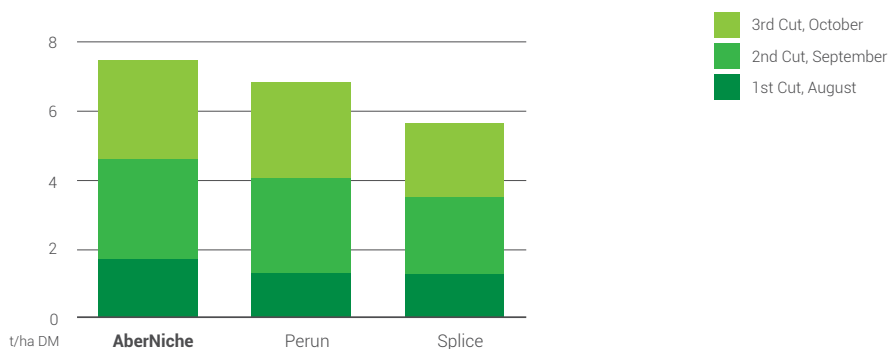
Where can I grow it?

- Medium to high rainfall zones
- Suitable for irrigation or dryland but not hot, dry climates
- Cold and frost tolerant



Sowing Rate: 20-25 kg/ha

Blend Rate: 10-15 kg/ha



Festulolium, Replicated Dry Matter Trial

Tooma Research Farm, NSW, 2016

Everlast was bred for the Australian cattle and sheep market and is an early maturing but highly productive and extremely hardy ryegrass.

Key Features

- Extremely vigorous, provides abundant winter and early spring feed
- Extremely persistent and hardy
- Reliable dry matter production
- Improved tolerance to hot, dry Australian summers
- Low endophyte levels

Plant Characteristics

- Highly palatable, diploid perennial ryegrass
- Semi-erect growth habit and very deep rooted
- Hardy, frost tolerant and withstands dry conditions
- Persists 7-10 years under suitable conditions
- Summer dormant to enhance long-term persistence

Maturity

An early flowering variety which is slightly later than traditional Victorian types.

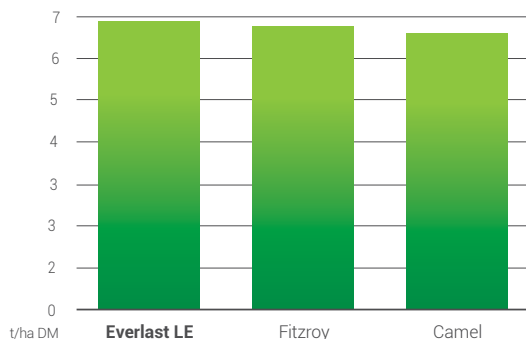
Days to flowering relative to Nui (0) = -14

Where can I grow it?

- Ideally suited to marginal perennial ryegrass areas and cooler climates
- Medium to high rainfall



Sowing Rate: 20-25 kg/ha
Blend Rate: 5-15 kg/ha



Perennial Ryegrass, Replicated Dry Matter Trial

Tooma Research Farm, NSW, 2016



Award is an early maturing but very productive ryegrass with the persistence of traditional Victorian germplasm. It was bred specifically for the Australian cattle and sheep market.

Key Features

- Extremely persistent
- Reliable dry matter production
- Improved tolerance to hot dry summers

Plant Characteristics

- Diploid perennial ryegrass
- Designed to persist onwards of 7-10 years under suitable conditions

Maturity

An early flowering variety which is slightly later than traditional Victorian types.
Days to flowering relative to Nui (0) = -8

Where can I grow it?

- Medium to high rainfall zones



Sowing Rate: 20-25 kg/ha

Blend Rate: 5-15 kg/ha





Jumbuck is a mid-season, diploid perennial ryegrass bred for high input grazing systems.

Key Features

- Rapid and vigorous establishment
- Maintains grazing value into summer
- Produces impressive liveweight gains
- Ideal component for perennial pasture blends

Plant Characteristics

- Diploid perennial ryegrass
- Designed to persist onwards of 5-7 years under suitable conditions

Maturity

A mid-season flowering variety designed to run later into the season than traditional diploid perennial types. Days to flowering relative to Nui (0) = +0

Where can I grow it?

- Medium to high rainfall and irrigation
- Best suited to regions with a cooler finish and reliable spring rainfall
- High temperatures can constrain summer growth



Sowing Rate: 20-25 kg/ha
Blend Rate: 5-10 kg/ha





Trooper is a very late-season, diploid perennial ryegrass bred for high-input grazing systems.

Key Features

- Establishes very rapidly
- Beneficial to all types of livestock
- Produces high quality feed throughout the season
- Ideal option for perennial mixes

Plant Characteristics

- Diploid perennial ryegrass
- Low endophyte type
- Very palatable
- Performs well into the season
- Very persistent
- Very dense tillers

Maturity

Trooper is a late-maturing variety designed to produce large amounts of quality feed late into the spring and summer season.

Days to flowering relative to Nui (0) = +23

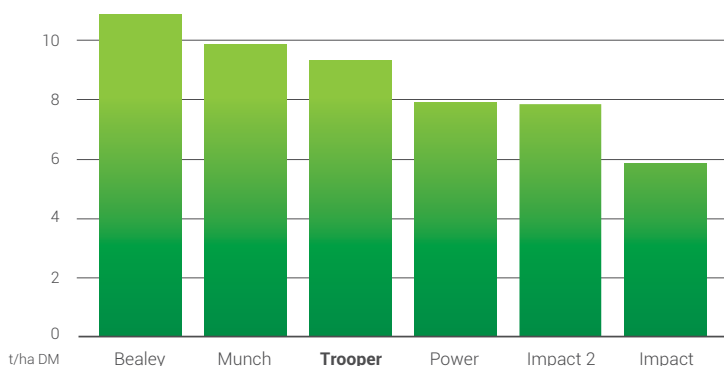
Where can I grow it?

- Medium to high rainfall
- Performs very well under irrigation
- It suits a wide range of fertility levels and soil profiles



Sowing Rate: 20-25 kg/ha

Blend Rate: 10-15 kg/ha



Perennial Ryegrass, Replicated Dry Matter Trial

Tooma Research Farm, NSW, 2015



Munch is a high yielding, tetraploid perennial ryegrass which is ideal for dairy, beef and sheep systems.

Key Features

- Combines high levels of metabolisable energy (ME), crude protein (CP) and water soluble carbohydrates (WSC) to create one of the best performing grasses on the market
- Establishes rapidly
- Produces excellent quality hay and silage
- Regrows rapidly after grazing
- Ideal option in pasture mixes

Plant Characteristics

- Tetraploid perennial ryegrass
- Low endophyte levels
- Very palatable with high tiller density

Maturity

A late maturing plant designed to produce large amounts of dry matter well into summer (if conditions are suitable).

Days to flowering relative to Nui (0) = +23

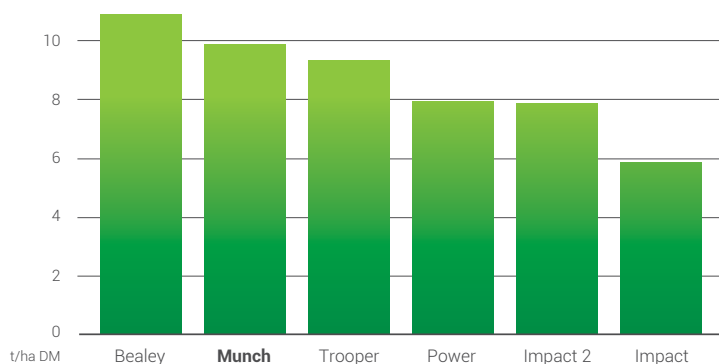
Where can I grow it?

- Medium to high rainfall
- Performs very well under irrigation



Sowing Rate: 25-30 kg/ha

Blend Rate: 15-20 kg/ha



Perennial Ryegrass, Replicated Dry Matter Trial

Tooma Research Farm, NSW, 2015



Pastoral is a soft-leaf, persistent, summer-active fescue bred to withstand the harsh Australian climate.

Key Features

- Bred from the most persistent plants of a summer-active fescue trial
- Improved palatability over traditional fescues
- Responds really well to summer rainfall
- Extremely drought tolerant

Plant Characteristics

- Temperate type
- Perennial tussock-forming grass with deep root system

Activity

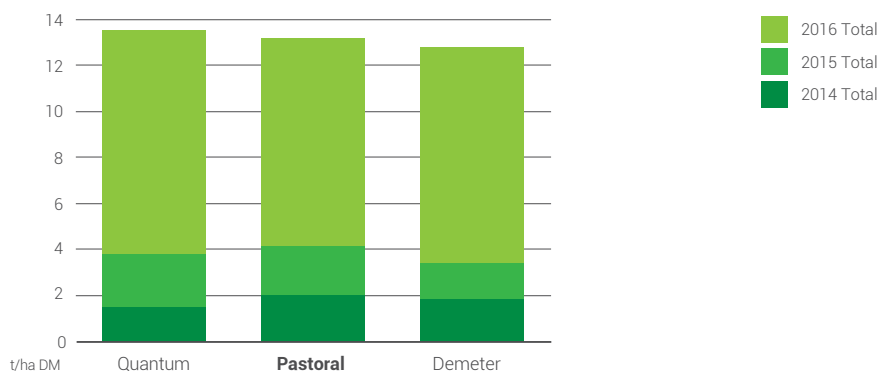
Pastoral is a summer-active, early flowering variety. Temperate types exhibit spring/summer activity with some slow growth in winter, they do not frost off as easily as cocksfoot and phalaris.

Where can I grow it?

- Suited to high rainfall zones
- Better heat tolerance than perennial ryegrass
- Ideal for heavy soils



Sowing Rate: 10-20 kg/ha
Blend Rate: 4-10 kg/ha



Summer Active Fescue, Replicated Dry Matter Trial

Tooma Research Farm, NSW, 2014-2015-2016



Charlem is an extremely persistent, densely tillered, Mediterranean-type, winter-active fescue.

Key Features

- Grows more winter feed and later maturing than traditional fescues
- Very high dry matter production and extremely soft leaf
- Deep-rooted perennial
- Ideal lucerne companion plant
- Alternative to phalaris where persistence is required

Plant Characteristics

- Mediterranean type
- Perennial tussock-forming grass with deep root system

Activity

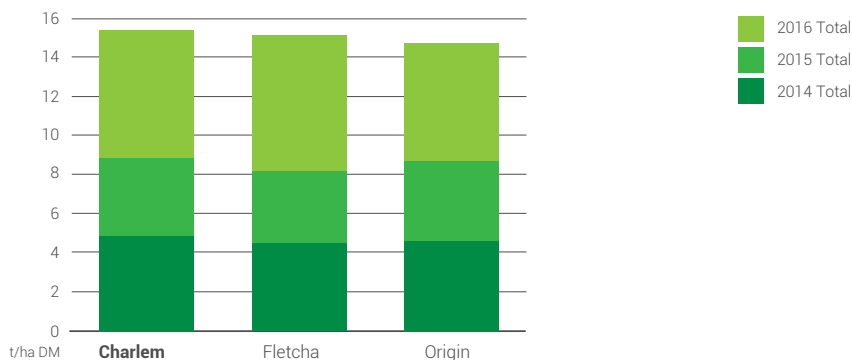
Charlem is a winter active, mid/late flowering variety. Mediterranean types exhibit winter activity and varying levels of summer dormancy and consequently have greater tolerance to summer drought.

Where can I grow it?

- Excellent drought tolerance
- Better heat tolerance than perennial ryegrass



Sowing Rate: 10-20 kg/ha
Blend Rate: 4-10 kg/ha



Winter Active Fescue, Replicated Dry Matter Trial

Tooma Research Farm, NSW, 2014-2015-2016



Drover is an acid tolerant, Australian bred cocksfoot which sets the benchmark for Mediterranean-type cocksfoots.

Key Features

- Earlier maturing than traditional cocksfoots
- Excellent palatability
- High dry matter production
- Persistent and hardy perennial grass
- Increased winter activity

Plant Characteristics

- Semi-erect growth habit
- Perennial tussock-forming grass
- Soft leaf, very palatable compared to Porto

Activity

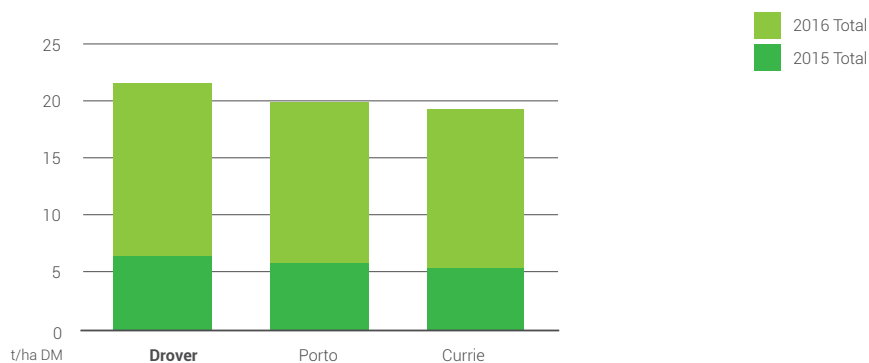
Drover has similar summer activity to Porto

Where can I grow it?

- Rotational grazing systems with a minimum of 450mm annual rainfall
- Sensitive to waterlogging



Sowing Rate: 2-4 kg/ha
Blend Rate: 1-3 kg/ha



Cocksfoot, Replicated Dry Matter Trial

Tooma Research Farm, NSW, 2015-2016



Grazier is a truly persistent and productive perennial grass that can really handle stock grazing pressure once established. It is Australian-type phalaris bred for improved leaf quality and yield.

Key Features

- Improves ground cover due to its low, wide, dense crown and prostrate, spreading growth habit
- Once established, Grazier's deep and extensive root system improves its ability to handle periods of drought
- For optimum results, apply strategic grazing management to phalaris

Plant Characteristics

- Tussock forming grass which can recruit new seedlings

Activity

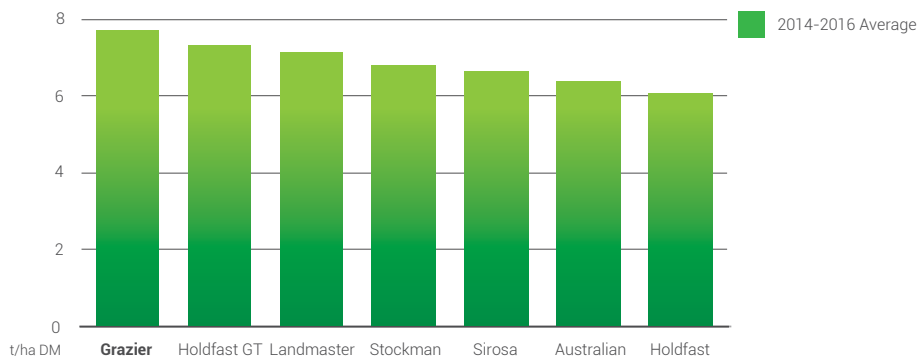
Grazier is a semi winter-active variety which provides year-round feed but with typically abundant spring growth.

Where can I grow it?

- Tolerates a wide range of conditions and climates
- Very persistent
- Highly adaptable to most temperate zones



Sowing Rate: 4-6 kg/ha
Blend Rate: 1-3 kg/ha



Phalaris, Replicated Dry Matter Trial

Tooma Research Farm, NSW, 2014-2016



Stockman is the ultimate phalaris bred by crossing the traditional Australian cultivar with Holdfast phalaris.

Key Features

- Ideal base for perennial pastures
- More winter active than traditional types
- Improved dry matter production
- Excellent performance in poorly drained and waterlogged soils
- Tolerates acid soils well compared to traditional cultivars

Plant Characteristics

- Semi-erect type
- Tussock forming grass which can recruit new seedlings

Activity

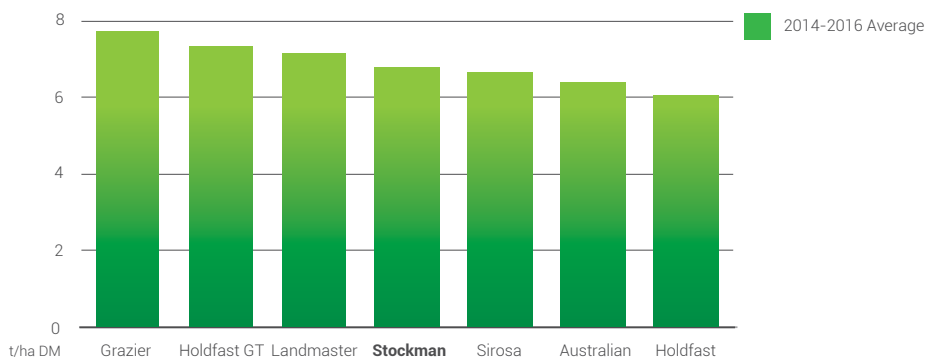
Stockman is a winter-active variety

Where can I grow it?

- Tolerates a wide range of conditions and climates
- Very persistent



Sowing Rate: 4-6 kg/ha
Blend Rate: 1-3 kg/ha



Phalaris, Replicated Dry Matter Trial

Tooma Research Farm, NSW, 2014-2016



Nandu is a very productive, South American-bred grass with strong autumn and winter growth.

Key Features

- Establishes quickly and regrows rapidly after grazing
- Tolerant of set stocking and horses
- Resistant to Argentine stem weevil
- High levels of digestibility and ME

Plant Characteristics

- A prolific seeder that recruits new plants strongly
- Densely tufted with relatively fine leaves, and dense fine tillers
- Excellent early vigour and a prostrate growth habit

Activity

- Nandu is a valuable winter feed producer
- Produces bulk feed throughout the season

Where can I grow it?

- Grows best in areas of more than 600mm annual rainfall
- Some summer rainfall will significantly improve persistence



Sowing Rate: 25 kg/ha
Blend Rate: 5-10 kg/ha





Silverado is a premium quality lucerne, with built-in, broad-spectrum disease and pest resistance that enhance its forage quality and performance.

Key Features

- Highly persistent in dryland and irrigation
- Superior cold and heat tolerance
- Rapid regrowth after grazing and cutting
- Well suited to hay production systems
- Significantly better than usual leaf retention when hay making

Plant Characteristics

- Erect growth habit
- Excellent mature leaf:stem ratio
- Highly resistant to aphids

Where can I grow it?

- Bred to suit all Australian lucerne growing areas
- Dryland conditions to winter cold to subtropics



Sowing Rate: 6-15 kg/ha
Blend Rate: 1-4 kg/ha



WINTER ACTIVITY 9
HIGHLY WINTER-ACTIVE

*Ask for our Lucerne Guide or
download from our website*

Lucerne disease resistance profile

Leaf and Stem Diseases	Silverado	Silverosa GT
Stemphylium Leaf Spot	Resistant	Resistant
Pepperspot (Leptosphaerulina)	Resistant	Resistant
Rust	Highly Resistant	Highly Resistant
Downy Mildew	Highly Resistant	Highly Resistant
Phoma (Spring Blackstem)	Resistant	Resistant
Common Leafspot	Resistant	Resistant
Lucerne Yellows Disease	Highly Tolerant	Highly Tolerant
Root and Crown Diseases		
Phytophthora Root Rot	Highly Resistant	Highly Resistant
Anthracnose	Highly Resistant	Highly Resistant
Stagonospora Crown Rot	Highly Resistant	Highly Resistant
Fusarium Crown Rot	Highly Resistant	Highly Resistant
Rhizoctonia Crown Rot	Moderately Resistant	Moderately Resistant



Silverosa GT is the benchmark for multi-purpose, grazing tolerant lucerne. It has inbuilt disease and pest resistance, produces premium quality forage and is salt tolerant.

Key Features

- High-yielding and extremely persistent lucerne suited to both intensive grazing and fodder production
- Superior fine stem:leaf ratio
- Rapid regrowth after grazing and cutting
- Significantly better leaf retention when hay making
- Tolerates high levels of salinity; up to 10,000ppm

Plant Characteristics

- Erect, leafy growth habit
- Very high leaf:stem ratio in mature stands
- Fine leafy stems are very palatable in hay and forage
- Has broad crowns with dense stem regrowth
- High levels of ME and CP
- Highly resistant to aphids

Where can I grow it?

- Bred to suit all Australian lucerne growing areas from the subtropics to dryland or irrigation conditions
- Tolerates frost and cold winters
- Persists in saline soils and retains its high quality and palatability



Sowing Rate: 6-15 kg/ha
Blend Rate: 1-4 kg/ha



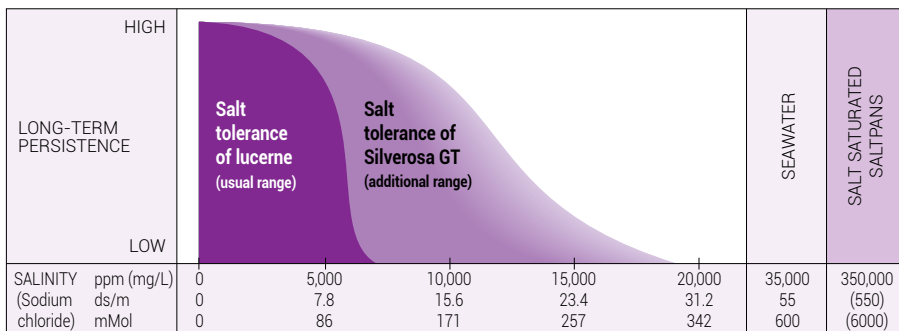
WINTER ACTIVITY 7
HIGH-YIELDING IN SUMMER

*Ask for our Lucerne Guide or
download from our website*

Salt tolerance of Silverosa GT



Silverosa GT is protected by patent



AberLasting is a Caucasian/white clover cross providing the nutritive and N-fixing benefits of white clover, as well as drought-tolerant rhizomatous root characteristics.

Key Features

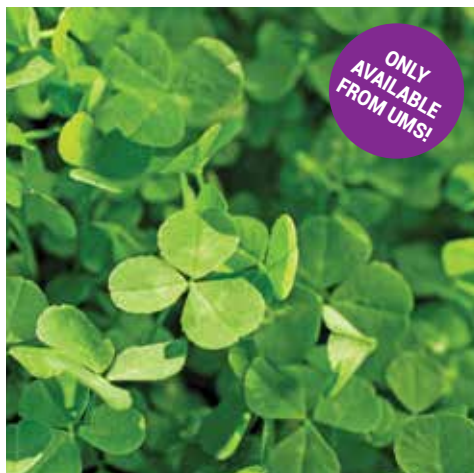
- High levels of stolon density and tolerance to set stocking
- Bred to provide a more drought-tolerant and persistent perennial legume
- Ideal for long term grazing

Plant Characteristics

- Has all the characteristics of a small-leaf white clover coupled with the drought tolerance of Caucasian clover
- Stolons and rhizomes from the Caucasian clover
- Dense fibrous root system for dry tolerance

Where can I grow it?

- Suitable for use in all grazing systems including permanent pasture with limited water
- Proven to be drought tolerant and persistent, even in clover root weevil areas



Sowing Rate: 3-5 kg/ha
Blend Rate: 1-3 kg/ha



A REAL BREAKTHROUGH
THE FIRST SUPER CLOVER IS HERE!

Typical quality characteristics of white clover and perennial ryegrass

	White Clover	Perennial Ryegrass
Digestibility (D-value %)	75 - 82	65 - 75
Crude protein (%)	27	17
Dry matter intake by sheep (kg/day)	1.9	1.6
Calcium content (%)	1.6	0.6
Magnesium content (%)	0.18	0.16
Phosphorus (%)	0.6	0.3
Copper (parts per million)	10.0	6.5
Selenium (parts per 100 million)	0.6	0.2

AberDance is a medium-leaf white clover which provides flexibility in a variety of grazing management systems and is best suited to sheep or cattle grazing.

Key Features

- Can be used in either medium or long-term pastures
- High-yielding and persistent in a range of systems
- Showed consistently high yields over 8 years in long-term trials
- Bred for stress tolerance, grazing tolerance, pest and disease resistance
- Flexibility, ie suitable for hard grazing and cutting

Plant Characteristics

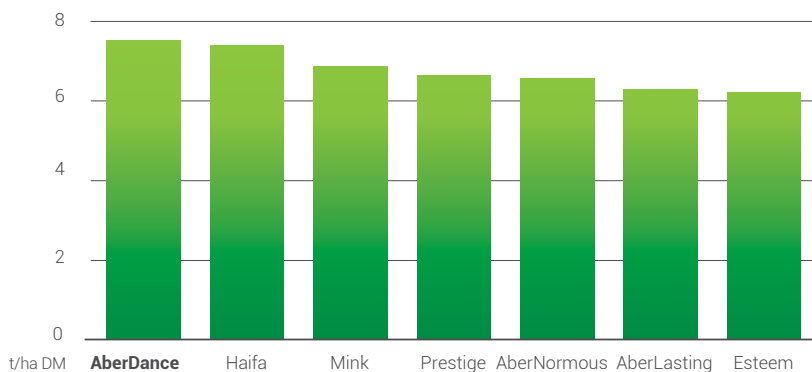
- Very winter hardy with outstanding cool season activity
- High stolon density
- Medium leaf size

Where can I grow it?

- Best suited to medium to high rainfall zones or irrigation
- Responds well to spring and summer moisture
- Will grow in a wide range of soil and fertility conditions



Sowing Rate: 3-5 kg/ha
Blend Rate: 1-3 kg/ha



White Clover, Replicated Dry Matter Trial

Tooma Research Farm, NSW, 2013-2014

AberNormous[®]

WHITE CLOVER

AberNormous is a large-leaf white clover suitable for rotational dairy/cattle grazing and high production silage pastures.

Key Features

- Combined with AberDance, provides high yielding pasture for high-fertility lamb fattening systems
- Retains high digestibility throughout the season
- Improved stress tolerance, grazing tolerance, pest and disease resistance

Plant Characteristics

- Larger leaf size and higher stolon density than other similar clovers
- Dense stolon growth for greater persistence

Where can I grow it?

- Best suited to medium to high rainfall zones or irrigation
- Responds well to spring and summer moisture
- Will grow in a wide range of soil and fertility conditions

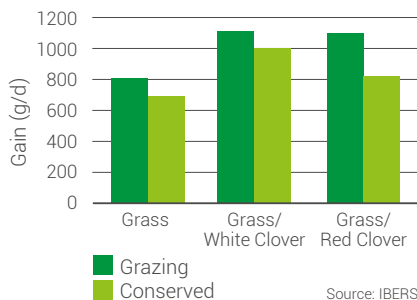


Sowing Rate: 3-5 kg/ha

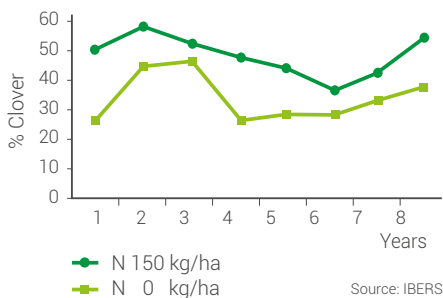
Blend Rate: 1-3 kg/ha



Liveweight gains on clover (beef cattle)



Evidence of persistence of modern white clover varieties





TurboPlus is a Persian clover specially bred to meet the need for a disease resistant, frost tolerant, high performance, multicut/multigraze variety.

Key Features

- High dry matter yields
- Tolerant to set stocking
- Longer production season than traditional forage Persian clovers
- Ideal in a mix for quality hay and silage making

Plant Characteristics

- Annual legume with a tall and erect growth habit
- Grows quickly and displays large leaflets
- Soft seeded

Activity

TurboPlus is winter active with a late flowering date

Where can I grow it?

- Specifically adapted to suit a wide range of climates from the subtropics to cool temperate areas
- Excellent frost and waterlogging tolerance
- Ideal for irrigated areas



Sowing Rate: 4-10 kg/ha

Blend Rate: 2-4 kg/ha





Red812 is a very productive, upright, red clover with excellent winter and spring growth.

Key Features

- Excellent for hay or silage production
- Low oestrogen levels
- Excellent for fattening lambs

Plant Characteristics

- A short term perennial clover (2-3 years)
- Early flowering
- Low oestrogen levels
- Large leaf

Activity

Red812 grows best in summer and autumn with good levels of winter production

Where can I grow it?

- Suited to high rainfall zones
- Some summer rainfall will significantly improve persistence
- Performs very well in heavy soils



Sowing Rate: 4-6 kg/ha

Blend Rate: 1-2 kg/ha



GrowMax

FORAGE BRASSICA

GrowMax is a modern forage brassica cultivar bred to improve quality, regrowth and yield over the traditional varieties. When well-managed, GrowMax provides high quality, cost-effective forage for beef cattle and sheep.

Key Features

- Late flowering and early maturing
- High yielding
- Excellent regrowth after grazing
- Effective break crop beneficial to soil structure
- Produces more leaf compared to Winfred

Plant Characteristics

- Hybrid type rape x kale
- Excellent disease resistance
- Excellent feed quality CP17-20, ME11-13

Maturity

- GrowMax establishes rapidly and is ready for first grazing in 60-90 days
- Graze GrowMax when the crop is ripe based on sowing time and location
- Will provide more feed from later grazings

Where can I grow it?

- Medium to high rainfall areas 500-700mm
- Suited to most soil types



Sowing Rate: 3-5 kg/ha
Blend Rate: 1-2 kg/ha



	J	F	M	A	M	J	J	A	S	O	N	D
Sowing												
Grazing												

Year-round grazing is possible when forage brassica is well managed



Lavish forage oats is the latest release from UMS originating from an Australian research and development program. Lavish has been extensively evaluated in Australian field trials over four years. It is the outstanding performer when compared to current market-leading varieties.

Plant Characteristics

- Semi-erect growth habit
- Prolific tillering – a high proportion of thinner tillers allows rapid recovery after cutting or grazing
- Strong initial growth and establishment reduces the time to first grazing
- Outstanding total season dry matter (DM) yield
- Highly resistant to crown (leaf) rust

Maturity

Lavish is a late maturing oat (with similar maturity to Taipan).

Where can I grow it?

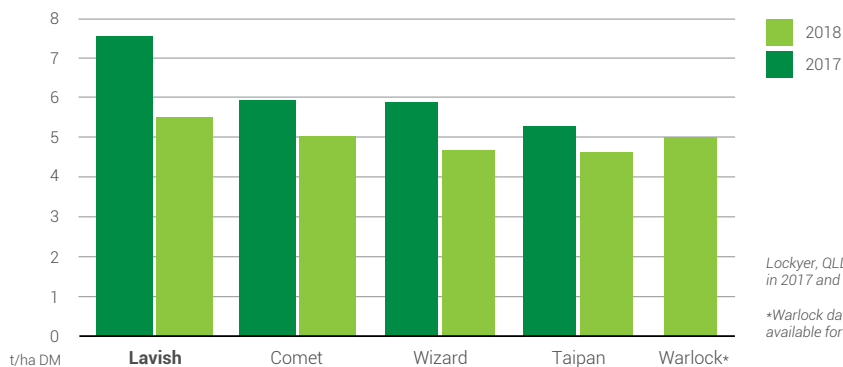
- Produces excellent results in all oat-growing regions of Australia under both dryland and irrigation situations
- Tolerates most soil types



Sowing Rate: 30-60 kg/ha Dryland/Low Rainfall
80-120 kg/ha Irrigation/High Rainfall



**HIGHLY RESISTANT TO
CROWN (LEAF) RUST**



Oats, Replicated Dry Matter Trial

Source: Palafor Partners, QLD



Massive is a modern forage-oat cultivar. Its enormous leaf is derived from a joint Australian/North American breeding program with the aim of providing good early feed but having the capacity to survive tough conditions.

Key Features

- Very quick to first grazing, very late maturing
- Good seedling vigour
- Excellent growth during Autumn, Winter and Spring
- High tolerance to grazing

Plant Characteristics

- Large seed size
- Enormous leaf size
- Low growing point

Maturity

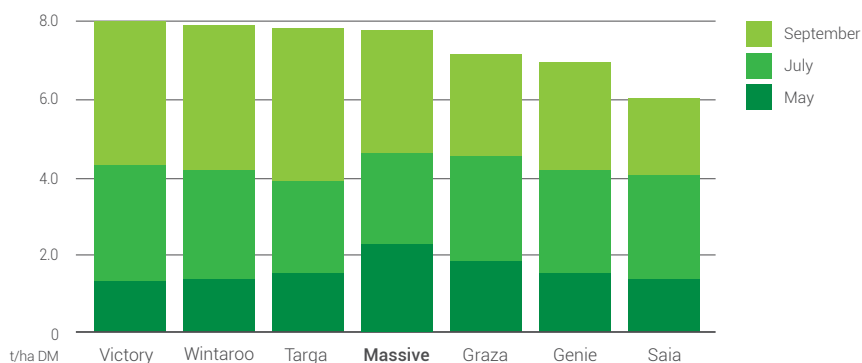
Massive is a very late-maturing oat variety.

Where can I grow it?

- Can be sown in many different regions but is better suited to higher rainfall inland areas.
- Suited to both dryland and irrigation conditions
- Suited to most soil types



Sowing Rate: 80-120 kg/ha Dryland/Low Rainfall
100-150 kg/ha Irrigation/High Rainfall



Oats, Replicated Dry Matter Trial

Tooma Research Farm, NSW, 2016



Victory is a very high-yielding and late maturing, modern forage-oat cultivar with an extremely rapid growth rate.

Key Features

- Semi-erect growth habit
- Good seedling vigour
- Excellent growth during Autumn, Winter and Spring
- High tolerance to grazing

Plant Characteristics

- Medium seed size
- Large leaf size
- Low growing point

Maturity

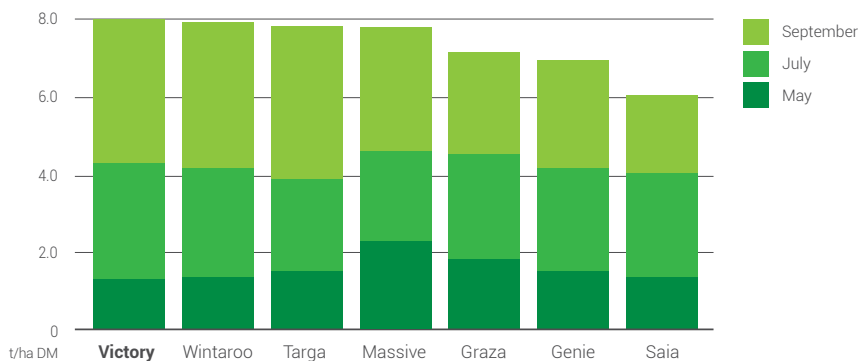
Victory is a slightly earlier maturing variety compared to Massive but later than most southern varieties.

Where can I grow it?

- Can be sown in more areas than most other oat varieties
- Grows well from southern Victoria right through to Queensland
- Suited to both dryland and irrigation conditions
- Suited to most soil types



Sowing Rate: 80-120 kg/ha Dryland/Low Rainfall
100-150 kg/ha Irrigation/High Rainfall



Oats, Replicated Dry Matter Trial

Tooma Research Farm, NSW, 2016



Kiwi is a very palatable, late maturing, perennial herb providing extended seasonal growth, which is ideal for finishing livestock.

Key Features

- Acid soil tolerant
- Ideal for finishing livestock
- Very high rate of summer activity
- Excellent lucerne companion

Plant Characteristics

- Short-term perennial
- Grows broad prostrate leaves forming a rosette
- Becomes more upright when actively growing in spring and nearing flowering

Activity

Warm-season growing herb, growing actively from early spring to late autumn. Winter growth slows when frosts occur, but will continue until soil temp drops below 9°C.

Where can I grow it?

- Deep tap root enables moderate drought tolerance.
- Can be used as an alternative to lucerne on acidic soils in high rainfall areas



Sowing Rate: 2-5 kg/ha

Blend Rate: 0.5-2 kg/ha



Lawn Blends

Whether you need to sow a sports field or a back yard, UMS will advise on the best blend to suit the purpose. We blend and pack seed that's high in quality, germination and purity and selected to suit even the toughest conditions. Our agronomists can also offer helpful hints on establishing and maintaining a healthy and good-looking lawn.

- **Sunny Lawn** - A very durable, persistent water-miser that looks good all year
- **Hardy Lawn** - A really tough, well presented but low-maintenance lawn
- **Backyard Lawn** - For the rough and tumble of the backyard but easy care
- **Sports Oval** - Quick to establish, withstands wear and tear and harsh conditions
- **Highway Blend** - Designed for harsh freeway or roadside conditions
- **Hardware Blend** - Economical, hard-wearing, all-purpose lawn for the novice gardener



Available in 5 kg
and 25 kg bags

Pasture Blends

Our range of pasture blends includes annuals for hay and silage production, through to perennials such as phalaris, winter-active fescue or ryegrass. The range is regularly reviewed to ensure it continues to boost farm productivity and profitability.

- Ready-to-sow blends available for various purposes and conditions
- Annual or perennial pastures catered for
- Formulated to suit beef, sheep, dairy, equine and fodder conservation
- **Dairy Premium**
- **Fat Lamb Factory**
- **Hardy Perennial**
- **Hay & Silage**
- **Equine**
- **High Density Legume**
- **Hill Country**
- **Meat & Milk**
- **Recovery**
- **Tractor Stopper**



Custom Blending

Blends can really drive increased pasture production and farm profitability. UMS can blend pasture seed specifically to suit your needs, whatever your budget or farming enterprise.

- Designed to suit a widely varying range of soil types and seasonal conditions
- Formulated to provide nutritious feed throughout the season
- We can coat or treat blends as needed

Custom blends available from Albury and Tamworth NSW, and Launceston TAS.



Seed Coating

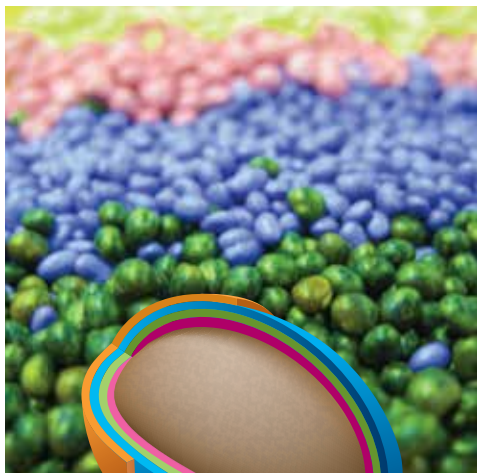
The **UMS SupaCote®** process helps protect your investment in seed.

The purpose of coating is to optimize seed germination, plant emergence and growth, as well as nodulation in legumes.

UMS SupaCote® provides broad-spectrum protection against some major insect pests and common soil borne diseases during establishment.

UMS offers you precise and flexible technology to coat and treat seed thanks to its highly-developed batch processing plant.

Ask your UMS area manager or see our website for more information about the features and benefits of **UMS SupaCote®**.



SupaCote®

Research and Development

The Australian climate is notoriously challenging, a fact of farming life which influences our research and development (R&D) program, the focus of which is providing seed suited to Australian conditions.

Since 2001 our independent R&D company has been developing and trialling different varieties of pasture and forage seed under authentic farming conditions. The performance data from different varieties is analysed and compared 'on-farm'. Our varietal and species recommendations are based on scientifically-produced results, backed up by practical observation.

An independent technician/agronomist manages our NSW research site, and in 2018 our R&D program expanded significantly and now operates from the former Department of Primary Industry Research Station near Cressy in the Tasmanian midlands. New varieties are assessed both visually and physically to demonstrate how beneficial traits perform and whether they are consistent over several seasons. Persistence is the key factor for perennial species.

Statistical data replications are carried out and data provided quarterly. Dry matter cuts are obtained using the traditional cutting and drying method, which provides the most accurate data available, compared to quicker and cheaper methods (eg rising meter and probes) in use in the industry.



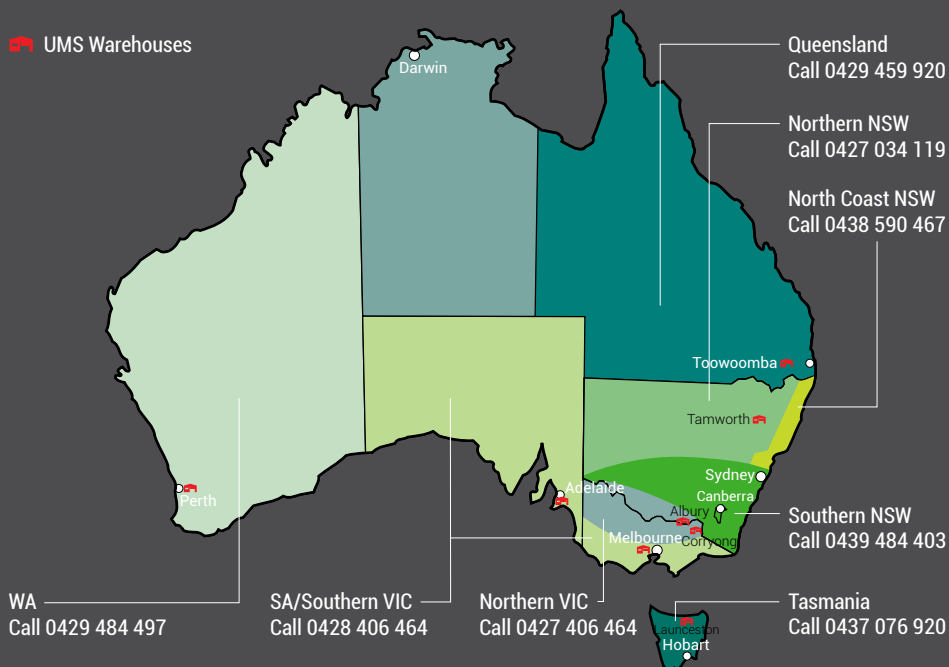
Species currently being trialled at our research farms include grasses, cereals, brassicas, legumes, and fodder crops, it's a slow process (typically 7-10 years) from breeding to evaluation, through trials to bulk-up and finally Plant Breeders' Rights (PBR) assessments prior to commercial release.

Upper Murray Seeds' agronomists and sales staff can confidently select and recommend our products to you, having seen them perform at our demonstration sites, production farms, and commercially.



Sheldon Agri

 UMS Warehouses



Upper Murray Seeds®
Sow much better

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