

AGF^{seeds}

SEED GUIDE - 2024

Grain
Forage
Pasture
Cover Crop

Advancing Agriculture Through
Better Seeds and Service

(03) 5345 6262 agfseeds.com.au

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Welcome to AGF Seeds. We are a fully independent and Australian owned seed production and marketing business.

Our mission: To advance agriculture through better seed and service to resellers and growers throughout Australia.

We achieve this by ensuring our varieties are meticulously tested and proven in local conditions, that the product that goes into the bag has been processed with care and attention to detail, and that we bring it all together with world class service.

Whether you're a Mallee cocky or a cane grower, our experienced staff and independently-run trial sites are here to support you from seed to harvest.

If you have been working with us for years, thank you, and if this is your first time interacting with AGF Seeds then welcome.

We hope the information provided in this guide can set you up for success in 2024.



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TARGET  **PERFORMANCE PASTURE BLENDS**

TARGET blends are convenient, mixed and ready to sow solutions for establishing perennial, short term, and specialist pastures. They are reliable blends made up of proven varieties and contain the highest quality seed.

Whatever your pasture goals we will have a blend to meet it. Call our helpful staff to find the perfect mix for your farming system.



PERENNIAL BLENDS

Target Premium Perennial



Where late season maturity and high quality production is required. This mix will suit both irrigation and high rainfall environments and has a blend of white clovers providing persistence, high stolon and leaf density and strong seasonal growth.

Bistro LE Perennial Ryegrass (Gaucho)	42%
Avalon Plus LE Perennial Ryegrass (Gaucho)	42%
White Clover (SlimCoat + Gaucho)	16%
Sowing Rate	25kg/ha

Target Finisher



Premium high performance blend for medium term production in high rainfall and irrigated districts. Target Finisher contains late maturing ryegrasses with white and red clovers and chicory that continue to provide high quality feed late into the season. Use target finisher to finish animals later into the year.

Bistro LE Perennial Ryegrass (Gaucho)	20%	Rubitas Red Clover (SlimCoat + Gaucho)	6%
Rula Hybrid Ryegrass (Gaucho)	20%	Antas Sub Clover (SlimCoat + Gaucho)	14%
Avalon Plus LE Perennial Ryegrass (Gaucho)	18%	Puna Chicory (Gaucho)	10%
White Clover (SlimCoat + Gaucho)	12%	Sowing Rate	25kg/ha

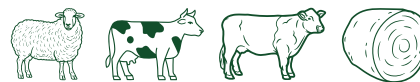
Target Valley 650+



Suited to the fertile valleys and hills in Victoria and southern NSW. The sub clovers ensure persistence and good winter growth. The cocksfoot is summer active and provides growth when other grasses won't. The mid maturing ryegrasses and white clover will provide excellent growth in valleys where rainfall is more reliable and soil more fertile.

Marathon LE Perennial Ryegrass	30%	Campeda Sub Clover (SlimCoat + Gaucho)	11%
Avalon Plus LE Perennial Ryegrass	30%	White Clover (SlimCoat + Gaucho)	3%
Yarck Cocksfoot	14%		
Riverina Sub Clover (SlimCoat + Gaucho)	12%	Sowing Rate	25kg/ha

Target Oversow

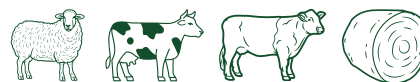


Target Oversow is specifically designed for use on irrigated or high rainfall perennial pastures. It is a blend of high quality perennial, hybrid and Italian ryegrasses that can be used to rejuvenate pastures that have thinned out due to overgrazing or drought.

Avalon PLUS LE Perennial Ryegrass	34%
Rula Hybrid Ryegrass	33%
Xtend Italian Ryegrass	33%

Sowing Rate 15kg/ha

Target Robust Ryegrass



Blend includes earlier maturing & robust ryegrass varieties with self regenerating mid maturing black and cream sub clovers for dryland use where persistence is more important or seasons don't support later maturing varieties. An excellent value perennial blend.

Marathon LE Perennial Ryegrass	24%	Paradana Balansa Clover	4%
Victorian Perennial Ryegrass	40%		
Campeda Sub Clover	16%	Sowing Rate	25kg/ha
Riverina/Trikkala Sub Clover	16%		

PASTURE BLEND BOOSTERS

Target Ryegrass S&B



Persistent and productive perennial ryegrass and sub clover blend for sheep & beef producers in medium rainfall environments. Early mid maturing perennial ryegrasses without stagger causing endophyte and sub clovers with mid-late maturity to balance production and quality through the season.

Marathon LE Perennial Ryegrass	30%	Narrikup Sub Clover (SlimCoat + Gaucho)	10%
Avalon Plus LE Perennial Ryegrass	30%		
Riverina Sub Clover (SlimCoat + Gaucho)	20%	Sowing Rate	20kg/ha
Rosabrook Sub Clover (SlimCoat + Gaucho)	10%		

Target Fescue S&B



Summer active fescue and clover blend for late season quality feed on heavy flats and paddocks often too wet to graze through winter and as a rotationally grazed irrigated summer pasture. Sub clovers selected for tolerance to wet winters with a very soft leafed summer active tall fescue.

Finesse Q Tall Fescue (Gaucho)	60%	Rouse Sub Clover (SlimCoat + Gaucho)	15%
White Clover	5%		
Strawberry Clover	5%	Sowing Rate	20kg/ha
Riverina Sub Clover (SlimCoat + Gaucho)	15%		

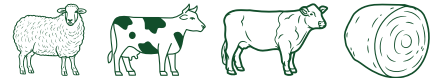
Target Cocksfoot S&B



Cocksfoot and clover blend for long term pasture in well drained paddocks in medium but variable rainfall environments. Combination of summer active and winter active cocksfoot varieties and companion mid maturing sub clovers to balance production through the season and utilise moisture when it rains. Particularly well suited to sheep and beef operations, a complimentary alternative to Phalaris based pastures.

Excellate Cocksfoot (Gaucho)	25%	Narrikup Sub Clover (SlimCoat + Gaucho)	33%
Yarck Cocksfoot (Gaucho)	25%		
Riverina Sub Clover (SlimCoat + Gaucho)	17%	Sowing Rate	12kg/ha

Target Phalaris S&B

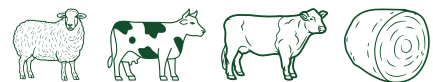


Highly persistent blend that when established can result in a productive pasture for many years. Good weed control and reasonable fertility are required prior to sowing. Blend suits most areas that receive 450mm+. Perennial Ryegrass can be added by direct drilling one season after establishment.

Holdfast GT Phalaris (Gaucho)	20%	Narrikup Sub Clover (SlimCoat + Gaucho)	10%
Holdfast Phalaris (Gaucho)	10%	Rosabrook Sub Clover (SlimCoat + Gaucho)	10%
Mate Phalaris (Gaucho)	20%		
Riverina Sub Clover (SlimCoat + Gaucho)	30%	Sowing Rate	10kg/ha

SHORT TERM BLENDS

Target Short-Term Stayer



A fast establishing and quick growing short term ryegrass blend proving a combination of quick growth, late season quality and second year recovery. Being later flowering Rula extends quality and growth later into the season with added grazing recovery coming from the densely tillered Xtend Italian ryegrass. Clovers such as Persian or Red can be added to Stayer or the blend can be used to oversow Headstart summer forage blends in the autumn.

Pinnacle Annual Italian Ryegrass	50%	Sowing Rate	25kg/ha
Xtend Italian Ryegrass	33%		
Rula Hybrid Ryegrass	17%		

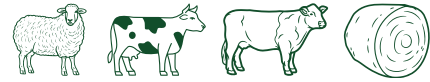
Target Mighty Graze



A careful selection of winter cereals to give a longer grazing opportunity as an oats alternative. Suited for Sheep, Beef, and Dairy systems looking for quality forage at the right price.

BigRed Winter Wheat	50%	Sowing Rate	50kg/ha Nth Australia/Dryland
Grazing Oats	25%		100kg/ha Sth Australia/Irrigated
Forage Ryecorn	25%		

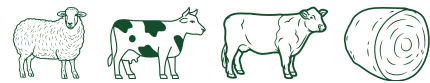
Target Autumn Allgrass



An ideal blend in oversowing paddocks that have a healthy population of clover, but little ryegrass. It is best sown early in the autumn to take advantage of its rapid establishment and high level of winter production. The late maturing ryegrasses will make excellent silage or hay, and offer the opportunity for quality regrowth into early Summer.

Tetraploid Annual Italian Ryegrass	50%	Sowing Rate	25kg/ha
Diploid Italian Ryegrass	25%		
Diploid Annual Ryegrass	25%		

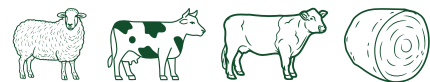
Target Sub Mix



This mix has been used on dryland and short irrigation cycles in the Goulburn Valley and Southern NSW for over 10 years and has a good fit outside these areas. It is self-regenerating if let set seed. The mix has been used for hay, silage and grazing with excellent results.

Riverina Sub Clover (SlimCoat + Gaucho)	20%	Shaftal Persian Clover (SlimCoat + Gaucho)	10%
Rouse Sub Clover (SlimCoat + Gaucho)	12.5%		
RedGum 2 Annual Ryegrass	27.5%		
Storm Annual Ryegrass	30%	Sowing Rate	25kg/ha

Target Feed & Fodder



This combination of late maturing ryegrasses and annual clovers has produced outstanding results since 2007. It can be used in both irrigation and high rainfall environments, with the opportunity for numerous winter grazings and multiple silage or hay cuts. It has excellent regrowth potential, and will produce quality leafy feed into early summer with irrigation or spring rainfall.

Pinnacle Annual Ryegrass	43%	Shaftal Persian Clover	8%
Xtend Italian Ryegrass	43%		
Bolta Balansa Clover	6%	Sowing Rate	25kg/ha

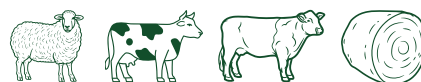
Target Hay & Silage



Excellent for grazing, hay, or silage production. This mix can be used in situations where a short term pasture is required, or as a productive break crop to clean up a run down paddock before returning it to permanent pasture. The blend contains early/mid maturing varieties that have only moderate regrowth after cutting. If full regrowth potential is required use TARGET Feed & Fodder.

Apex Annual Ryegrass	24%	Shaftal Persian Clover	8%
RedGum 2 Annual Ryegrass	24%	Arrowleaf Clover	8%
Storm Annual Ryegrass	28%		
Paradana Annual Ryegrass	8%	Sowing Rate	25kh/ha

Target Oat & Vetch



Target Oat and Vetch combines premium grazing and hay Oat Forester with very late flowering Benetas Purple Vetch at a ratio to allow Benetas to establish and trellis on fast establishing Forester Oats aiding the production and quality of the hay and silage crop. Suitable for a single hay or silage cut the varieties in the blend are slow maturing to maximise production in higher rainfall regions and allow cutting later in the season.

Benetas Vetch	67%	Sowing Rate	60kg/ha
Forester Oats	33%		

Target Mega Silage



TARGET Mega Silage is an ideal ratio of oats and peas for silage and hay production. The Forester Oats provide a good trellis for the field peas to climb on, minimising the likelihood of lodging. The addition of peas to oats does not necessarily improve yield, but has a positive effect on protein content and palatability of the resulting product.

Forester Oats	40%	Sowing Rate	125kg/ha
Peas	60%		

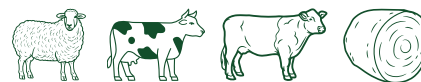
Target Jumpstart



Blend for autumn planting to get a Jumpstart on feed for autumn and winter. Includes two of our most vigorous cereals for quick, robust dry-matter production for when feed is required as quickly as possible, and Pinnacle annual ryegrass to maintain grazing from the paddock into spring and summer. This grass and cereal blend can provide excellent weed competition that is useful in pasture renovation phase when coupled with cost effective broadleaf weed control options.

Ryecorn	30%	Pinnacle Annual Ryegrass	30%
Oats	40%	Sowing Rate	50kg/ha

Target Summagraze



Target Summagraze is a well-balanced blend of millet and brassica providing quick grazing with Blue Gorilla forage brassica improving the overall quality of the standing feed. The Blue Gorilla has been Poncho treated for added insect protection.

Blue Gorilla Forage Rape (Poncho Plus)	20%	Sowing Rate	12.5kg/ha
Shirohie Millet	80%		

SPECIALITY MIXES

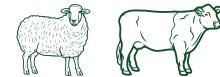
Target MR Horse Mix



A blend designed specifically for horse pastures in medium rainfall zones. A range of highly palatable grasses that will provide feed across the entire season where conditions allow.

Cocksfoot	10%	Timothy Grass	20%
Kentucky Blue Grass	16%	Sub Clover	12%
Prarie Grass	18%	Strawberry Clover	4%
Perennial Ryegrass	20%	Sowing Rate	25kg/ha

Target Dam Bank Mix



A blend designed to provide soil stabilisation on dam banks to reduce the risk of erosion from water flow and livestock. In livestock situations this Target Dam Bank mix provides feed and extra stability for the bank when stock are accessing water.

Finesse Q Tall Fescue	18%	Riverina Sub Clover	16%
Yarck Cocksfoot	8%	Palestine Strawberry Clover	2%
Victorian Perennial Ryegrass	36%		
Common Ryecorn	20%	Sowing Rate	25kg/ha

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Farmour COVER CROPS



Cover crop and bio-fumigation seed blends for those looking to improve soil health, landscape function and supporting wildlife and beneficial insects.

We have mixes for every season, zone and use case. Consider a FArmour blend for grazing, nitrogen fixes, and bio fumigation.

Use the below guide to find which mix is best for you.

FArmour blends	Sowing Rate kg/ha	Suggested Planting Window				Grazing /Forage	Quick Cover	Diversity	Erosion Protection	Manure	Bio-fume
		Summer	Autumn	Winter	Spring						
WinterMax	40-60					✓✓✓	✓✓	✓✓	✓✓✓	✓	
SummerMax	12.5-17.5					✓✓✓	✓✓	✓✓	✓✓	✓	
Cool Cover	50-75					✓✓	✓✓✓	✓✓✓	✓✓	✓✓	
WarmCover	15-25					✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓	
HDL	20-30					✓✓✓	✓	✓		✓✓✓	
Nitro	40-60					✓✓	✓✓	✓		✓✓✓	
Sunnbiosys	15-25					✓✓	✓✓✓	✓✓	✓✓	✓✓	
Biofume	10-20						✓✓		✓	✓✓	✓✓✓

Table 1: Use case and suggested sowing windows for our FArmour range.

✓ = suitability for objective. Maximum rating is 3.

FArmour WinterMax

Widely used cover crop blend suited to planting from late summer through winter where quick cover and grazing is the priority. Range of species included to maximise quick cover and forage production. Can be used between or before summer crop rotations for grazing, brown or green manuring.

Common Ryecorn	30%	Tetraploid Annual Ryegrass	16%
Oats	36%		
Tillage Radish	10%	Sowing Rate	50kg/ha
Crimson Clover	8%		

FArmour CoolCover

Cool season cover crop blend where diversity is priority with a combination of annual grasses and broadleaf species. Suited to sowing from late summer through winter. Can be successfully grazed or used for quick cover weather adding biodiversity, competing with weeds or building organic matter.

Oats	20%	Forage Rape	5%	Chicory	2%
Ryecorn	20%	Leafy Turnip	2%	Tillage Radish	7%
Purple Vetch	5%	Linseed	3%		
Diploid Annual Ryegrass	7%	Crimson Clover	3%	Sowing Rate	50kg/ha
Winter Wheat	16%	Peas	10%		

FArmour HDL

High Density Legume blend for cool season/ winter production of nitrogen fixing clover species for biomass that can be utilised for grazing, hay production and building organic matter. HDL blend provides opportunities for grass weed control and a grass free disease break in cropping rotations that will also benefit from residual Nitrogen

Arrowleaf Clover	8%	Crimson Clover	12%
Popany Vetch	56%	White Clover	4%
Balansa Clover	4%	Antas Sub Clover	8%
Persian Clover	8%	Sowing Rate	25kg/ha

FArmour Biofume

Robust blend including Radish and Mustard for bio fumigation operations in horticultural settings. Suited to sowing from late summer through early spring, mulching and incorporating or brown manuring as pest and disease break while building soil organic matter.

Tillage Radish	33.3%	Sowing Rate	15kg/ha
Pantha Mustard	33.3%		
Falkor Mustard	33.3%		



FArmour SummerMax

Widely used cover crop blend suited to planting from late spring through early-mid summer where quick cover and grazing is the priority. Range of species included to maximise quick cover and forage production. Can be used between or before winter crop rotations for grazing, brown or green manuring. Can be used as a break for perennial pastures & may help generate a feed wedge in the perennial pasture to carry into winter or simply as a specialist summer crop with some diversity to maximise the opportunity for summer feed or biomass.

Millet	33%	Forage Rape	7%
Sorghum	33%		
Tillage Radish	27%	Sowing Rate	50kg/ha

FArmour WarmCover

Warm season cover crop blend where diversity is priority with a combination of annual warm season grasses and broadleaf species. Suited to sowing from spring through summer. Can be successfully grazed or used for quick cover weather adding biodiversity, competing with weeds or building organic matter.

Millet	20%	Freyr Sunn Hemp	13%	Sunflower	13%
Sorghum	10%	Buckwheat	13%	Linseed	7%
Tillage Radish	13%	Teff	5%		
Forage Rape	3%	Leafy Turnip	3%	Sowing Rate	20kg/ha

FArmour Sunnbiosys

Summer cover crop blend featuring Freyr Sunn Hemp and a range of species suited to warm season production. Nitrogen fixing and scavenging broadleaf species and annual summer grasses provides for grazing opportunities, diversity and organic matter production. Premium blend of species to make the most of the window between winter crops in warmer climates and provide diversity into monoculture rotations.

Millet	20%	Forage Rape	7%
Sorghum	13%	Freyr Sunn Hemp	40%
Tillage Raish	20%	Sowing Rate	15kg/Ha

FArmour Nitro

Legume blend for warm season/summer production of nitrogen fixing legume species for biomass that can be utilised for grazing, hay production and building organic matter. FArmour Nitro blend provides opportunities for grass weed control and a grass free pest and disease break in cropping rotations that will also benefit from residual Nitrogen.

Freyr Sunn Hemp	20%	Lablab	20%
Soybean	40%		
CowPea	20%	Sowing Rate	50kg/ha



SOILKE SEED BLENDS

Soilkee Pty Ltd is on a mission to enable better utilisation of farmland and water resources by continuous replenishment of the soil for a more profitable, production, health, and sustainable agriculture globally. Part of Soilkee’s pasture cropping system involves seasonal planting and successful establishment of crop and pasture species into existing pasture post grazing by livestock. The Soilkee Seed Blend range work together with the revolutionary Soilkee System. The Soilkee Renovator is proving its potential to be a vital part of achieving a one pass solution for productive, profitable, and resilient soils.

The Soilkee Seed Blend range is available through farm supply stores.

The blends are a carefully selected range of cultivars to achieve a high level of biodiversity including:

Soilkee Winter Mix

- Wheats
- Barley
- Triticales
- Oats
- Saia Oats
- Rye-corn
- Field Pea
- Faba Beans
- Forage Rape
- Plantain
- Turnips
- Tillage Radish
- Sub Clovers
- Annual Clovers
- Perennial Clovers
- Chicory
- Purple Vetch
- Perennial Ryegrass

Soilkee Summer Mix

- Millet
- Sunflowers
- Chicory
- Field Peas
- Faba Beans
- Purple Vetch
- Plantain
- Wheats
- Barley
- Triticales
- Oats
- Saia Oats
- Rye-corn
- Perennial Ryegrass
- Red Clovers
- Sub Clovers
- Crimson Clover
- Linseed/Flax
- Forage Rape
- Tillage Radish



HEADSTART

HEADSTART blends are an innovative way of improving establishment of the perennial pasture herbs and/or clovers in the spring. The summer forage crop (e.g. brassica or millet) acts as a cover crop for the slower establishing species, which benefit from being sown into a warm, cultivated seedbed with seeds of a compatible size.

The HEADSTART Concept



The HEADSTART blends do more than just produce feed over the summer months. The bulk of the initial growth consists of the summer forage crop in the blend, however as the summer progresses, it becomes more evident that the herbs and clovers are making a sizeable contribution to the dry matter on offer.

In addition to increasing total crop production and regrowth potential, they contain high levels of minerals such as selenium, calcium, copper and sodium that are essential for animal performance.

In the first Autumn after sowing HEADSTART blend, many farmers have been impressed with the outstanding growth rates of the established chicory, plantain and white clover, which respond rapidly to the first rains. Oversowing the established herbs and clover with a short to medium term ryegrass will result in a high production pasture that can persist for 2-4 years.

HEADSTART with Millet

Shirohie Millet	58%
Tonic Plantain (Gaucho)	10%
Puna Chicory (Gaucho)	16%
White Clover	16%
(SlimCoat + Gaucho)	
Sowing Rate	25kg/ha

HEADSTART with Winfred

Winfred Forage Rape	12.5%
(Poncho Plus)	
Blue Gorilla Forage Rape	12.5%
(Poncho Plus)	
Tonic Plantain (Gaucho)	20%
Puna Chicory (Gaucho)	37.5%
White Clover	17.5%
(SlimCoat + Gaucho)	
Sowing Rate	8kg/ha

HEADSTART with Karaka

Karaka Leafy Turnip (Gaucho)	30%
Tonic Plantain (Gaucho)	
Puna Chicory (Gaucho)	15%
White Clover	35%
(SlimCoat + Gaucho)	25%
Sowing Rate	10kg/ha

Establishing a New Lawn

Six Steps to a New Lawn

**READY
TO
GROW**

The best time to sow a new lawn depends on the climate of the area. In some areas lawns can be sown all year round but the best time is usually spring through to early summer and late summer to mid-autumn.

The type of soil you have will be a major determining factor in how well your lawn establishes and persists.

- Heavy clay soils should be treated with gypsum at 1kg/square metre before sowing.
- If the soil is prone to waterlogging, most grasses will not persist, so be prepared to address the drainage before planting.
- "Hungry" soils need constant fertilising to support the grass.

1. Choose the mix to suit your needs



Landscaper

Perennial Ryegrass	85%
Bentgrass	5%
Fine Fescue	10%
Sowing Rate	1kg/30m2
Mowing Height	3-5cm

A tough budget priced blend suited to most areas



Quickstart

Turf Type Ryegrass	85%
Bentgrass	5%
Fine Fescue	10%
Sowing Rate	1kg/30m2
Mowing Height	3-5cm
For fast establishment and good vigour	



Longrun

Turf Type Ryegrass	85%
Bluegrass	15%
Sowing Rate	1kg/25m2
Mowing Height	5-7cm
For a strong lawn that uses less water and is very hard wearing. Ideal for hotter Northern Victorian areas and Southern NSW	



Solarwise

Turf Type Tall Fescue	90%
Couch Unhulled	10%
Sowing Rate	1kg/25m2
Mowing Height	5-7cm

The most drought tolerant blend



Shade

Fine Fescue	85%
Bluegrass	15%
Sowing Rate	1kg/25m2
Mowing Height	6-7cm

Perfect for lawns which may experience higher amounts of shade



Caravan Park

Turf Type Perennial Ryegrass	85%
Couch Unhulled	15%
Sowing Rate	1kg/30m2
Mowing Height	3-5cm

A hardy blend that provides year round growth



Sport Oval

Turf Type Perennial Ryegrass	90%
Couch Unhulled	10%
Sowing Rate	1kg/30m2
Mowing Height	3-5cm

A blend that provides the quality and hardness for a sports field

2. Spraying & Rotary Hoeing

Spray out all existing weeds. Rotary hoe (now is a good time to incorporate gypsum or lime if needed) or dig the area. Disturbing soil can activate dormant weed seeds. Be prepared to spray weed killer 2 weeks after digging if you think it might be necessary.

3. Levelling & Raking

Level and rake the area and use a light roller if the soil is too loose or clods need to be pressed down.

4. Seeding & Fertilising

Spread the seed as evenly as possible and use lawn starter fertiliser at a rate of 1kg to 30 square metres, then very lightly rake to achieve good seed soil contact.

5. Watering

Frequent light watering promotes seed germination and rapid establishment. Don't allow the seed bed to become too dry or too waterlogged. As the grass begins to grow, decrease the frequency of watering but increase the amount of water each time. Normally a 2 month old lawn can be watered the same as an established lawn.

6. Mowing

Wait until the grass gets to 6-7cm high before the first mowing, and then take 2-3 mowings to get it to the desired height of 4cm (6-8cm for fescue lawns). Keep the mower blades sharp because this will lessen the harm to the young plants.

AGF  seeds



RYEGRASS

Choosing the Right Ryegrass

Choosing the right type and variety of ryegrass is crucial to establishing a successful pasture. Knowing what goals you are trying to achieve and matching this with the rainfall and soil conditions of your paddock will lead to a healthy, strong pasture.

Step 1: Lifespan of the pasture

Type	Lifecycle	Key Benefits
Perennial	3-5+ years	<ul style="list-style-type: none"> • Efficient and cost effective • Long term feed option • Requires minimal intervention • Can be oversown to improve later years
Hybrid	2 to 4 years	<ul style="list-style-type: none"> • Higher yields and larger leaves than perennials • Higher persistence than Italian ryegrasses • Can oversow perennial pastures
Italian	1 to 3 years	<ul style="list-style-type: none"> • Highly nutritious • Produces quality hay and silage • Oversow for short term improvements to perennial pasture
Annual	1 year	<ul style="list-style-type: none"> • Rapid establishment and excellent winter growth • Provides multiple grazings in one season • High yields for hay and silage production

Step 2: Grazing Patterns

Choose either a diploid or a tetraploid based off of how you will graze your pasture.

Diploid: Can be grazed to 2-5cm. Will handle short or long periods of set stocking or rotational grazing.

Tetraploid: Can be grazed to 5-7cm and will handle short periods of set stocking or rotational grazing. Stock tend to prefer tetraploids to diploids which can lead to overgrazing of tetraploids.



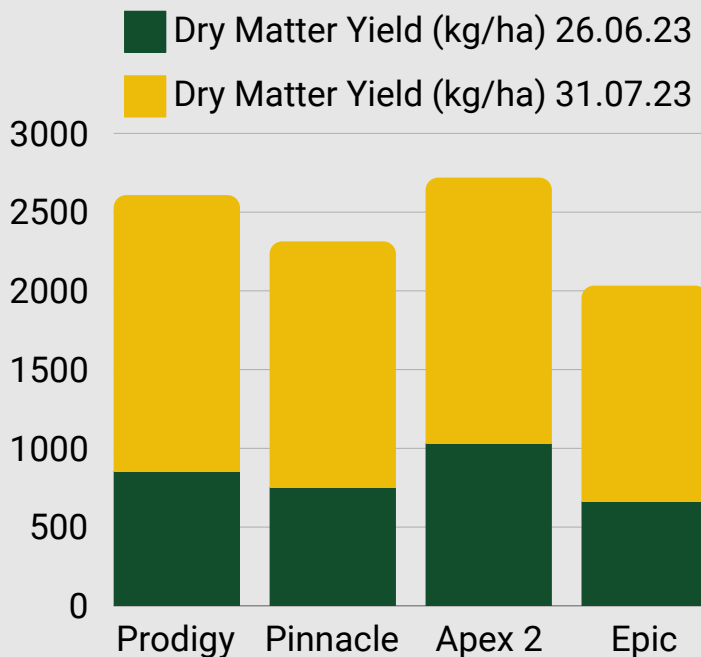
Step 3: When do you require fodder?

Different ryegrass varieties will provide varying amounts of dry matter across the season. Growers who may be looking for high winter/autumn yields should consider Apex 2, however, if you are irrigating or have the rainfall to push later into the season then Prodigy provides great late season yields and regrowth. Maturity is important to track as well as it will impact the time of the spring-flush and the late season loss of quality.

Ryegrass Maturity (based on compiled scores 2017-2023 Smeaton)

	Annual	Italian & Hybrid	Perennial & Hybrid
Early/Quick Maturity	Storm (d)	Awesome (d)	Barberia (d)
	Burst (t)	Hulk (d)	Victorian (d)
	Tetila (t)		Bolton (d)
	RedGum 2 (t)	Xtend (d)	Marathon LE (d)
		Gusto (d)	Kingsgate (d)
	Vortex (t)	Tempo (d)	Nui (d)
	Ascend (t)	Crusader (d)	Avalon (d)
		Accelerate 2 (d)	Avalon PLUS LE (d)
	Epic (d)		Rula (t)
	Apex (t)		Shogun (t)
Late Maturity	Apex 2 (t)		Hustle AR1 (d)
		Feast 2 (t)	Bistro LE (t)
	Torpedo (t)	Blade (d)	Matrix (d)
	Fuze (d)		Tenacious (t)
	Zoom (t)	Rula (t)	Base (t)
	Pinnacle (t)	Shogun (t)	Bealey (t)
	Dash (t)	Mohaka (t)	
	Prodigy (t)		

*Bolted varieties are AGF Seeds proprietaries



Autumn & Winter Yields

Figure 1 shows the amount of dry matter harvested from AGF Seeds varieties in the first two simulated grazes of our 2023 annual ryegrass trial. Different varieties are suited to proving feed at different times of the season. Apex 2 is a great variety for growers looking to find a ryegrass to fill their winter feed gap.

Step 4: Assess Impacts of Endophytes in Perennial & Hybrid Ryegrasses

An endophyte is a fungus found naturally in grasses forming a mutualistic symbiotic relationship where the fungus protects the ryegrass from insects and the ryegrass provides nutrients and a host. Endophytes can be a positive or negative depending on the goals of the pasture. While providing protection for some varieties the alkaloids produced by the grass/endophyte relationship can cause animal production and health problems, the most common of these problems is 'ryegrass staggers'. It is important to discuss with our seed representatives or your agronomist how endophytes in ryegrass may impact your livestock.

Smeaton Ryegrass Trials

The aim of the ryegrass variety trials was to assess the dry matter production performance, heading dates, and make disease observations of pre-commercial and new commercial genetics and compare to industry benchmark varieties for each species (annual, Italian, perennial). We invest heavily in these trials to ensure genetics we take to market have proven they can perform in the field.

We have distributed results from this trial throughout the ryegrass section to highlight where our new varieties will fit within the market.

Each variety trial comprises a 4 replicate randomized complete block design. Sowing rates are based off MLA pasture trial network protocols (annual and Italian: Diploids @ 20kg/ha, Tetraploids @ 28kg/ha. Perennials: Diploids @ 20kg/ha, Tetraploids @ 25kg/ha).

Top Right: Mark Steele taking Biomass Cuts with our specialty Iseki trial mower.

Right: Rhys Cottam-Starky presenting at our November field days.

Below: One of our Smeaton trial sites from above.

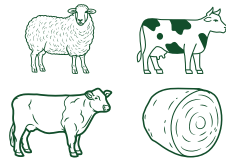


ANNUAL RYEGRASS

Prodigy Tetraploid Annual Italian

Key Features

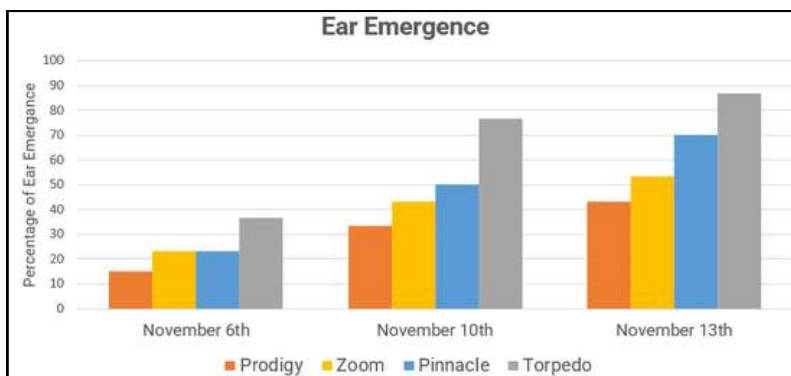
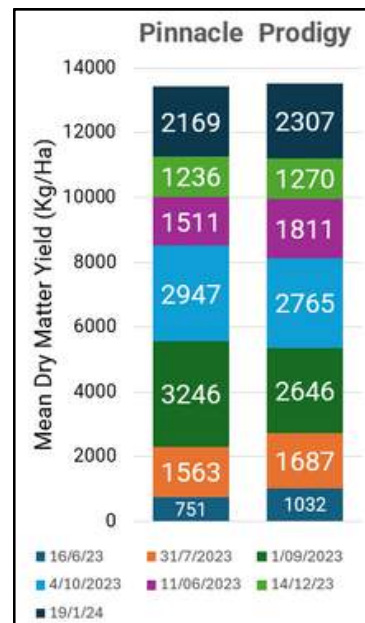
- Late season quality
- High Winter production
- High seedling vigour



Prodigy ryegrass, bred by AGF Seeds in Australia, is an annual tetraploid variety with exceptional seedling vigour, very late heading, and high leaf quality.

It provides valuable forage from early winter through to late in the growing season and enables excellent pasture utilisation, silage production, and hay quality during the spring and summer months. Perfect for medium to high input Dairy, sheep and beef systems where the highest performing annual pastures are required.

Prodigy was selectively bred from plants that showed the potential to provide a second year of growth where conditions allow.



Above: Dry Matter Yield results of Pinnacle and Prodigy in the 2023 AGF Seeds Annual Ryegrass Trial in Smeaton

Left: Ear Emergence scoring from AGF Seeds 2023 Heading Date Trial, Smeaton

Below: Redgum 2 (left), Pinnacle (Centre), and Prodigy (Right) on 14/12/2023 showing how well Prodigy holds quality late into the season. Smeaton Annual Ryegrass Trial 2023

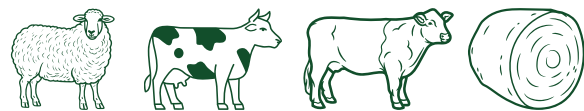




Apex 2 Tetraploid Annual

Key Features

- Early Season Powerhouse
- Lodging & Rust Resistance
- Improved Late Season Quality



Apex 2 builds upon the highly regarded Apex. It continues to deliver very high early season production while providing improved late season quality and production.

Apex 2 suits single year production where winter grazing is a high priority and opportunities for efficient silage/hay making or late season grazing are important in dairy, sheep, beef, and fodder production systems.

In our Smeaton Ryegrass trials in 2022 and 2023 Apex 2 had strong results when compared to other mid maturity tetraploids. Apex 2 outperformed the average result for biomass cut overall, with outstanding results for early feed where Apex 2 shines.

From the biomass results for cuts before October Apex 2 was producing 10.8% over the average mid maturity tetraploids in 2022 and 9.3% in 2023, again proving its potential for providing winter feed.



Dry matter yield (Kg/Ha) for Apex 2 and an average of all mid maturity tetraploids in the 2022 and 2023 AGF Seeds Annual Ryegrass Trials



Epic *Diploid Annual*

Key Features

- Winter Feed
- Robust variety that can be set stocked or rotationally grazed
- Fine leaves and stems

Diploid mid-late maturing annual suited to a broad range of environments and systems. Bred in Australia for high seedling vigour, production through winter, high tiller density and rust resistance.

Epic is a robust variety that provides dense feed in medium inputs systems for sheep and beef. Very strong winter performance.

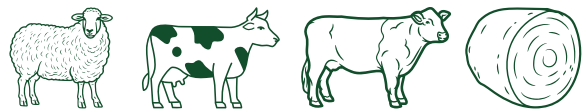
Consider use of annual clovers companions to fix nitrogen and further improve feed quality. Can be used to oversow pastures.



Pinnacle *Tetraploid Annual*

A top performer in Dairy Australia Forage Value Index Pinnacle performs very well through the season including through winter and holds density late into the season. Pinnacle is late maturing and where moisture permits can recover post hay/silage cutting to produce high quality feed very late into the season.

Tested in Australia since 2010 Pinnacle is a proven performer that will add value to any system.



RedGum 2 *Tetraploid Annual*

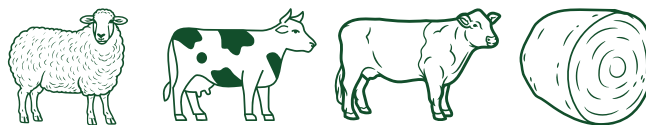
Quality Assurance practices during seed production ensures consistent quality is guaranteed in this variety. Rapid establishment, early maturity and improved grazing and hay production are the main benefits of this low cost annual tetraploid.

HYBRID & ITALIAN RYEGRASS

Gusto *Diploid Italian*

Key Features

- Mid-late maturity
- Low aftermath heading
- Early Season Production
- Densely Tillered Diploid



Mid-Late maturing Diploid Italian with excellent early season production and recovery from grazing. Gusto is a densely tillered upright variety providing a balance between optimising grazing and conserving for silage or hay. Low aftermath heading ensures quality feed continues to be produced while moisture is available.

Gusto has the potential to provide up to two seasons of high-quality grazing and silage or hay. Gusto provides excellent early season production and can recover for multiple grazings. Due to the low aftermath heading quality feed is ensured to be produced late in the season while moisture is available.

In AGF Seeds 2023 Italian Ryegrass trial Gusto proved its ability to provide premium winter feed, and its ability to continue to provide biomass late into the season for grazing or hay & silage purposes.

2023 Italian Ryegrass Trial, Smeaton Mean Dry Matter (Kg/Ha)

Variety	Winter	Spring	Summer	Total
Appeal	2168	6690.6	3528	12386
Xtend	2082	6875.6	2784	11741
Gusto	2353	6248.3	3128	11729
Allure	2319	6298.1	2840	11457
Crusader	2199	5928.3	3281	11408
Knight	2269	6166.9	2922	11358
Manta	2222	6013.8	2986	11222

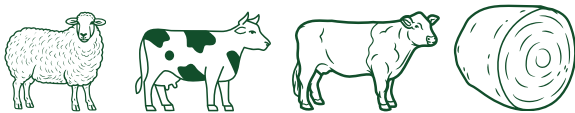


Xtend *Diploid Italian*

Key Features

- Durable diploid Italian option with sound performance across a wide range of environments
- Winter Feed

An Italian ryegrass with sound winter performance and well noted standability though the season. An upright habit and mid maturity makes Xtend a robust and durable 1-2 year pasture grass that holds density deep into the season. Currently used across eastern Australia in sheep, beef, dairy and hay production operations.

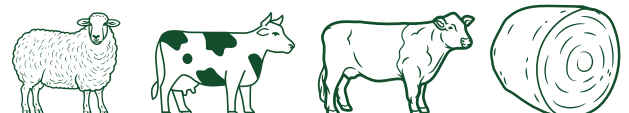


Rula *Tetraploid Hybrid*

Key Features

- Potential as sole grass in 4 year pastures
- It has a fit for a short term pasture in environments where Italians are unreliable.
- High year round fodder

A late-flowering long-rotation type with strong establishment vigour. Rula provides value in a number of situations. It is often used as the sole grass in a potential 4 year pasture. It has a fit for a short term pasture in environments where Italians are unreliable.



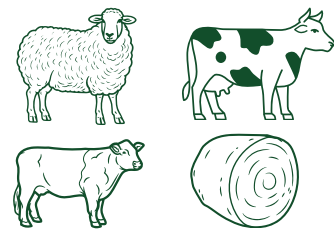


PERENNIAL RYEGRASS

Bistro LE *Tetraploid Perennial Ryegrass*

Key Features

- Late heading
- Tetraploid
- High tiller density
- Bred for persistence under grazing systems
- Australian Bred



Late heading Tetraploid Perennial bred in Australia to combine early vigour, later maturity, persistence under heavy grazing, high tiller density, and rust resistance. Suited to high rainfall and irrigated perennial systems where late maturity allows multiple silage cuts and grazings through early summer in medium to high input dairy, sheep, and beef systems.

Bistro LE provides strong all season production and shows improvement in winter growth compared to previous perennials. Provides quality feed late into the season while moisture is available.





Avalon PLUS

Diploid Perennial

Key Features

- Improved density when compared to Avalon
- Bred for persistence under grazing
- Improved late season quality
- Reduced risk of ryegrass staggers

Avalon PLUS provides quality late season feed where conditions allow and has improved upon Avalon's winter feed with improved vigour. A mid-late maturity approximately 7 days later than Avalon and 14 days later than Victorian.

Bred in a high rust pressure environment for improved resistance when evaluated against comparators.

Suitable to dryland medium to high rainfall regions and irrigation in dairy, beef and sheep systems as a durable quality perennial with robust maturity.



Marathon LE

Diploid Perennial

Early Mid maturing variety suited to sheep and beef operations in medium rainfall environments. Can be used with other perennial grasses as a low endophyte component to reduce the risk of losses associated with livestock staggers
Economical permanent pasture option
Can reduce risk of ryegrass staggers



Victorian LE

Diploid Perennial

Victorian Perennial Ryegrass is a locally grown ecotype well suited to its local environment. While its production is often less than modern varieties its ability to endure is a key feature of this variety and it fits as an economical option in some areas.

Victorian Ryegrass has a standard endophyte.



AGF  seeds



OTHER GRASSES

COCKSFOOT

Deluxe



Deluxe is an enhanced addition to the AGF cocksfoot range. Providing a high-yielding and soft-leaf variety with improved winter activity.

It is particularly suitable for high-rainfall environments, as it maintains high production levels throughout all seasons, while also retaining summer quality and palatability when seasons allow. Deluxe is a next-generation cocksfoot variety that has demonstrated useful disease resistance.

Key Features

- Soft Leaf
- Tiller Density
- Disease Tolerance
- Palatability

Rainfall: 600mm+

Yarck



Selected to be more suitable in regions with a medium or short growing season. Yarck is a porto type with vigorous seedling establishment, high winter growth, and softer and more palatable leaves. Yarck also has the ability to respond and grow with summer rainfall.

Key Features

- Persistence
- Palatability
- Rapid Establishment

Rainfall: 500mm+

Excellate

A late flowering variety with prostrate, growth habit. Bred for a low crown. It has proven to be a durable variety, with a fit in medium to high rainfall zones in sheep and beef pastures.

Rainfall: 500mm +



Lazuly

A late flowering variety with semi erect growth habit, high palatability and persistence. Lazuly is suitable for sheep, beef and dairy systems, being softer and more palatable to animals.

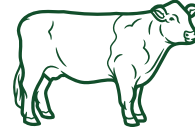
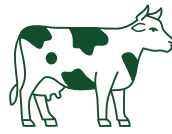
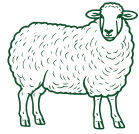
Rainfall: 600mm +





TALL FESCUE

Stirling



Stirling is densely tillered and has excellent palatability, making it an ideal choice for dairy, beef, and sheep.

In comparison to other leading summer-active, continental varieties, Stirling has proven to be highly persistent and high-yielding throughout the year, including early spring and autumn. It also exhibits useful rust resistance and Stirling is highly adaptable and can thrive in both dryland and irrigated conditions. It tolerates heavy, wet, and moderately saline soils, and it is more versatile than perennial ryegrass in hot conditions.

Key Features

- Persistence for longer pasture life
- Soft-leaved, densely tillered
- High forage yield
- Disease resistance

Type: Summer Active

Endophyte: Nil

Rainfall: 550mm+

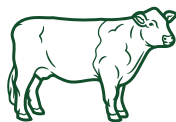
Finesse-Q

Finesse-Q is a high yielding, densely tillered, soft-leaf fescue with semi-late heading. It is extremely persistent due to its dense nature and has no fescue endophyte. It has an intermediate growth pattern better suited to much of Australia's oceanic climate.

Type: Summer Active

Endophyte: Nil

Rainfall: 600mm+



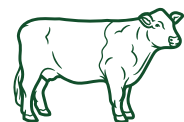
Prosper

A Mediterranean tall fescue with high winter production and summer dormancy. It is ideal for low summer rainfall areas and shows good persistence.

Type: Winter Active

Endophyte: Nil

Rainfall: 350mm +



PHALARIS & PRAIRIE GRASS

Mate *Winter Active Phalaris*

Mate is a highly winter active phalaris bred in Argentina with excellent autumn to spring forage production and good persistence. It has good seedling vigour and high autumn/ winter forage yields. Mate is about 2 weeks earlier flowering than Holdfast. It can also be sown as the sole perennial grass with sub clover, or in a mix with summer active cocksfoot varieties for all year round feed. It is also suited to sowing at 0.5-1kg/ha with lucerne.

Rainfall: 450mm+

Holdfast GT *Winter Active Phalaris*

Holdfast GT phalaris bred for increased grazing tolerance over Holdfast phalaris. Has excellent winter activity and seedling vigour with exceptional dry matter production. Adapted to a greater range of soil types than Holdfast.

Rainfall: 450mm +

Holdfast *Winter Active Phalaris*

Holdfast is a winter activity variety with a low level of summer dormancy, similar to the levels in Australian. At the time of Holdfasts release in the 90's it was slightly more tolerant of soil acidity than other cultivars available at that time.

Rainfall: 650mm+

Matua *Prairie Grass*

An annual or short-lived perennial grass. Most growth in autumn, winter and spring. Suited to fertile, well-drained soils.

Compared to other prairie grass cultivars, Matua has increased annual production, faster tillering, better disease resistance, more erect growth habit, and rapid recovery from grazing.

Rainfall: 650+mm

ANNUAL CLOVERS & MEDIC

Subterranean Clover

A self-regenerating annual that gets its name from its ability to bury its seed. Native to the Mediterranean region, sub clovers grow on a wide range of soil types and varying rainfall, from 250mm to in excess of 750mm. Sub clovers are divided into three main subspecies, with large variations.

Sub-Species Subterranean

These black-seeded varieties can tolerate a wide range of acid soils, mostly well drained. **Seed count:** 133,000 – 250,000/kg **Sowing rate:** 4-8kg/Ha

Campeda

Campeda is a black seeded sub clover that demonstrates a prostrate to semi erect growth habit and persists well on various soil types. It has mid season maturity which makes it adaptable to medium and high rainfall environments.

Narrikup

A vigorous mid-late season cultivar. It is best suited to well-drained, moderately acid soils in areas where the growing season extends to mid-November. Emerging seedlings suffer less damage from red-legged earth mite than older subterranean clovers.

Rosabrook

Developed as a replacement for cv. Denmark with improved cotyledon tolerance to redlegged earth mite (RLEM). Suited to well drained, moderately acid soils in areas of southern Australia where the growing season extends to mid-late November.

Sub-Species Yanninicum

The varieties are adapted to acid soils subject to winter water logging, but also perform well in well drained soils. **Seed count:** 90,000 – 120,000/kg **Sowing rate:** 6-10kg/Ha

RIVERINA

Early mid-season alternative for Trikkala. Riverina provides greater autumn and winter production, with a good level of hard seed. It provides high resistance to all three strains of Phytophthora root rot.

YANCO

A mid-season sub-clover. It is well adapted to moderately acidic soils prone to waterlogging and to loamy and clay soils with good water retention. Its upright, vigorous growth makes it suited to hay and silage production, as well as to grazing by cattle or sheep.

ROUSE

Rouse is a mid to late-season cultivar. Excellent overall forage yield with very high seed yield leading to improved seedling regeneration over comparative cultivars.

Sub-Species *Brachycalycinum*

Purplish-black seeded variety best suited for neutral to alkaline soils.

Seed count: 77,000 – 140,000/kg **Sowing rate:** 8-12kg/Ha

ANTAS

Black seeded brachy sub clover Antas demonstrates a prostrate to semi erect growth habit and persists well on various soil types. It has mid to late season maturity and is suited to medium to high rainfall environments. **Rainfall** 500-750mm+

Balansa Clover

Originally introduced from Turkey, it is a hard seeded self-regenerating annual that is capable of producing an abundance of seed that can quite often find its way into a system via hay. Will tolerate very heavy water logged soils and soils of moderate salinity, with a pH from acid to alkaline.

Rainfall: 400mm - 700mm **Seed count:** 1,400,000/kg approx. (Varies between cultivars)

Sowing rate: 1-3kg/Ha Mixes, 3-5kg/Ha Pure Stands

PARADANA

Tolerates relatively severe waterlogging. High levels of hard seed. Good growth during late winter and spring. Good hay production.

Bolta

High performance variety with good tolerance of waterlogging and moderate tolerance of salinity. Later maturing than Paradana, with excellent late spring production. Ideal for grazing or hay/silage.

Arrowleaf Clover

Originated from the Mediterranean region. Suited to well-drained soils, slightly acid to slightly alkaline. A self-regenerating annual clover with thick hollow stems, being an aerial seeder it owes its self-regeneration to its high level of hard seed. Commonly provides late spring/early summer growth. Erect growth habit is ideal for cattle, as it is not known to cause bloat.

Rainfall: 450mm+ **Seed count:** 880,000/kg

Sowing rate: 2-8kg/Ha Mixes, 10-15kg/Ha Pure Stands



Ask about our SlimCoat Seed Coating Technology

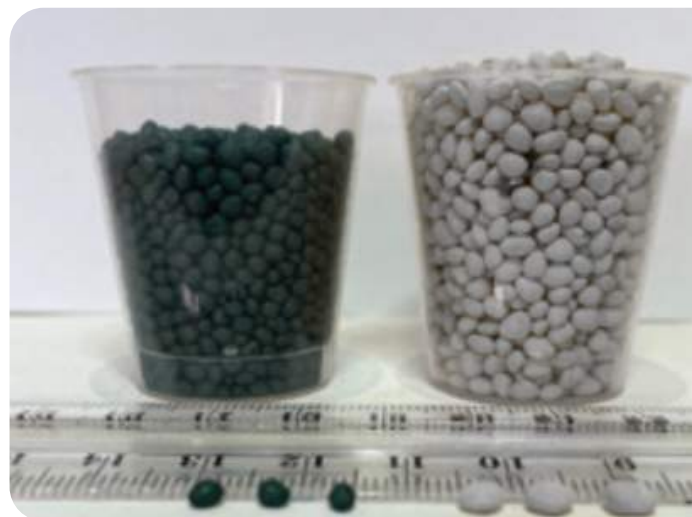
There is more seed in the bag!

You can benefit from higher plant densities, or reduced sowing rates, and improved handling with our innovative polymer based technology, we call "SlimCoat".

SlimCoat uses a purposefully selected polymer to encapsulate the active ingredients tightly around the seed, and our cold application process protects the rhizobia.

This is another example of our drive for continual improvement, in this case, negating the need for high weight gain build-up coats.

When you want more seed in the bag, ask for SlimCoat.



Left: Slimcoat sub clover **Right:** Coated sub clover.

In just 16kg of SlimCoat seed, you get the same seed count as in 25kg of conventionally coated seed.

Crimson Clover

A native to southern Europe, a soft seeded annual clover that is very quick to establish. Very useful autumn and winter growth because of its flush in early spring. A worthwhile addition for silage crops. Suited to a wide range of soil types, from sandy to heavy textured, and soils of very low to neutral pH. It has a very distinctive brilliant red flower.

Rainfall: 450mm+

Seed count: 250,000-280,000/kg

Sowing rate: 1-4kg/Ha mixes, 8-10kg/ Ha alone

Persian Clover

An annual clover native to the Middle East, tolerates a range of soil conditions including wet, slightly salty, and slightly acid to alkaline. If sown in early autumn can be quite productive in winter, with a high level of spring growth. Persian clovers are divided into two main subspecies. Sub-species majus will grow well into summer under irrigation, producing high quality forage.

Rainfall: 350mm min and higher or irrigation (depends on cultivar chosen)

Seed count: 800,000/kg (majus) 1,400,000/kg (resupinatum) Sowing rate: 2-4kg/Ha
Mixes 4-5kg/Ha Dryland 6-8kg/Ha High Rainfall or Irrigation

Sub-Species Majus

Characterised by being nearly 100% soft seeded, therefore needs to be re-sown each year, majus are of very high nutritive value.

Enrich

One-year forage crop. Soft seeded, erect plant with thick fleshy hollow stems and late season maturity. Tolerates various soil types, waterlogging, and mild salinity.

Sub-Species Resupinatum

Prolific

Very early season, hard seeded cultivar for dryer areas. Prolific is suited to a range of soils, tolerates heavy soils, waterlogging and mild salinity. Can be used in rotation with crops, in low rainfall cropping zones or in perennial pasture mixes.

Annual Medic

A self-regenerating annual. Medic clovers grow on a wide range of soil types and varying rainfall. There are seven species commonly sown in Australian farming systems, with large variations.

Seed count: 60,000 – 500,000/kg

Sowing rate: 3-5kg/ha mixes, 4-10kg/Ha alone





LUCERNE, VETCH, & PERENNIAL CLOVERS

Lucerne

Lucerne is a deep tap-rooted plant with excellent feed quality and drought tolerance. Its main period of growth is from spring through to autumn and it may persist for over ten years. All Lucerne varieties are summer-active, however they are divided into one of four groups depending on their level of winter dormancy:

- highly winter-active (8-10 rating)
- winter-active (6-7 rating)
- semi winter dormant (4-5 rating)
- winter dormant (1-3 rating).

The choice of cultivar should depend on its intended use and the environment into which it will be sown. For example:

1. Highly winter active varieties should not be sown into areas prone to heavy frosts.
2. Varieties intended for dual purpose use should come from the winter active range.
3. If sowing for hay production only, in a region that experiences heavy frosts, a winter/semi winter dormant variety would be best suited.

Pest and disease tolerance is also an important consideration. Lucernes can be affected by fungal diseases such as phytophthora (root rot) and anthracnose (crown rot), as well as by bacterial wilt and fusarium wilt. Aphid resistance is also a desirable trait in a lucerne variety.

Rainfall: 400mm+ or Irrigation **Seed count:** 440,000 to 500,000/kg

Sowing rate: 3-10kg/ha dryland or 10-20kg/ha irrigation

Aurora

Winter Active - 6

A general-purpose lucerne variety that is well suited to either haymaking or grazing systems. A well-managed stand of Aurora should remain productive and provide high quality forage for several years.

SARDI 7 Series 2

Winter Active - 7

A lucerne with good grazing tolerance with strong pest and disease resistance. Improved performance in cold, wet environments. Well suited to grazing and hay production with a broad crown and high leaf-to-stem ratio.

SARDI 10 Series 2

Highly Winter Active - 10

Suited to cropping rotations, pasture mixes and year-round hay production systems. Improved forage production and persistence over SARDI 10. A highly productive 3-4 year + option.

White Clover

A perennial clover native to Europe, which owes its perennial nature to its stolon activity. The original plant will send out stolons (or runners) that root down at the nodes to form daughter plants. These daughter plants will eventually break away and become independent plants. White clovers are suited to a wide range of soil types from sandy soils to well-drained heavy clays. One method of differentiating white clovers is by leaf size, another by stolon density. Persistence in pasture is usually attributed to those cultivars whose stolon density is highest although some persistence can also be attributed to seeding.

Rainfall: 750mm+ Irrigation **Seed count:** 1,600,000 / kg

Sowing rate: 1-2kg/Ha Dryland 3-5kg/ Ha High Rainfall/ Irrigation

Red Clover

A short-lived perennial clover native to Europe and sometimes referred to as cow grass. Its main growth periods are spring and summer with very little production in winter. Soils need to be well drained, fertile, and slightly acid. High in feed value and performs best under low stocking rates. Very suitable for high quality hay production. Diploid and tetraploid cultivars are available.

Rainfall: 600mm+ or Irrigation **Seed count:** 500,000/kg diploid 290,000/kg tetraploid

Sowing rate: 3-5kg/Ha in mix, 6-10kg/Ha sowing alone

RUBITAS

A diploid red clover, with a good production that was bred for persistence. Utilise its high quality to enhance pasture mixes or as component of specialist finishing pasture like Target Finisher.

Strawberry Clover

A deep-rooted perennial clover native to the Mediterranean region. Survives periods of drought or flooding. Tolerates very heavy and saline soils, performs best on neutral to alkaline soils.

Rainfall: 550mm+ **Seed count:** 800,000/kg **Sowing rate:** 1-2kg/Ha Mixes

Palestine

Grows in spring, summer and autumn but not much in winter. Prostrate growth habit, good ground covering ability in wet soils.

Common Vetch

Common vetch is a winter-active annual legume usually added to oats or cereals to increase dry matter production and to improve feed quality for grazing or hay. Sown alone, vetch can provide a high protein hay yield or it may be used as a green manure crop, providing nitrogen for following crops and breaking disease cycles.

Rainfall: 350mm+ **Seed count :** 25,000-50,000/kg **Sowing rate:** 15-30kg/Ha alone, 20-30kg/Ha in mixes

Purple Vetch

Purple vetch is an annual legume native to Southern Europe generally grown as a green manure crop or mixed with oats to produce hay. Purple vetch does not respond well after grazing and is 100% soft seeded.

Rainfall: 400mm min or higher **Seed count:** 22,000/kg

Sowing rate: 15-40kg/Ha Mixes depending on rainfall. 30-50kg/Ha Sole Component

Benetas

Benetas Vetch was developed by Tasglobal Seeds. It is capable of producing high forage yields and has good early spring vigour. Benetas is later flowering than Popany. Its cold tolerance during vegetative growth is improved. It is also tolerant of moderate waterlogging. Benetas Vetch features in our Target Oat & Vetch and FArmour HDL blends.

FREYR SUNN HEMP

Easy Sow Easy Grow

Highly valued soil health species, Freyr fixes nitrogen and is a high protein forage option.

A tropical legume adapted to a wide range of soil and environmental conditions with very quick growth in favourable conditions. Originating in India, recent popular use around the world has expanded rapidly and Sunn Hemp is widely used in Cover cropping, grazing and forage production. Crops can be grazed through to flowering and when planted into warm soils with good moisture, biomass production can be very fast.

Access to quality sowing seed has traditionally been an issue for Sunn Hemp adoption in Australia but quality seed is now readily available through AGF Seeds.

Sowing Rate: 10-20kg/Ha

Tech Sheet



<p>GREEN OR BROWN MANURE</p> <p>★★★★★</p> <p>UTILISE SOIL MOISTURE</p> <p>★★★★★</p>	<p>SOIL BIOLOGY</p> <p>BENEFITS SOIL BIOLOGY</p> <p>★★★★★</p> <p>ROOT-KNOT NEMATODE SUPPRESSION</p> <p>✓</p>	<p>SOIL STRUCTURE</p> <p>ROOTING DEPTH</p> <p>★★★★☆</p> <p>EROSION CONTROL</p> <p>✓</p>	<p>SOIL CHEMISTRY</p> <p>NITROGEN FIXATION</p> <p>★★★★★</p> <p>WEED SUPPRESSION</p> <p>★★★★☆</p>	<p>ANIMALS AND SOIL BIOLOGY</p>
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TILLAGE RADISH

<p>MATURITY</p> <p>SHORT LONG</p>	<p>TAP ROOT</p> <p>★★★★★</p> <p>EARLY VIGOUR</p> <p>★★★★★</p>	<p>PALATABILITY AND FEED QUALITY</p> <p>★★★★★</p> <p>USE MOISTURE AND CYCLE NUTRIENTS</p> <p>★★★★★</p>	<p>ANIMAL AND BIOLOGY</p>
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Tillage Radish is a brassica bred specifically for its large taproot, which is used to reduce soil issues such as compaction. Tillage Radish is also a short term fodder option (10-12 weeks) with first grazing in 5-6 weeks, and 2-3 grazings possible prior to maturity. Tillage Radish produces very palatable feed, appropriate for all cattle and sheep.

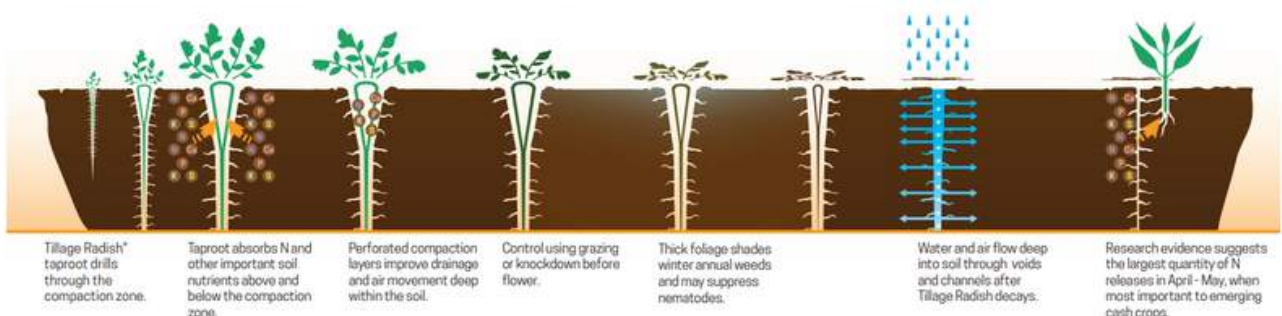
Maximum fodder and tuber development occurs when sown in Jan/Feb, although Tillage Radish can also be sown in autumn and spring to provide quick feed options. Strategic grazing can also delay maturity.

When compared to other brassicas, Tillage Radish is a drought hardy, lower risk option due to the energy reserves available in the tuber, and its ability to access subsoil moisture and nutrients.

Tech Sheet



SEASONAL BENEFITS & CONSIDERATIONS FOR TILLAGE RADISH:		
Summer / Autumn	Winter	Spring
<p>PLANTING: Plant on substantial summer rain or in February / March on 10-15mm event for feed wedge or Winter forage.</p>	<p>TERMINATION: Tillage Radish holds the nitrogen and other soil nutrients over the winter. To control, use standard herbicide burndown methods in the spring before flowering.</p>	<p>SOIL CONDITIONING: Tillage Radish decays, the voids are left in the soil, along with holes in the compaction zone from the taproot. This means your soil will have greater air and water circulation.</p>
<p>NUTRIENT SCAVENGING: Nitrogen (N) is absorbed along with other key nutrients, including that from manure. Tillage Radish will release the nutrients in the spring when needed most by cash crops.</p>	<p>WHAT WEEDS? A thick canopy is formed so most annual weeds never see the light, potentially reducing the need for a spring burndown.</p>	<p>DECAY & RELEASE: Once temperatures rise, the nitrogen is released back to the rhizosphere and the root zone. Here it will be available for the cash crop that follows Tillage Radish.</p>



Blue Gorilla *Forage Rape*

Blue Gorilla is a dark purple green, re-growing forage rape. The stature of Blue Gorilla is slightly shorter than many current varieties but with good standing ability.

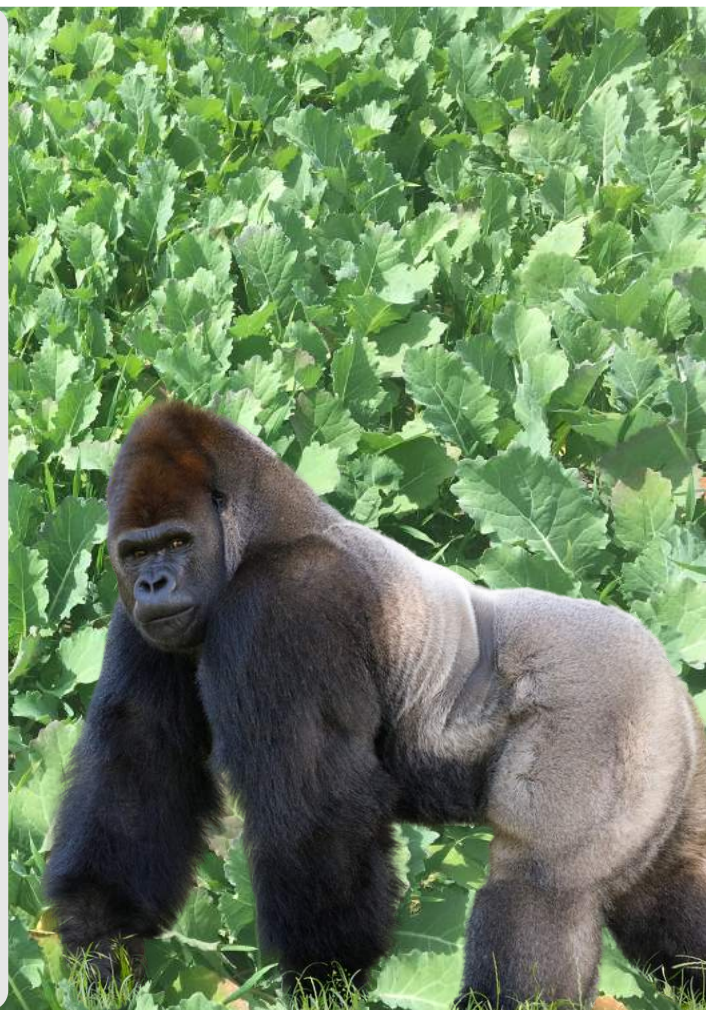
The dry matter content of Blue Gorilla is higher than average which leads to high total dry matter yields. Furthermore, the high dry matter content means that animals take in more useful food per kilo and are likely to thrive better than on conventional forage rape varieties.

Blue Gorilla shows a moderately good resistance to powdery mildew and is quite resistant to clubroot.

Maturity: 10 – 12 weeks

Grazings: 2 – 4

Sowing Rate: 3 – 4 kg/ha



Greenland *Forage Rape*

Greenland fodder rape was bred in 2006, and has had great success in trials and commercial applications. Greenland is well adapted to sowing opportunities throughout the year, provided adequate moisture is available. Greenland provides abundant, highly palatable fodder from spring and autumn sowings, helping to finish livestock in summer and maintain livestock in winter. The variety also has a short, thick stem which allows excellent recovery and persistence through multiple grazings.

Maturity: 10 – 13 weeks

Grazings: 2 – 4

Sowing Rate: 3 – 4 kg/ha

Winfred *Forage Rape*

Winfred fodder rape has a high leaf to stem ratio for excellent utilisation rates. Tolerant of dry conditions once established. Ideal for summer, autumn, and winter feed.

Maturity: 10 – 12 weeks

Grazings: 2 – 4

Sowing Rate: 3 – 4 kg/ha



Karaka Hybrid Brassica

Quick, short-term, palatable, high quality feed is what you can achieve from this annual hybrid brassica that is capable of providing high yields from multiple grazings when grown on fertile soils and is properly managed. Hybrid brassicas are created by crossing a turnip with an Asiatic leaf vegetable, kale or rape. The resulting plant is quick growing and leafy with minimal bulb development.

Maturity: 6 – 8 weeks

Grazings: 2 – 4

Sowing Rate: 4 – 5 kg/ha

Mammoth Purple Top Turnip

A single, longer ripening, globe type, graze turnip that has been widely adapted, is cost-effective, and suitable for dairy, beef or sheep grazing.

Maturity: 12 – 14 weeks

Grazings: 1

Sowing Rate: 0.5 - 2 kg/ha

Variety	Maturity	Grazings	Sowing Rate
Dual Purpose Canola			
Phoenix CL (Page 46)	9-12 Weeks	2-4	3-4 kg/ha
Captain CL (Page 47)	9-12 Weeks	2-4	3-4 kg/ha
Forage Rape			
Blue Gorilla	10-12 Weeks	2-4	3-4kg/ha
Winfred	10-12 Weeks	2-4	3-4kg/ha
Greenland	10-13 Weeks	2-4	3-4kg/ha
Turnips & Hybrid Brassicas			
Karaka	6-8 weeks	2-4	4-5kg/ha
Mammoth Purple Top	12-14 Weeks	1	0.5-2kg/ha
Radish			
Tillage Radish	4-6 Weeks	1-2	5-8kg/ha

Summer Forage

Swift Forage Sorghum

Swift is a fast growing, fine stemmed sorghum x sudan grass hybrid with excellent palatability. Swift provides a high quality product that can be used for grazing, hay and silage. Swift has an excellent leaf to stem ratio and is quick to regrow, making it suitable for multiple cuttings at the highest quality.

Tech Sheet



Swift 2 Forage Sorghum

A fine stemmed and leafy Hybrid Sorghum x Sudan. Excellent regrowth & drought tolerance which works well as a multi-cut hay or hay and silage. Swift 2 should be grazed from 60–100cm in height to maximise forage quality, but can be conserved as hay, although with lower feed value. Low prussic acid risk.



Cowpeas

A summer growing legume, cowpeas are more suitable to sandy soils than Lablab, they flower earlier but do not recover as well after grazing.

Lablab

Lablab's performance on heavy soils is greatly superior to that of cowpeas; both require well-drained soils, although lablab has better resistance to phytophthora root rot and more tolerance to trampling.

Soybean

Soybean is an annual summer growing legume that can be a useful forage and hay crop, particularly in high rainfall and coastal districts. The best quality hay is made from soybean crops when pods are half filled.

Teff

Teff is a self-pollinated, annual grass and can be harvested or grazed multiple times during the growing season. As a fast-growing crop, Teff combines excellent forage quality with high yield during a relatively short growing season.

Shirohie Millet

Less dry matter production than forage sorghum and can be more difficult to establish. Shirohie can be grazed 5 to 7 weeks after sowing but does not stand harsh grazing. There is no prussic acid poisoning risk associated.

Grazing Maize

A single graze, quality feed option. It does not contain prussic acid. It is not affected by diamond back moth and white butterfly. It also tolerates lower soil temperatures at sowing than sorghum and millet.



AGFseeds



CANOLA

SMEATON CANOLA TRIALS

As adoption of winter canola in Australia continues to rise AGF Seeds has been on the front foot adapting international genetics for local conditions, and we continue to do so with Phoenix CL and Captain CL.

Winter canola has a huge opportunity for growers to find economic value in a dual-purpose system. To provide further data for graze and grain systems, as well as grain only systems, we decided in 2023 to obtain trial results for an ungrazed trial, and two simulated grazed trials with separate sowing dates. We hope this information will help farmers and agronomists to continue to make informed decisions around adopting winter canola.

Each trial, ungrazed and the two grazed trials with different sowing dates, comprise of a 4 replicate randomised trial design. Commercial and pre-commercial lines are tested against benchmark varieties.

WINTER CANOLA (UNGRAZED)

The aim of the un-grazed winter canola trial was to evaluate pre-commercial and new commercial winter canola genetics from a maturity, disease, plant type and grain yield perspective compared to benchmark varieties.

Sowing Date	14/04/2023
Seeding Rate	Calculated per variety to target plant population of 50 plants/m ²
Seed Treatment	Illevo @ 8L/t + Poncho @ 5L/t

Of the commercially available cultivars, Captain CL was the highest yielding (3.6t/ha) followed by Phoenix CL (3.13t/ha), Hyola Feast CL (2.6t/ha), Hyola 970 CL (2.57t/ha) & Nizza CL (2.35t/ha).

The winter x spring pre-commercial line (AGFCA014820 CL) began flowering ~2 weeks before the earliest winter canola in the trial. This line yielded (2.86t/ha) and did suffer medium pod shattering.

Table 1. 2023 Un-grazed Winter Canola Start of Flowering Assessment

Variety	Estimated Start of Flowering Date
AGFCA014820 CL	5/09/2023
AGFCA015023 CL	19/09/2023
Nizza CL	19/09/2023
AGFCA014420	20/09/2023
Feast CL	20/09/2023
Captain CL	20/09/2023
Phoenix CL	22/09/2023
Hyola 970 CL	25/09/2023
AGFCA006310	1/10/2023
AGFCA006110 CL	1/10/2023

Table 2. 2023 Un-grazed Winter Canola Trial Pre-Harvest Height Assessment. 0 = nil, 5 = very high

Variety	Plant Height	Lodging Score (0 - 5)	Pod Shattering Score (0-5)
AGFCA014420	182.5	0	2
AGFCA014820 CL	178.75	0	2.9
AGFCA015023 CL	181.25	0	2.1
Captain CL	181.25	0	1.6
Hyola 970 CL	176.25	0.13	1.5
Feast CL	168.75	0.75	3.4
Nizza CL	177.5	0	3.4
Phoenix CL	171.25	1	2

Note: Storms and wet conditions prior to harvest did lead to significant pod shattering across the site. This was scored during the pre-harvest assessment and should be noted when interpreting results.

Table 3. Un-Grazed Winter Canola Trial Grain Yield Analysis

Variety	Mean Yield (t/ha)	Homogeneous Groups	% Of Site Mean
Captain CL	3.60	A	125
AGFCA006310	3.60	A	125
AGFCA014420	3.41	AB	119
AGFCA015023 CL	3.38	AB	118
Phoenix CL	3.13	ABCD	109
AGFCA006110 CL	2.87	BCDE	100
AGFCA014820 CL	2.86	BCDE	100
Feast CL	2.63	CDE	92
Hyola 970 CL	2.57	DEF	90
Nizza CL	2.35	EF	82

Site Mean (t/ha)	2.87
P Value	0.0000
CV	15.74
LSD	0.643

Chemical Inputs

Type	Product	Rate	Date Applied
Pre-emergent Herbicide (IBS)	Glyphosate 540 @ 2.5L/ha, Trifluran 480 @ 2L/ha		14/04/2023
Insecticide	Transcend Bait	15kg/ha	17/04/2023
Insecticide	Alpha-Cypermethrin 250	200ml/ha	1/05/2023
Herbicide	Intervix + Hasten Adjuvant	750ml/ha	2/06/2023
Herbicide	Clethodim Hi-Load 360 + Hasten Adjuvant	330ml/ha	9/06/2023

Fertiliser Inputs

Product	Analysis	Rate (kg/ha)	Date Applied
MAP	10% N, 21.9% P, 1.5% S, 1.6% Ca	110	14/04/2023
SOA	20.2% N, 24% S	90	15/05/2023
Urea	46% N	85	21/06/2023
Urea	46% N	130	4/08/2023
Urea	46% N	75	5/09/2023

WINTER CANOLA (GRAZED)

In the mechanical biomass cut to simulate grazing for TOS1 Captain CL achieved the highest dry matter (DM) production for a commercial variety of 1680kg DM/ha. This was a 4% and 5% higher dry matter production compared to Nizza CL and Feast CL respectively, and 25% higher production vs Hyola 970 CL.

The winter cross spring pre-commercial line (AGFCA014820 CL) achieved a 14% higher dry matter production compared to Captain CL.

The TOS2 biomass cut highlighted that delayed sowing by 20 days resulted in an average dry matter production loss across the site of 49% (857kg DM/ha) at simulated grazing compared to TOS1. Average grain yield in TOS1 was 0.47t/ha or 15.5% higher than the average grain yield achieved in TOS2.

Of the commercially available cultivars, Captain CL achieved the highest grain yield in both TOS1 and TOS2 (4.3t/ha and 3.38t/ha respectively). In TOS1 Captain CL (4.3t/ha) was followed by Hyola 970 CL (3.64t/ha), Phoenix (3.28t/ha), Hyola Feast CL (3.23t/ha), & Nizza CL (2.98t/ha). In TOS2 Captain CL (3.38t/ha) was followed by Phoenix (2.97t/ha), Hyola 970 CL (2.59t/ha), Hyola Feast CL (2.46t/ha), & Nizza CL (1.88t/ha).

Table 1: Winter Canola Graze and Grain Trial Biomass Cut Analysis. Plots cut and weighed to simulate grazing.

Variety	Time of Sowing 1 Cut 21st of June: 88 days after sowing			Time of Sowing 2 Cut 7th of August: 115 days after sowing			
	Mean Yield (kg/ha)	Homogeneous Groups	% Of Site Mean	Mean Yield (kg/ha)	Homogeneous Groups	% Of Site Mean	Yield % vs Time of Sowing 1
Captain CL	1680	AB	96	1157.2	AB	122	69
Phoenix CL	1548	AB	88	404.7	C	43	26
Hyola 970 CL	1248	B	71	387.5	C	41	31
Feast CL	1596	AB	91	947.7	AB	100	59
Nizza CL	1611	AB	92	736.9	BC	78	46
AGFCA014820 CL	1923	A	110	1303.5	A	138	68
AGFCA015023 CL	1944	A	111	1171.5	AB	124	60
AGFCA006310 CL	1934	A	110	952.7	AB	101	49
AGFCA014420 CL	2099	A	120	1039.2	AB	110	50
AGFCA006110 CL	1949	A	111	959.7	AB	101	49
	Site Mean (kg/ha)	1753		Site Mean (kg/ha)	896		
	CV	14.62		CV	34.52		
	P Value	0.2579		P Value	0.0042		
	LSD	719.84		LSD	773.82		

Table 2: Winter Canola Graze and Grain Trial Pre-Harvest Assessment. 0 = nil, 5 = very high

Variety	Time of Sowing 1			Time of Sowing 2		
	Plant Height	Lodging Score (0 - 5)	Pod Shattering Score (0-5)	Plant Height	Lodging Score (0 - 5)	Pod Shattering Score (0-5)
Captain CL	170	0	1	158	0.25	0.1
Phoenix CL	160	0	1	153	0.5	0.1
Hyola 970 CL	165	0	1.5	160	0.4	0.1
Feast CL	160	0	1.5	144	0.375	0.25
Nizza CL	170	0	3	157	1.4	0.8
AGFCA014820 CL	170	0	1.5	153	0.3	0.1
AGFCA015023 CL	165	0	1	159	0.5	0.1
AGFCA006310 CL	185	0	1.5	164	0.375	0.1
AGFCA014420 CL	165	0	2	160	0.625	0.25
AGFCA006110 CL	*	*	*	156	0.3	0.1

Note: Storms and wet conditions prior to harvest did lead to significant pod shattering across the site. This was scored during the pre-harvest assessment and should be noted when interpreting results.

*AGFCA006110 not measured in pre-harvest assessment rep due to establishment problem and was not scored for grain yield or pre-harvest assessment from this plot

Table 3: Winter Canola Graze and Grain Trial – Grain Yield Analysis

Variety	Time of Sowing 1			Time of Sowing 2			
	Mean Yield (t/ha)	Homogeneous Groups	% Of Site Mean	Mean Yield (t/ha)	Homogeneous Groups	% Of Site Mean	Yield % vs Time of Sowing 1
Captain CL	4.30	A	133	3.38	AB	114	79
AGFCA015023 CL	3.83	AB	119	3.58	A	120	93
AGFCA006310 CL	3.77	AB	117	3.40	AB	114	90
AGFCA014420 CL	3.76	ABC	116	3.06	BC	103	81
Hyola 970 CL	3.64	ABC	113	2.59	D	87	71
AGFCA014820 CL	3.44	BCD	107	3.15	ABC	106	92
Phoenix CL	3.28	BCD	102	2.97	C	100	91
Feast CL	3.23	BCD	100	2.46	D	83	76
Nizza CL	2.98	CD	92	1.88	E	63	63
AGFCA006110 CL	2.82	D	87	3.21	ABC	108	114
	Site Mean (t/ha)	3.50		Site Mean (t/ha)	3.03		
	P Value	0.0243		P Value	0.0000		
	CV	14.15		CV	8.03		
	LSD	0.912		LSD	0.609		

Chemical Inputs

Type	Product	Rate	Date Applied
Time of sowing 1			
Pre-emergent Herbicide (IBS)	Glyphosate 540 @ 2.5L/ha, Trifluran 480 @ 2L/ha, Propyzamide 500 @ 1.5L/ha		25/03/2023
Insecticide	Transcend Bait	15kg/ha	27/03/2023
Insecticide	Alpha-Cypermethrin 250	200ml/ha	1/05/2023
Herbicide	Intervix + Hasten Adjuvant	750ml/ha	13/05/2023
Time of sowing 2			
Pre-emergent Herbicide (IBS)	Glyphosate 540 @ 2.5L/ha, Trifluran 480 @ 2L/ha		14/04/2023
Insecticide	Transcend Bait	15kg/ha	17/04/2023
Insecticide	Alpha-Cypermethrin 250	200ml/ha	1/05/2023
Herbicide	Intervix + Hasten Adjuvant	750ml/ha	2/06/2023
Herbicide	Clethodim Hi-Load 360 + Hasten Adjuvant	330ml/ha	9/06/2023

Fertiliser Inputs

Type	Product	Rate (kg/ha)	Date Applied
Time of sowing 1			
MAP	10% N, 21.9% P, 1.5% S, 1.6% Ca	110	25/03/2023
SOA	20.2% N, 24% S	90	15/05/2023
Urea	46% N	85	21/06/2023
Urea	46% N	130	9/08/2023
Urea	46% N	75	5/09/2023
Time of sowing 2			
MAP	10% N, 21.9% P, 1.5% S, 1.6% Ca	110	14/04/2023
SOA	20.2% N, 24% S	90	15/05/2023
Urea	46% N	85	21/06/2023
Urea	46% N	130	9/08/2023
Urea	46% N	75	5/09/2023

Phoenix CL ^(D)

Rising Above... Again and Again



MATURITY



TYPE
WINTER



POD SHATTER
RESISTANCE



DUAL PURPOSE

Phoenix CL is a Hybrid Clearfield Dual-purpose Winter Canola

- Proven and consistent performance
- Durability for grazing and for grain
- R Blackleg bare seed rating
- Blackleg Group B resistance
- Maturity suited to a wide sowing window
- Excellent early vigour
- Improved pod shattering resistance
- Late maturing winter type

“

*'How do you stop this Canola growing?
I've got 1400 lambs on this paddock!*

*It's been a real success... only regret is
that I should've put more in.*

”

Rob Cameron

Farmer - Mount Mercer, Victoria

Photo above is Phoenix CL growing on
the Cameron's property.



Scan for
more
information

CAPTAIN CL[®]

for Big Yields and Big Biomass

Captain CL Winter Canola takes a large step forward in both yields and biomass production, making it the perfect canola for your grain and grazing needs.



Leading the Way!

EPR \$5.00/t + GST

MATURITY

Clearfield
Production System

POD SHATTER
RESISTANCE

BLACKLEG
RATING

BLACKLEG
GROUP

SCAN FOR
MORE
INFO

Captain has proven its potential for market leading yields in grain and biomass for grazing. With high oil percentages and a strong disease package and an AH blackleg group resistance Captain can help you lead the way with Winter Canola.

Higher Yielding

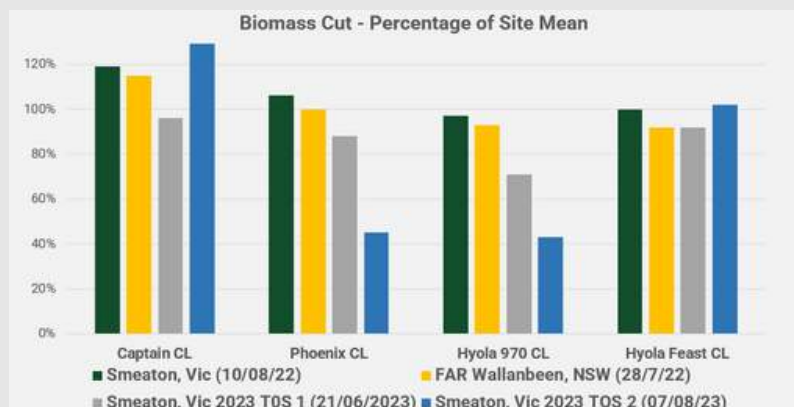
Table 1: Yield CL varieties expressed as t/Ha (Sources AGF Seeds, FAR, SFS)

Variety	AGF Smeaton, Vic		AGF Smeaton 2023			FAR Millicent 2022, SA		FAR Wallanbeen 2022, NSW		FAR Gnarwarre 2022
	2021	2022	Ungrazed	Grazed TOS 1	Grazed TOS 2	Ungrazed	Grazed	Ungrazed	Grazed	Ungrazed
Captain CL	6.53	6.55	3.6	4.3	3.38	4.57	4.84	3.79	3.36	3.23
Phoenix CL	5.49	5.31	3.13	3.28	2.97	4.18	3.92	4.37	4.26	2.59
Hyola 970 CL	5.64	5.63	2.57	3.65	2.59	3.81	4.23	3.65	3.39	2.23

Higher Biomass

Captain CL continues to shine in trials and in the field for biomass. Early sowing can lead to exceptional feed for stock in times when other forms of feed may be hard to find.

Biomass numbers are based on plots cut and weighed to simulate grazing.





FORAGE WHEAT RYECORN & TRITICALE

Alfresco Forage Wheat

AGF Seeds is excited to bring a forage wheat to the market. Densely tillered, awnless, and leafy with fine stems forage wheat is an excellent alternative to forage oats and can help round out your forage system. Excellent grazing recovery, useful leaf disease resistance and good standability with improved lodging resistance over tall straw oats. A mid-tall height with a semi-erect growth habit.

Vampire Ryecorn

Ryecorn is a deep-rooted early winter feed option. Rapid establishment provides first grazing at 4-8 weeks with good recovery allowing 3-4 grazings per season. Sown with brassica, legumes or vigorous grasses, ryecorn can provide a fast feed component to overcome by the more nutritious pasture varieties as the ryecorn is grazed out.

Bred in Australia by the University of Sydney, Vampire ryecorn has been selectively bred to improve leaf production and mature later than common ryecorn, therefore offering greater biomass during a longer growing season. This improved productivity makes Vampire ryecorn an excellent choice for the discerning grazer.

Kokoda Triticale

Long season dual purpose with reduced awn (semi-awnless). Similar early biomass to Endeavour and excellent recovery from grazing. Improved grain yield compared to Endeavour. Suitable for early planting, slightly quicker maturity than Endeavour.



OATS



Forester *Graze & Hay*

A dual-purpose, late maturing oat suited for grazing and export quality hay production. For graziers Forester offers excellent early growth and quick recovery from grazing and late maturity.

Suited to Northern and Southern Australian environments. Features of Forester include high forage yields, good regrowth capabilities, excellent export quality hay and proven disease resistance.

Forester can also be combined with other cultivars like Peas or Vetch to create premium grazing, hay, & silage blends.



Marleigh *Grazing*

Marleigh is an exciting, mid-late maturity, improved grazing oat, with outstanding early vigour, fast biomass production and recovery post grazing. Marleigh comes out of South American breeding program and is our best oat for winter grazing.

Below: Marleigh Oats jumped out of the ground in our Winter Feed Gap trial. Seen from the side against other Winter Cereals the growth is impressive



Koala Seednet

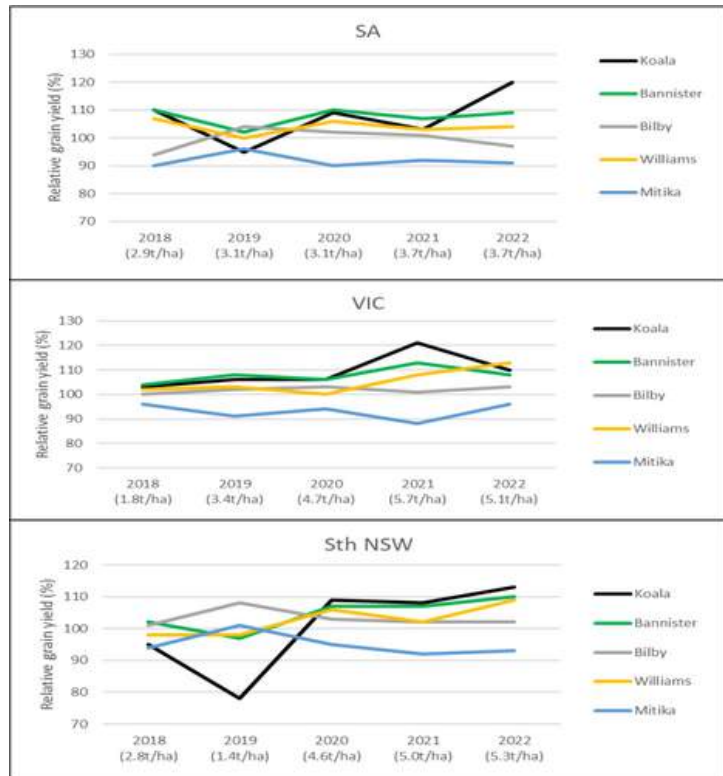
Mid Grain Oat

A tall dwarf milling variety. Similar to Bannister, with improved rust resistance and higher grain yield in Victoria. May be attractive to feed end users due to potentially higher digestibility.

The charts show the NVT yield data across all sites in a state from 2018-2022.

EPR \$2.50

Tech Sheet



Saia

Quick Grazing Oat

A tall black seeded grazing oat with a fine stem and smaller seed than most other varieties. Fast to establish and will provide good quality quick feed for grazing, hay and silage. Saia grows in a wide range of soil types and has good tolerance of acid soil.

Archer IMI

Mid Hay Oat

Mid maturing medium height IMI tolerant hay oat agronomically similar to Yallara. EPR \$3.65 (Applicable for both hay and grain production).



Tech Sheet

Mulgara

Quick Grazing or Hay Oat

Mulgara is a mid-season tall oat which is suited to hay production. It has exceptional hay yield which can make export quality.



PULSES

Field Peas

Field peas are a hard winter legume and are one of the oldest domesticated crops, cultivated for at least 7,000 years. They are now grown in many countries for both human consumption and stockfeed. There are several cultivars and colours of peas, including blue, dun (brown), maple and white. Peas are a climbing annual legume with weak, viny and relatively succulent stems. Vines are often 1.2 to 1.5 metres long but when alone, field pea's weak stems prevent it from growing more than 40- 60cms tall. Leaves have two leaflets and a tendrils. Flowers are white, pink or purple. The root system is relatively shallow and small, but well nodulated.

Rainfall: 500mm+

Seed count: 5,800/kg

Sowing rate: 80-120kg/Ha

Faba Beans

Amberley

Mid-season flowering faba bean that has high yield potential in the higher rainfall and long growing season districts of south eastern Australia. It has a greater level of resistance to chocolate spot than all current varieties and is also resistant to both pathotypes 1 and 2 of ascochyta blight. EPR \$3.50.

Bendoc

Southern region variety with tolerance to Imidazolinone (Group B) herbicide (Registered product: Intercept ® from Nufarm – only apply at rate and timing on label) Good adaptation throughout southern Australia with small to medium sized seed, similar time of flowering and maturity to Nura and PBA Samira, susceptible to chocolate spot and this will need to be managed. EPR \$3.90.

Lupins

A profitable pulse crop well suited to lighter soil types. Lupins can be used to extend cereal crop rotations by acting as a break crop for cereal disease, weeds and insect pests.

Chickpea

Chickpeas contributes to a farming system rotation by fixing nitrogen and providing a disease and weed break for cereal crops. Chickpea is well adapted to warm spring environments and tolerates higher temperatures during and after flowering than other winter pulse crops such as faba beans, lupins, and field peas.

BARLEY TRIALS

The aim of the 2023 barley variety trial was to evaluate pre-commercial and new commercial barley genetics compared to benchmark varieties (RGT Planet). This trial comprised a 4 replicate randomised block trial design with trial inputs as detailed below. Rep A had no fungicide applied, whilst the remaining three reps had 2 fungicides applied with the timings detailed in the input description table.

Sowing Date	16/05/2023
Seeding Rate	Calculated per variety to target plant population of 200 plants/m ²
Seed Treatment	Gaucht @1.2L/t + Rancona Dimension @0.8L/t

For the 2 fungicide input trial, Neo CL was the highest yielding variety (9.21t/ha), which equated to a 6% and 9% yield advantage over Maximus CL (8.68t/ha) and Spinnaker (8.43t/ha) respectively.

The two AGF trial lines of AGFBA021322 (9.09t/ha) and AGFBA021022 (8.87t/ha) were 1% and 4% lower yielding respectively versus Neo CL and 13% and 10% respectively higher yielding versus RGT Planet.

In comparison to RGT Planet (8.09t/ha), Cyclops achieved a 2% higher yield (8.2t/ha) whilst Zena CL (7.88t/ha), Fandaga (7.78t/ha) and Minotaur (7.4t/ha) were 2%, 3% and 8% lower yielding respectively compared to RGT Planet.

The Newton 2 row winter barley (5.09t/ha) was significantly lower yielding than the other entries (63% of site mean yield). It is important to note that the mid-May sowing time of this trial whilst satisfactory for the spring barley varieties sown here, it is significantly later than the ideal sowing time for winter barley (approximately 3-4 weeks later). This combined with the dry spring has likely severely negatively impacted the grain yield potential of Newton.

Table 1: Table 1. 2023 Barley Variety Trial Pre-Harvest Assessment. Score range 0 = nil, 5 = very high

Variety	Mean Plant Height (cm)	Mean Lodging Score (0-5)	Mean Grain Loss Score (0-5)	Mean Head Loss Score (0-5)
Cyclops	61	0.1	0.63	0.125
Fandaga	64	0.8	0.13	0.25
IGB21130	60	0	0.25	0.125
Maximus CL	64.3	0.1	1.13	0.5
Minotaur	55.3	0.4	0	0.125
Neo CL	57.8	0.3	0.88	0.75
Newton	76.3	1.3	0.25	0.25
Planet	66	0.5	0.25	0.125
Spinnaker	65.8	0.1	0.38	0.25
Zena CL	64.3	0.5	0.38	0.25
AGFBA021022	69.8	0.3	0.38	0.5
AGFBA021122	64	0.6	0.38	0.375
AGFBA021222	66.5	0.1	0.13	0.3125
AGFBA021322	66	0	0.13	0.125
AGFBA021422	68.5	0.9	0.38	0.375
AGFBA021522	67.5	0.3	0	0.125
AGFBA021622	66	0.4	0.13	0.375
AGFBA021722	63.5	0	0.25	0.375
AGFBA031022	63.3	0.4	0.63	0.625
AGFBA031122	66.8	0.6	0.38	0.25
AGFBA031222	66	0.3	0.13	0.125

Variety	2 Fungicide			Nil Fungicide	
	Mean Yield (t/ha)	Homogeneous Groups	% Of Site Mean	Yield (t/ha)	Yield % vs 2 Fungicide
Neo CL	9.21	A	114	8.49	92
AGFBA021322	9.09	AB	113	8.02	88
AGFBA021022	8.87	ABC	110	8.13	92
Maximus CL	8.68	BCD	108	8.70	100
AGFBA021422	8.59	CDE	107	7.67	89
AGFBA031122	8.47	CDEF	105	7.50	89
AGFBA021222	8.45	CDEF	105	6.82	81
Spinnaker	8.43	DEFG	105	7.94	94
AGFBA021522	8.36	DEFG	104	8.18	98
AGFBA021722	8.32	DEFG	103	7.83	94
Cyclops	8.20	EFGH	102	7.96	97
Planet	8.09	FGHI	100	7.64	94
AGFBA031222	8.01	GHI	99	7.44	93
Zena CL	7.88	HIJ	98	7.68	98
IGB21130	7.81	HIJK	97	6.39	82
Fandaga	7.78	HIJK	97	7.12	91
AGFBA021622	7.71	IJK	96	6.91	90
AGFBA031022	7.48	JKL	93	7.04	94
Minotaur	7.40	KL	92	5.62	76
AGFBA021122	7.27	L	90	6.86	94
Newton	5.09	M	63	4.58	90
Site Mean (t/ha)	8.06			7.36	91
P Value	0.0000				
CV	3.22				
LSD	0.390				

Table 2. 2023 Barley Variety Trial Yield Analysis

Chemical Inputs

Type	Product	Rate	Date Applied
Pre-emergent Herbicide (IBS)	Glyphosate 540 @ 2.5L/ha, Trifluran 480 @, 2L/ha, Boxer Gold @ 2.5L/ha, AMS @ 800g/100L, Spreadwet 1000 @ 200ml/100L		16/05/2023
Herbicide	MCPA 250, Diflufenican 25	1L/ha	5/07/2023
Fungicide	Aviator Xpro - Excluding Rep A	500ml/ha	5/09/2023
Fungicide	Maxentis EC - Excluding Rep A	600ml/ha	24/10/2023

Fertiliser Inputs

Product	Analysis	Rate (kg/ha)	Date Applied
MAP	10% N, 21.9% P, 1.5% S, 1.6% Ca	110	16/05/2023
Urea	46% N	115	20/07/2023
Urea	46% N	120	28/08/2023

Fandaga Mid Maturity Feed Barley

Key Features

- Slower Maturity than Planet
- Improved Net Blotch resistance compared to other popular varieties.

Fandaga is a medium height variety suited to medium to high rainfall regions. Fandaga offers an ability to yield, consistency and useful disease resistance traits. EPR \$3.65



MATURITY SPEED ROSALIND PLANET FANDAGA	LEAF SCALD 	SPOT FORM NET BLOTCH 	NET FORM NET BLOTCH
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Newton

Slow Maturity Winter Feed

Newton is a slow growing winter type variety that requires winter vernalisation to develop from vegetative to reproductive growth. Newton is a feed type barley with 2-row heads and white aleurone grain.

Newton suits operations looking for a strong grain and graze option.

Seednet 



Tech Sheet

Titan AX

Quick-Mid Pot Malt

Titan AX is the first barley variety in the world to carry tolerance to Aggressor® herbicide, which allows growers to control susceptible populations of barley grass, brome grass, annual ryegrass, wild oats and other grass weeds; offering an alternative to Clearfield® technology which growers have relied on for some time now.

 AGT



Tech Sheet

RGT Planet

Quick-Slow Maturity Spring Malt

RGT Planet has a strong agronomic package that, combined with its yield potential, will make it an economic option for Australian barley growers. RGT Planet has good disease resistance to mildew, rhynchosporium, net blotch and brown rust. It also has good straw strength and reduced risk of lodging.

 RGT



Tech Sheet

Maximus CL

Quick-Mid Maturity Spring Malt

Maximux CL is a high yielding, quick-mid maturing, malt accredited, imidazolinone (IMI) tolerant barley. Good net form net blotch and scald resistance, improved spot form net blotch resistance to Spartacus CL. Strong lodging tolerance and a low-medium head loss risk.

 INTERGRAIN



Tech Sheet

Neo CL

Mid Maturity Spring Pot. Malt

Exceptionally high yielding spring Clearfield barley. Outstanding disease resistance package including excellent resistance to cereal cyst nematode, powdery mildew and the spot form of net blotch, and useful resistance to the net form of net blotch and leaf scald

 INTERGRAIN



Tech Sheet

Commodus CL

Quick-Mid Mat Spring Pot. Malt

Think IMI Compass. A high yielding, quick-mid maturing variety that is agronomically similar to Compass. Ideally suited to lighter soils and medium-low rainfall environments. CCN resistance and useful levels of spot form net blotch resistance.

 INTERGRAIN



Tech Sheet



WHEAT

SMEATON WHEAT TRIALS 2023

One of the core values of AGF Seeds is trust. We believe that we need to build trust between ourselves, and our growers and stockists. Whether it's planting a seed in the ground or associating our name with a product, trust is paramount. To foster this trust, AGF Seeds makes substantial investments in rigorous, independent trials.

Additionally, we actively participate in third-party trials conducted by organizations like the National Variety Trials (NVT), Field Applied Research (FAR), and the Pasture Trial Network (PTN).

Our goal is to evaluate pre-commercial and new commercial genetics and compare them against benchmark varieties to ensure that we have confidence in the varieties we offer will perform in the field.

Our wheat trials are broken into three categories long season, main season, and quick season wheats. Each trial comprises a 4 rep randomised block design with full input along with a 1 fungicide rep, and nil fungicide rep to assess genetic disease resistance levels in all varieties.

Agronomic characteristics of wheat varieties for South East Australia

Variety	Type	Observed Maturity	Maximum Quality Southern Zone	Rainfall			Head Type		Height	Lodging
				Low	Med	High /Irrigated	Awned	Colour		
BigRed	Winter	Mid-Slow	Feed				A	Red	M	MRMS
Longford	Winter	Slow	Feed				A	Red	M	R
Stockade	Spring	Very Slow	APW				A	White	M	R
Anvil CL Plus	Spring	Quick	AH				A	White	MT	MRMS
Matador	Spring	Mid	AH				A	White	M	MR
Genie	Spring	Mid	-				A	White	M	MRMS
Tomahawk CL Plus	Spring	Mid	APW				A	White	M	MR
Major	Spring	Mid-Slow	-				A	White	M	MRMS
RGT Waugh	Winter	Slow	Feed				A	White	M	R
RGT Cesario	Winter	Mid-Slow	Feed				AL	Red	M	MR

Maturity, height, lodging ratings are based on observations at the Smeaton trial site and are not NVT official ratings. Observations may vary at different trials. Head type: A = awned, AL = awnless



QUICK SEASON TRIALS

The quick season wheat trial was established to assess performance (disease resistance, standability, grain retention and yield) of spring wheat cultivars sown in mid-May in Smeaton, VIC. Matador was significantly higher yielding across all fungicide treatments versus other varieties.

Sowing Date	18/05/2023
Seeding Rate	Calculated per variety to target plant population of 200 plants/m ²
Seed Treatment	Gaucho @1.2L/t + Rancona Dimension @ 0.8L/t

Both Reilly and Kingston performed well, with Reilly recording less yield loss with reduced fungicide input. Compared to Rockstar, Genie recorded a 4% and 20% yield increase in the 2 fungicide and nil fungicide inputs respectively.

Chemical Inputs

Type	Product	Rate	Date Applied
Pre-emergent Herbicide (IBS)	Trifluralin 480 @ 2L/ha, Triallate Gold 500 @ 1.6L/ha, AMS @800g/100L, Spreadwet 1000 @ 200ml/100L		19/05/2023
Herbicide	LVE MCPA 570	700ml/ha	16/08/2023
Herbicide	Lontrel 750 SG	50g/ha	16/08/2023
Fungicide	Aviator XPro (@GS30-31)	500ml/ha	16/08/2023
Herbicide	Clodinafop 240EC + Hasten Adjuvant	165ml/ha	12/09/2023
Fungicide	Radial (@GS39 - 45 Fungicide)	840ml/ha	23/09/2023

Fertiliser Inputs

Product	Analysis	Rate (kg/ha)	Date Applied
MAP	10% N, 21.9% P, 1.5% S, 1.6% Ca	110	18/04/2023
Urea/SOA Blend	(75kg/ha Urea - 46% N, 75kg/ha SOA - 20.2% N, 24% S)	150	2/07/2023
Urea	46% N	120	22/08/2023
Urea	46% N	120	19/09/2023

Table 1. Quick Season Wheat Variety Trial Disease Infection Scoring (0-100) Across Fungicide Treatments. 0 = Good, 100 = Bad

Variety	2 Fungicides Infection Scoring (0-100)			1 Fungicides Infection Scoring (0-100)			Nil Fungicide Infection Scoring (0-100)		
	Septoria Tritici Blotch	Stripe Rust	Powdery Mildew	Septoria Tritici Blotch	Stripe Rust	Powdery Mildew	Septoria Tritici Blotch	Stripe Rust	Powdery Mildew
Genie	30	20	0	30	20	5	30	35	5
Kingston	40	40	0	-*	50	0	-*	60	0
LPB19-8035	30	30	0	20	30	0	20	30	0
LPB19-8213	40	40	0	40	30	0	-*	60	0
Matador	30	20	0	25	20	0	25	25	0
Reilly	20	20	0	20	25	0	30	40	0
Rockstar	40	30	0	40	40	5	-*	60	0
Scepter	40	30	0	40	35	0	-*	65	0
Tomahawk CL Plus	40	30	0	40	35	0	-*	65	0

*Severity of stripe rust infection made determining Septoria Tritici Blotch infection level too difficult

Variety	Plant Height (cm)	Lodging Score (0-5)	Grain Loss Score (0-5)
Genie	76	1.5	0.75
Kingston	71	2	1
LPB19-8035	68	0	0.25
LPB19-8213	74	1.25	0.5
Matador	71	0.5	1
Reilly	79	3	1.5
Rockstar	72	1.5	0.5
Scepter	77	0.25	1.5
Tomahawk CL Plus	73	1	0.5

Table 2. Quick Season Wheat Variety Trial Pre-Harvest Height, Lodging and Grain Loss Assessment. 0 = Good, 5 = Bad

Table 3. Quick Season Wheat Variety Trial Yield Analysis

Variety	2 Fungicides t/ha	Homogenous Groups	Mean %	1 Fungicide t/ha	Yield % v 2 Fungicides	Nil Fungicide t/ha	Yield % v 2 Fungicides	Yield % v 1 Fungicides
Matador	7.56	A	115	7.73	102	6.41	85	83
Reilly	6.88	B	105	6.99	102	4.29	62	61
Kingston	6.88	B	105	6.36	92	3.96	58	62
Genie	6.70	BC	102	6.44	96	5.20	78	81
LPB19-8035	6.65	BC	101	7.09	107	4.14	62	58
LPB19-8213	6.55	BC	100	6.93	106	4.02	61	58
Rockstar	6.44	C	98	6.47	101	4.32	67	67
Scepter	5.83	D	89	6.29	108	4.02	69	64
Tomahawk CL Plus	5.47	D	84	5.64	103	3.56	65	63
Site Mean (t/ha)	6.55			6.66	102	4.44	67	66
CV	4.13							
P Value	0.0000							
LSD	0.394							

MAIN SEASON TRIALS

The main season wheat trial was established to assess performance (disease resistance, standability, grain retention and yield) of winter and spring wheat cultivars sown in early May in Smeaton, VIC. LRPB Major was the highest yielding commercial spring cultivar in 2 fungicide input (12% higher vs Rockstar).

Sowing Date	4/05/2023
Seeding Rate	Calculated per variety to target plant population of 200 plants/m ²
Seed Treatment	Gaucho @1.2L/t + Rancona Dimension @ 0.8L/t

In the 1 fungicide and nil fungicide treatments LRPB Major yields declined by 8% and 30% respectively. Other white spring wheat cultivars of Rockstar and Genie recorded a 16% and 10% respectively (1 fungicide) and 52% and 41% respectively (nil fungicide) yield reduction vs 2 fungicide input. The AGFWH010222 pre-commercial red wheat cultivar was the highest yielding in 2 and 1 fungicide inputs, second highest in nil fungicide input. As in the long season trial it displayed strong genetic disease resistance and minimal yield response to reduced fungicide input.

Table 1: Main Season Wheat Variety Trial Disease Infection Scoring (0-100) Across Fungicide Treatments. 0 = Good, 100 = Bad

Variety	2 Fungicides Infection Scoring (0-100)			1 Fungicides Infection Scoring (0-100)			Nil Fungicide Infection Scoring (0-100)		
	Septoria Tritici Blotch	Stripe Rust	Powdery Mildew	Septoria Tritici Blotch	Stripe Rust	Powdery Mildew	Septoria Tritici Blotch	Stripe Rust	Powdery Mildew
AGFWH010122	10	0	0	10	0	0	20	0	0
AGFWH010222	5	0	5	5	0	5	5	5	0
AGFWH010322	20	10	0	20	10	0	40	30	0
AGFWH010422	5	0	0	5	0	0	10	5	0
AGFWH010522	40	50	5	40	30	0	40	40	0
AGFWH010622	10	5	0	30	10	0	30	60	0
Beaufort	20	10	5	30	0	0	30	20	0
BigRed	5	5	0	5	5	0	20	10	0
Genie	30	30	5	40	30	5	30	50	5
IGW6755	50	40	5	30	50	5	30	60	0
Longford	5	0	0	5	0	0	5	0	0
LRPB Major	20	10	5	20	20	0	30	25	0
RGT Accroc	30	30	0	30	40	0	30	50	0
RGT Cesario	30	45	0	5	60	0	10	50	0
RGT Waugh	10	0	0	10	0	0	10	0	0
Rockstar	30	50	5	20	70	0	-*	70	0
Scepter	35	60	5	10	80	0	-*	70	0
Stockade	20	5	10	20	0	10	30	5	15
Tomahawk CL Plus	35	60	5	10	80	0	-*	70	0
Willaura	40	30	15	50	30	10	40	30	20

*Severity of stripe rust infection made determining Septoria Tritici Blotch infection level too difficult

Chemical Inputs

Type	Product	Rate	Date Applied
Pre-emergent Herbicide (IBS)	Trifluralin 480 @ 2L/ha, Triallate Gold 500 @ 1.6L/ha, AMS @800g/100L, Spreadwet 1000 @ 200ml/100L		17/04/2023
Herbicide	LVE MCPA 570	700ml/ha	16/08/2023
Herbicide	Lontrel 750 SG	50g/ha	16/08/2023
Fungicide	Aviator XPro (@GS30-31)	500ml/ha	16/08/2023
Herbicide	Clodinafop 240EC + Hasten Adjuvant	165ml/ha	12/09/2023
Fungicide	Radial (@GS39 - 45 Fungicide)	840ml/ha	23/09/2023

Fertiliser Inputs

Product	Analysis	Rate (kg/ha)	Date Applied
MAP	10% N, 21.9% P, 1.5% S, 1.6% Ca	110	18/04/2023
Urea/SOA Blend	(75kg/ha Urea - 46% N, 75kg/ha SOA - 20.2% N, 24% S)	150	2/07/2023
Urea	46% N	120	22/08/2023
Urea	46% N	120	19/09/2023

Table 2. Main Season Wheat Trial Pre-Harvest Height, Lodging & Grain Loss Assessment. 0 = Good, 5 = Bad

Variety	Plant Height (cm)	Lodging Score (0-5)	Grain Loss Score (0-5)
AGFWH010122	86	0	2.00
AGFWH010222	86	0	2.25
AGFWH010322	81	0	2.00
AGFWH010422	85	0.25	2.00
AGFWH010522	85	0.75	3.50
AGFWH010622	83	0.25	2.75
Beaufort	80	0	1.50
BigRed	83	0.75	1.00
IGW6754	80	2.75	1.00
IGW6755	79	0.25	0.50
Longford	82	0	0.25
LRPB Major	75	1.5	1.00
RGT Accroc	84	0.25	2.00
RGT Cesario	81	0.25	1.75
RGT Waugh	85	0	0.00
Rockstar	80	2.5	1.50
Scepter	80	2	2.25
Stockade	77	0	0.25
Tomahawk CL P	79	2	1.75
Willaura	81	1.5	0.75



Above: BigRed being trialed in Streatham, Vic

Table 3. Main Season Wheat Trial Yield Analysis

Variety	2 Fungicides t/ha	Homogenous Groups	Mean %	1 Fungicide t/ha	Yield % v 2 Fungicides	Nil Fungicide t/ha	Yield % v 2 Fungicides	Yield % v 1 Fungicides
AGFWH010222	9.82	A	125	9.80	100	8.26	84	84
AGFWH010422	9.60	A	122	9.76	102	9.06	94	93
LRPB Major	8.90	B	113	8.14	92	6.26	70	77
AGFWH010122	8.77	BC	111	8.94	102	7.85	90	88
AGFWH010322	8.58	BC	109	8.79	102	7.17	84	82
BigRed	8.44	BCD	107	8.01	95	7.49	89	93
Stockade	8.37	CDE	106	8.39	100	7.42	89	88
RGT Waugh	8.30	CDEF	105	8.26	100	7.31	88	89
Rockstar	7.99	DEFG	101	6.74	84	3.86	48	57
AGFWH010622	7.89	EFG	100	7.49	95	6.02	76	80
Genie	7.87	FG	100	7.08	90	4.62	59	65
RGT Accroc	7.83	FG	99	7.36	94	5.17	66	70
RGT Cesario	7.80	G	99	7.29	93	5.52	71	76
Longford	7.79	G	99	7.56	97	6.60	85	87
Scepter	6.90	H	88	6.61	96	3.85	56	58
Willaura	6.32	I	80	6.29	99	4.14	66	66
Tomahawk CL Plus	6.30	I	80	5.71	91	3.03	48	53
Beaufort	6.19	I	78	5.79	94	5.20	84	90
IGW6755	6.06	I	77	6.06	100	4.37	72	72
Site Mean (t/ha)	7.88			7.58	96	5.96	75	77
CV	4.32							
P Value	0.0000							
LSD	0.53							





LONG SEASON TRIALS

The long season wheat trial was established to assess performance (disease resistance, standability, grain retention and yield) of long season winter and spring wheat cultivars sown in mid-April in Smeaton, VIC. Longford was the highest yielding commercial cultivar in the 2 spray fungicide input (9.58t/ha) with no significant yield response to reduced fungicide input.

Sowing Date	18/04/2023
Seeding Rate	Calculated per variety to target plant population of 200 plants/m ²
Seed Treatment	Gaucha @1.2L/t + Rancona Dimension @ 0.8L/t

In 2 fungicide input vs Longford, BigRed yielded 4% lower and RGT Waugh and Stockade were both 5% lower. Despite increasing Septoria pressure in Stockade with reduced fungicide input, there was no significant yield response.

In both RGT Accroc and RGT Cesario there were significant yield responses to reduced fungicide input which correlated with increasing stripe rust infection.

Table 1: Long Season Wheat Variety Trial Disease Infection Scoring (0-100) Across Fungicide Treatments
0 = Good, 5 = Bad

Variety	2 Fungicides Infection Scoring (0-100)			1 Fungicides Infection Scoring (0-100)			Nil Fungicide Infection Scoring (0-100)		
	Septoria Tritici Blotch	Stripe Rust	Powdery Mildew	Septoria Tritici Blotch	Stripe Rust	Powdery Mildew	Septoria Tritici Blotch	Stripe Rust	Powdery Mildew
AGFWH010122	40	0	0	30	5	0	35	5	0
AGFWH010222	5	0	5	5	0	0	5	0	0
AGFWH010322	10	5	0	25	10	0	30	5	0
AGFWH010422	5	0	0	5	0	0	5	0	0
AGFWH010522	30	40	0	.*	60	0	.*	60	0
AGFWH010622	20	5	0	20	10	0	40	10	0
Anapurna	10	5	0	50	5	0	50	5	0
Beaufort	40	10	0	50	5	0	60	10	0
Bennett	60	30	0	.*	55	0	.*	60	0
BigRed	5	0	0	5	5	0	10	5	0
Longford	5	0	0	5	0	0	5	0	0
Manning	15	5	0	20	0	0	25	5	0
RGT Accroc	30	10	0	40	40	0	.*	60	0
RGT Cesario	10	50	0	.*	60	0	.*	75	0
RGT Waugh	25	0	0	15	5	0	10	5	0
Stockade	30	0	10	50	0	10	50	0	0

*Severity of stripe rust infection made determining Septoria Tritici Blotch infection level too difficult

Chemical Inputs

Type	Product	Rate	Date Applied
Pre-emergent Herbicide (IBS)	Gramoxone 250 @ 2L/ha, Trifluralin 480 @ 2L/ha, Triallate Gold 500 @ 1.6L/ha, AMS @800g/100L, Spreadwet 1000 @ 200ml/100L		17/04/2023
Herbicide	LVE MCPA 570	700ml/ha	16/08/2023
Herbicide	Lontrel 750 SG	50g/ha	16/08/2023
Fungicide	Aviator XPro (@GS30-31)	500ml/ha	16/08/2023
Herbicide	Clodinafop 240EC + Hasten Adjuvant	165ml/ha	12/09/2023
Fungicide	Radial (@GS39 - 45 Fungicide)	840ml/ha	23/09/2023

Fertiliser Inputs

Product	Analysis	Rate (kg/ha)	Date Applied
MAP	10% N, 21.9% P, 1.5% S, 1.6% Ca	110	18/04/2023
Urea/SOA Blend	(75kg/ha Urea - 46% N, 75kg/ha SOA - 20.2% N, 24% S)	150	2/07/2023
Urea	46% N	120	22/08/2023
Urea	46% N	120	19/09/2023

Table 2: Long Season Wheat Trial Maturity Scoring for Ear Emergence (mean date of 50% of ear emergence across plot)

Variety	Ear Emergence Date
AGFWH010222	27-Sep
AGFWH010422	27-Sep
Beaufort	28-Sep
AGFWH010622	1-Oct
Anapurna	1-Oct
RGT Accroc	3-Oct
AGFWH010322	3-Oct
AGFWH010522	3-Oct
Bennett	5-Oct
AGFWH010122	5-Oct
BigRed	5-Oct
Stockade	6-Oct
RGT Cesario	8-Oct
Longford	8-Oct
Manning	12-Oct
RGT Waugh	13-Oct

Table 3. Long Season Wheat Trial Pre-Harvest Height, Lodging & Grain Loss Assessment. 0 = Good, 5 = Bad

Variety	Plant Height (cm)	Lodging (0-5)	Grain Loss (0-5)
AGFWH010122	93	1.75	1.25
AGFWH010222	90	1.75	2.75
AGFWH010322	82	2.5	1.50
AGFWH010422	84	1.5	2.75
AGFWH010522	83	1.5	4.00
AGFWH010622	83	1.5	2.50
Anapurna	83	1	1.50
Beaufort	88	1.5	2.00
Bennett	96	3.75	1.75
BigRed	88	2.75	1.25
Longford	89	0.5	0.25
Manning	88	3.75	2.25
RGT Accroc	85	0.75	2.25
RGT Cesario	86	1.75	2.50
RGT Waugh	89	0.25	0.25
Stockade	85	2	0.50

Table 4: Long Season Wheat Trial Yield Analysis. Note: Beaufort seed germination/establishment was ~20% down v site average

Variety	2 Fungicides t/ha	Homogenous Groups	Mean %	1 Fungicide t/ha	Yield % v 2 Fungicides	Nil Fungicide t/ha	Yield % v 2 Fungicides	Yield % v 1 Fungicides
AGFWH010422	10.90	A	122	11.18	103	9.14	84	82
AGFWH010222	10.61	A	119	11.20	106	10.72	101	96
Longford	9.58	B	107	9.76	102	9.72	101	100
Anapurna	9.53	B	107	9.40	99	9.44	99	100
AGFWH010122	9.20	BC	103	9.01	98	9.76	106	108
Manning	9.19	BC	103	8.79	96	8.49	92	97
BigRed	9.18	BC	103	8.44	92	8.61	94	102
RGT Waugh	9.11	BC	102	9.73	107	9.00	99	93
Stockade	9.10	BC	102	9.01	99	8.92	98	99
AGFWH010322	8.95	BC	100	8.41	94	8.46	95	101
RGT Accroc	8.95	BC	100	8.61	96	5.22	58	61
AGFWH010622	8.57	CD	96	8.94	104	6.27	73	70
RGT Cesario	7.95	DE	89	7.62	96	5.89	74	77
AGFWH010522	7.50	EF	84	7.13	95	3.86	51	54
Bennett	7.37	EF	82	5.94	81	4.67	63	79
Beaufort	7.12	F	80	7.54	106	5.39	76	71
Site Mean (t/ha)	8.93			8.79	98	7.72	85	87
CV	5.37							
P Value	0.0000							
LSD	0.68							



Longford


for Big Yields where Disease Resistance matters!



Very high yielding red wheat which excels in long season environments.


Longford has proven to succeed in high disease pressure situations.

MATURITY SPEED




VERY QUICK VERY SLOW


SCEPTORIA RESISTANCE




STEM RUST




STRIPE RUST



LEAF RUST



TECH SHEET



From the breeders who brought you BigRed we are excited to introduce Longford. Longford is a long season high yield potential red wheat with a strong disease package and lodging tolerance. Longford is suited to dual purpose (graze/grain) or grain only farming systems in situations of very high or high yield potentials.

Table 1: Disease assessment on 3/10/23 from 2023 Smeaton, Vic long season wheat trial. (Source AGF Seeds)

Disease Assessment Nil + 2 x Fungicide				
Variety	Septoria % Leaf Infection		Stripe Rust % Leaf Infection	
	Nil Fungicide	2 x Fungicide	Nil Fungicide	2 x Fungicide
Longford	<5%	5%	5%	0%
BigRed	10%	5%	5%	0%
RGT Waugh	10%	25%	25%	0%
Manning	25%	15%	15%	5%

Table 2: Heading Date - Long Season Wheat Trial Smeaton, Vic 2023 (Source AGF Seeds)

Heading Date Assessment	
Variety	Heading Date
BigRed	5-Oct
Longford	8-Oct
Manning	12-Oct
RGT Waugh	13-Oct

Table 3: Lodging Index FAR Australia HYC Elite Screening Gnarwarre, Vic @GS99 (Source FAR Australia)

Lodging Index Assessment @GS99 0 - 500	
Variety	Lodging
Longford	21.3
BigRed	131.3
RGT Accroc	175.0



Table 4: AGF Seeds Long Season Wheat Trial. Scoring (0 = Good, 100 = Bad)

Variety	Yield (%SMY)	Septoria Scoring (0 - 100)	Stripe Rust Scoring (0 - 100)	Powdery Mildew Scoring (0 - 100)	Height (cm)	Lodging (0 nil - 5 high)	Grain Loss (0 nil - 5 high)
Longford	107	5	0	0	89	0.5	0.25
BigRed	103	5	0	0	88	2.75	1.25
RGT Waugh	102	25	0	0	89	0.25	0.25
Manning	103	15	5	0	88	3.75	2.25

Stockade

High Yielding APW Milling Wheat



MATURITY SPEED 	SCEPTORIA RESISTANCE	STEM RUST	STRIPE RUST	LEAF RUST	TECH SHEET
	MS	MS	MR	MR _p	

LongReach Breeders took Trojan and have improved on it with strategic crossing and selection. The result, a high yielding very slow maturity spring wheat for the long season areas of the southern market.

- Extremely high yield potential
- APW in Southern & Western Zones
- Improved disease tolerance
- A more suitable maturity
- White, milling grain

Table 1: AGF Seeds 2023 Main Season Wheat Trial Full Fungicide (Sown 4th of May 2023)

Variety	Yield (%SMY)	Septoria Scoring (0 -100)	Stripe Rust Scoring (0 -100)	Powdery Mildew Scoring (0 -100)	Height (cm)	Lodging (0 nil - 5 high)	Grain Loss (0 nil - 5 high)
Stockade	106	20	5	10	77	0	0.25
BigRed	107	5	5	0	83	0.75	1
Rockstar	101	30	50	5	80	2.5	1.5
LRPB Major	113	20	10	5	75	1.5	1
RGT Accroc	99	30	30	0	84	0.25	2
Willaura	80	40	30	15	81	1.5	0.75

Table 2: AGF Seeds 2023 Long Season Wheat Trial Full Fungicide (Sown 18th of April 2023)

Variety	Yield (%SMY)	Septoria Scoring (0 -100)	Stripe Rust Scoring (0 -100)	Powdery Mildew Scoring (0 -100)	Height (cm)	Lodging (0 nil - 5 high)	Grain Loss (0 nil - 5 high)
Stockade	102	30	0	10	85	2	0.5
BigRed	103	5	0	0	88	2.75	1.25
RGT Accroc	100	30	10	0	85	0.75	2.25
Bennet	82	60	30	0	96	3.75	1.75



Anvil CL Plus

Quick Maturity Spring Wheat

A quick AH quality, two-gene IMI-tolerant variety with market segment leading yield. An alternative to IMI-tolerant varieties like Hammer CL Plus, Razor CL Plus and Chief CL Plus. Ideally suited to the fast finishing, low-medium rainfall areas of SA and VIC Robust grain receivals package, for dependable grain deliveries.



Tech Sheet

Tomahawk CL Plus

Mid Maturity Spring Wheat

Tomahawk CL Plus (RAC3261) is closely related to popular variety Scepter, and offers all the benefits of Scepter along with Clearfield tolerance. Tomahawk has bridged the yield gap between conventional and Clearfield wheat varieties. Not only does Tomahawk offer higher yields, it has similar disease resistance, physical grain quality, adaption and maturity as Scepter.



Tech Sheet

Matador

Mid Maturity Spring Wheat

AH wheat that has consistently outperformed Vixen and Scepter Improved shorter canopy compared to Scepter with better lodging tolerance. Improved Powdery Mildew (MS) and Stripe rust resistance (MS) over Scepter adding some minor genes for both diseases.



Tech Sheet

Genie

Mid Maturity Spring Wheat

GENIE is an exceptionally high yielding, mid-slow AH wheat and is an excellent alternative to RockStar in >3t/ha yield environments. In these environments the variety offers medium-high rainfall growers a 1-2% yield improvement compared to RockStar.



Tech Sheet

Major

Mid-Slow Maturity Spring Wheat

High yielding Mid Slow Maturity with a flexible mid season sowing window suitable for Early to Mid May seeding opportunities across Southern NSW In Victoria LRPB Major suits sowing in the seeding window prior to Scepter, which has been used widely by growers of Trojan and Rockstar. Excellent disease package for SNSW/Vic production systems.



Tech Sheet

10222

Mid Maturity Winter Wheat

An awned red winter wheat currently under going pre-commercial evaluation. 10222 has been incredibly impressive for yield and durability in internal AGF trials and in the NVT where it has been a stand out performer.



A wheat to keep on your radar as we expect big things in the future.

RGT Waugh

Very Slow Maturity Winter Wheat

RGT Waugh has class leading yields in the medium and high rainfall zone. RGT Waugh is the new benchmark for yield in white winter wheats. The variety has a good disease resistance profile with very good resistance to stripe rust. With short stiff straw, harvest quality is good producing large bold grain with a high thousand grain weight.



Tech Sheet

RGT Cesario

Mid-Slow Maturity Winter Wheat

RGT Cesario is an awnless, mid-winter wheat. It has a potential for high yields in the medium and high rainfall zone. It has a maturity similar to RGT Accroc with a solid disease package to back it up. The high yield and grain quality of RGT Cesario will bring benefits to the Australian grower.



Tech Sheet

AGFseeds

CONTACT US



Will Bazley
Nth NSW & QLD
0499 456 263
will.bazley@agfseeds.com.au



Rhys Cottam-Starkey
**Gippsland, Yarra Valley, South-
Western Vic & Lower SE SA**
0409 776 126
rhys.cs@agfseeds.com.au



Cooper Lambden
SE NSW & NE Vic
0491 219 291
cooper.lambden@agfseeds.com.au



Ivan Pyke
**South-Western Vic, Central
Vic, SE SA, Murray NSW & Tas**
0497 432 157
ivan.pyke@agfseeds.com.au



Craig Altmann
Vic Mallee & SA
0448 863 169
craig.altmann@agfseeds.com.au



AGF Seeds Head Office
3487 Creswick-Newstead Rd,
Smeaton, 3364
03 5345 6262
admin@agfseeds.com.au

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and Big Biomass*



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