Constantly searching for better field crop varieties.

Our work at AGT is a search for the exemplary. An intensive process of inter-crossing, field and laboratory experimentation, data collection and analysis, and genetic selection over many years culminates in the creation of each of our new field crop varieties. This exhaustive and innovative process leads to new varieties that improve the profitability, sustainability and prosperity of grain growers all over the country.

Sign up to receive the latest news and updates from AGT
agtbreeding.com.au/subscribe
Thanks for taking the time to look through our 2020-2021 variety guide for Victoria. We hope that it provides you with the information you need to select the best AGT varieties for your farm.

This is a big year for us. We started out as a small southern focused wheat breeding company in 2002, and since then have grown our footprint nationally. We have also decided to serve Australia’s farming community even more, by investing into new crops. AGT is determined to provide Victorian growers with variety options for wheat, barley, durum, lupins and canola that you can trust.

Last year we released the highest yielding durum variety for the south (Bitalli) and our first lupin variety (Coyote). We also released a unique wheat variety that combined great yield, AH quality, CCN resistance and sowing date flexibility (Catapult). This year we have released our first barley variety (Beast). Beast is a higher yielding Compass derivative with early maturity that is likely to best fit in the low-medium rainfall areas.

We are also proud to release three quite contrasting wheat varieties for Victoria in 2020 that we think will have a great fit in grower’s paddocks. We expect that Ballista will be a popular choice in Mallee environments where growers are looking for market leading yield combined with good levels of CCN resistance and AH quality. Hammer CL Plus on the other-hand is the most exciting Clearfield wheat we have released yet for the southern region; with an AH classification, yield at a level similar to Mace plus good levels of CCN and yellow leaf spot resistance and improved stripe rust resistance. We hope that it adds some real value into your farming enterprise. Finally, our first feed quality winter wheat Anapurna has shown great adaptation to the high rainfall zones of Victoria and Tasmania, expanding our offerings into new territories.

We look forward to continuing to serve Victorian growers by releasing the best wheat, durum, barley, lupin and (in the future) canola varieties for your farms. We are investing strongly into breeding infrastructure to achieve this. Over the last few years alone, we have invested more than $30 million into improved plant breeding equipment, research farms, state-of-the-art greenhouses, growth rooms, and laboratories that will ultimately mean that we can generate even better varieties for Victorian farmers in the future.

We are proud of being part of the Australian farming community, located in regional towns around Australia, and employing people in rural communities. If you ever have the chance to drop by and say ‘hello’, please do, we always enjoy sharing what we do with the people we serve.

Yours sincerely,

Haydn Kuchel
Your EPR’s have allowed AGT to grow over our near 20 year history. From our beginnings as a small wheat breeding company, EPR’s have enabled us to better serve you by:

- Building a world-class breeding facility at Roseworthy, SA
- Purchasing secure irrigated land at Wagga Wagga and Narrabri, NSW, for breeding trial & seed production work
- Developing a breeding centre in Northam, WA, dedicated to servicing Western Australian growers
- Expanding into breeding other field crop types which now include durum, barley, lupin and canola in addition to spring and winter wheat
- Increasing rates of genetic gain with the use of state-of-the-art greenhouses and controlled environment rooms
- Investing in the latest plant breeding technologies including machine learning, robotics, DNA based selection, and advanced data management and analysis
- Building Australia’s first in-house tech support team that is fully integrated with the breeding programmes
- Developing high-tech quality laboratories for wheat, barley, durum, canola and lupins to make sure the varieties you grow meet end-use requirements

Thankyou! For paying End Point Royalties.

Your honest declaration of varieties at point of sale allows us to continue developing improved field crop varieties for you to grow.

- EPR’s are payable on all AGT varieties
- Most bulk grain buyers automatically deduct EPR’s and pay this money back to the breeder on your behalf – correct variety declaration matters!
- EPR’s are the only way that AGT generates income to continue breeding
Spring wheats make up the bulk of all wheat production in Australia. Our portfolio of conventional spring wheat varieties consists of a range of high performing variety choices to suit most wheat growing situations.
Ballista

- Improved yield over Scepter and Vixen in the Mallee
- Quick-mid maturity, slightly quicker than Mace
- AH quality classification
- Stable yields across a range of environmental conditions
- CCN resistance equal to Scepter and Mace
With the release of Ballista\textsuperscript{a}, a new yield benchmark for the Mallee has been set. Ballista\textsuperscript{a} has been released off the back of outstanding results in our yield trials over many years, and continues to build upon the strength of its Mace\textsuperscript{a} parentage.

We believe Ballista\textsuperscript{a} will be most closely compared with Scepter\textsuperscript{a} and newer variety Vixen\textsuperscript{a}. Compared with Scepter\textsuperscript{a}, Ballista\textsuperscript{a} offers consistently higher yields across a broad range of environments and growing conditions, while carrying very similar disease resistance attributes. Versus Vixen\textsuperscript{a}, Ballista\textsuperscript{a} produces higher yields in the Mallee, but does not have the very quick maturity of Vixen\textsuperscript{a}, giving Ballista\textsuperscript{a} a wider and more flexible sowing window. Perhaps the most important difference between Ballista\textsuperscript{a} and Vixen\textsuperscript{a}, particularly for Mallee environments, is CCN resistance; where Vixen\textsuperscript{a} is rated MSS and Ballista\textsuperscript{a} is MRMS, like Scepter\textsuperscript{a}.

Overall, Ballista\textsuperscript{a} has been released primarily for Mallee environments where very high yield, AH quality, CCN resistance and Mace\textsuperscript{a} type maturity are attributes that growers are looking for in a new variety.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{image.png}
\caption{Grain yield of Ballista\textsuperscript{a} and comparator varieties across the SA & Victorian Mallee}
\end{figure}
Catapult

- Mid slow maturity, with a very flexible sowing window
- Safer option for sowing dry when germination date is unknown
- Wide adaptation, will fit the front end of most grower’s cropping programs
- Good pre-harvest sprouting tolerance, better than LRPB Trojan and Rockstar
- Excellent choice for wheat on wheat situations
- Better CCN resistance than LRPB Trojan and Rockstar
- Very good physical grain characteristics with an AH quality classification
In most situations this level of resistance is enough to combat disease.

In-crop fungicide use may be required if conditions are conducive to disease.

This level of resistance makes Catapult® an excellent choice for use in a wheat on wheat situation.

In most situations this level of resistance is enough to combat disease. In-crop fungicide use may be required if conditions are conducive to disease.

Catapult® has consistently out-yielded LRPB Trojan®, Cutlass®, and Yitpi®. The high yield potential relative to other varieties has been recorded across a large range of growing conditions and environments, highlighting Catapult's® very wide suitability for most cropping programs.

These days, much of the wheat crop is planted dry. In many instances germination of dry sown crops may be delayed considerably if the arrival of the break in the season is unknown, and therefore variety choice for these situations is very important. A variety like Catapult® is a great choice for dry sowing because it maintains its high yield over a wide range of germination dates, including well into May where it remains competitive with the benchmark variety Scepter®.

Catapult® is also one of the best choices for use in wheat on wheat rotations. Apart from Catapult®, there are no other wheat varieties that combine this maturity type with CCN resistance, yellow leaf spot resistance and AH quality. It's this unique combination that supports Catapult's® use as a second wheat in a rotation, a practice very common in low rainfall or Mallee type environments.

Catapult® is very closely related to Scepter® and shares its physical grain quality characteristics of high test weight, low screenings and AH quality classification.
Denison

- Very unique ‘slow-very slow’ spring maturity
- Best suited to mid and late April sowings
- Highly competitive yield when sown early
- Wide adaptation
- APW quality classification
We have had great success working with a germplasm pool that heavily features the famous variety Wyalkatchem\(^a\), delivering Mace\(^b\); and then Scepter\(^a\) to growers. Through the success of these landmark varieties we have been able to increase our investment into breeding, with the intention to round out our portfolio of varieties to provide an offering for all unique wheat growing regions and use patterns in Australia.

Denison\(^a\) has emerged out of a Mace\(^b\)/Corack\(^a\) cross, and caught our attention with its very unique maturity relative to other commonly grown varieties. Up until now, there has been a gap in suitable wheat varieties for the sowing opportunity between early April (winter wheats) and late April (mid-slow spring wheats) in many regions of Victoria.

Denison\(^a\) is a slow-very slow spring wheat, a maturity that is very uncommon, but fits the sowing window of mid April that traditionally has been un-catered for. Although the mid April planting opportunity may only account for a small percentage of the total sowing programme, we are very proud to offer a well adapted and suitable variety for this purpose.

Denison\(^a\) also offers good physical grain quality, and has an APW quality classification in Victoria.

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**AGT early sown trials: Grain yield of Denison\(^a\) across all southern/western sites**

![Graph showing grain yield of Denison\(^a\) across different maturity types compared to comparator varieties.]

Source: AGT long term MET analysis, early sown trial series 2015-2019 (23 trials across WA/SA/Vic)

Number of trials that each variety was present in across the dataset

**Head emergence of Denison\(^a\) and comparator varieties relative to Scepter\(^a\), when sown in AGT early trials**

![Graph showing days to head emergence of Denison\(^a\) and comparator varieties relative to Scepter\(^a\).]

Source: AGT early sown trials in 2019 (average of 3 trials in southern Australia. Average sowing date 4th May)

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Tested as: WAGT734

Released: Spring 2020

EPR: $3.40 + GST/tonne

Seed Availability: AGT Affiliates, Retailers, Seed Sharing™
Scepter

- Mace replacement
- Very high yield
- AH quality classification
- Mid season maturity, slightly later than Mace
- Good physical grain quality package
- CCN and yellow leaf spot resistance equal to Mace
In 2010 Mace\textsuperscript{a} was released to Victorian growers presenting a big step forward in performance and profitability over its parent Wyalkatchem\textsuperscript{b}: Higher yield, AH quality and better CCN resistance saw it grow in popularity. Scepter\textsuperscript{a} builds on the success of Mace\textsuperscript{a}, and has now become a dominant wheat variety in Victoria.

From 2015-2019 Scepter was 7\% higher yielding than Mace\textsuperscript{a} in Victorian NVT's. This is a significant yield gain and has translated into considerable profitability increases for Victorian cereal growers.

We see Scepter\textsuperscript{a} as the successor to Mace\textsuperscript{a} and still the best all-round choice for most wheat growing situations in Victoria. With Mace\textsuperscript{a} as its major parent, Scepter\textsuperscript{a} behaves very similar to Mace\textsuperscript{a}, and fits into the same position in your rotation.

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**Grain yield advancement: Scepter\textsuperscript{a} versus Mace\textsuperscript{a}**

In 2010 Mace\textsuperscript{a} was released to Victorian growers presenting a big step forward in performance and profitability over its parent Wyalkatchem\textsuperscript{b}: Higher yield, AH quality and better CCN resistance saw it grow in popularity. Scepter\textsuperscript{a} builds on the success of Mace\textsuperscript{a}, and has now become a dominant wheat variety in Victoria.

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**Disease resistance ratings for Scepter\textsuperscript{a}**

<table>
<thead>
<tr>
<th>Disease</th>
<th>MRMS</th>
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<th>VS</th>
<th>SVS</th>
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<td>Stripe rust</td>
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<td>Leaf rust</td>
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<tr>
<td>Speltoria tritici blotch</td>
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<tr>
<td>Yellow leaf spot</td>
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<td>CCN</td>
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</table>

Source: SARDI Cereal Variety Disease Guide 2020

**Tested as**

RAC2182

**Released**

Spring 2015

**EPR**

$3.25 + GST/tonne

**Seed Availability**

AGT Affiliates, Retailers, Seed Sharing™
Winter wheats are typically best adapted to earlier sowing, longer season, or higher rainfall environments; although in recent years their use has gained popularity in lower rainfall regions. These varieties remain vegetative for a long period of time, providing early winter grazing opportunities by livestock before allowing the crop to recover to produce grain.
Anapurna

- Dual purpose winter wheat, suitable for grazing and grain production
- Awned, red grained, feed quality wheat
- Delivers very high grain yields in long season environments
- Slow winter maturity, similar to RGT Accroc
- Good level of septoria tritici blotch resistance
- Excellent stripe rust resistance
- Maintains high grain yields in the absence of foliar fungicides
- Excellent lodging resistance in high yield potential environments
Along with breeding improved long season wheat varieties in Australia, our winter wheat breeding programme at Wagga Wagga works to identify international germplasm that may be adapted to Australian wheat growing environments.

Emerging from a variety exchange with European breeding co-operative and AGT shareholder Limagrain, and through collaboration with the Hyper Yielding project run by the Foundation for Arable Research (FAR), we have identified the European variety Anapurna which excels in very long season, high rainfall environments of Australia.

The performance of Anapurna in the Hyper Yielding trials could not be ignored, and we are very proud to offer Anapurna to growers in high rainfall areas, helping to deliver on our commitment to provide quality varieties to all cropping zones of Australia.

Anapurna is an awned, dual purpose winter wheat variety with similar maturity to RGT Accroc and is largely suited to high rainfall environments throughout the mainland of southern Australia and Tasmania.

Anapurna has a long vegetative growth phase similar to RGT Accroc and SQP Revenue, providing a longer safe grazing period compared with mid-winter varieties like EGA Wedgetail and Illabo that reach stem elongation earlier. Its strong vernalisation requirement means Anapurna can be safely planted in early April.

Anapurna also has a useful disease package with good levels of septoria tritici blotch resistance, resulting in high yields being maintained in the absence of foliar fungicide application, despite the growing impact of this disease.

Furthermore, the compact canopy of Anapurna provides good standability with reduced susceptibility to lodging.

While Anapurna offers many potential benefits to high rainfall croppers, growers should be aware that Anapurna is a red grained wheat that can only be delivered into feed markets.

Grain yield of Anapurna versus comparators – Millicent, SA

![Grain yield comparison chart]

Head emergence (GS55) of Anapurna compared with other winter wheats

![Head emergence comparison chart]

Tested as Anapurna

Released Spring 2020

EPR $3.20 + GST/tonne

Seed Availability AGT Affiliates, Retailers, Seed Sharing™
Illabo

- Dual purpose winter wheat for grazing and grain production
- A higher yielding alternative to EGA Wedgetail and LRPB Kittyhawk
- Mid-quick winter maturity
- Improved resistance to stripe rust and black point over EGA Wedgetail
- AH quality classification
Mixed farming has traditionally had a strong presence in many regions of Victoria. The mixture of cropping and livestock has benefited farmers, helping to improve profits while also assisting in risk management. Dual purpose wheats offer many benefits to farmers in a mixed enterprise, and EGA Wedgetail® has been the variety of choice for many seasons now.

Illabo® is the first variety to be released from our dedicated winter wheat breeding program at Wagga Wagga, and has been bred with the intent of offering growers an improved version of EGA Wedgetail®. The main improvement that Illabo® offers over EGA Wedgetail® is yield. In high rainfall long term NVT early sown and long season trials across Victoria and SA, Illabo® has outperformed both EGA Wedgetail® and LRPB Kittyhawk® by at least 6% and 7% respectively. Illabo® also offers an improved disease resistance package over EGA Wedgetail®, with better stripe rust and black point resistance.

Like its parent EGA Wedgetail®, Illabo® requires a period of cold temperatures (vernalisation) before moving from vegetative to reproductive growth, and this maturity trigger allows Illabo® to be sown early in the cropping program with the aim of producing increased dry matter to fill early feed gaps.

To maximise grain only yield, Illabo® appears ideally suited to mid-late April sowing in high yield environments, and mid-April planting in low yield environments.

Grain yield of Illabo® across environments

Dry matter production of Illabo® in response to sowing date

Tested as V09150-01
Released Spring 2018
EPR $3.50 + GST/tonne
Seed Availability AGT Affiliates, Retailers, Seed Sharing™
Clearfield® Wheat Varieties

‘CL Plus’ wheat varieties have been specifically developed to carry two genes for tolerance to Clearfield® Intervix® herbicide. Intervix® is a member of the imidazolinone chemical family with Group B mode of action, offering one-pass post-emergent knockdown and residual control of many major grass and broadleaf weeds including brome grass, barley grass, wild oat, Indian hedge mustard, muskweed, wild radish, wild turnip, and suppression of annual ryegrass.
Hammer CL Plus

- The highest yielding AH Clearfield® variety
- AH quality classification with low screenings and high test weight
- Tolerant to Clearfield® Intervix® herbicide
- Closely related to Mace®, with similar adaptation
- Quick-mid maturity, similar to Mace®
- Suitable for wheat on wheat situations
In most situations this level of resistance is enough to combat disease.

In-crop fungicide use may be required if conditions are conducive to disease.

This level of resistance makes Hammer CL Plus™ an excellent choice for use in a wheat on wheat situation.

Tested as OAGT0016

Released Spring 2020

EPR $4.25 + GST/tonne

Seed Availability AGT Affiliates, Retailers
Razor CL Plus

- The highest yielding Clearfield® wheat variety currently available in western Victoria
- Derived from widely adapted variety Mace
- Tolerant to Clearfield® Intervix® herbicide
- Quick maturity, slightly quicker than Mace, similar to Corack
- Good physical grain package, with low screenings and high test weight
- Good CCN resistance
- ASW quality classification
The Clearfield® production system involving cereal varieties that are tolerant to Intervix® herbicide continues to play an integral part of in-crop weed management throughout Victoria. However, there was always a significant yield gap between the first wave of 2-gene Clearfield® varieties (Kord CL Plus®, Grenade CL Plus®), and the best non-Clearfield® varieties (Mace®, Scepter®).

Razor CL Plus® addresses this issue, offering the highest yields out of all currently available Clearfield® varieties for the Mallee and Wimmera.

We believe that Razor CL Plus® offers a very competitive package of yield, adaptation and disease resistance. Razor CL Plus® has an ASW quality classification, and therefore growers will have to determine whether the yield advantage that Razor CL Plus® offers over other Clearfields® generates additional income in their unique situation. Does the yield advantage of Razor CL Plus® outweigh the potential price split between ASW and higher grades? How often do you achieve higher quality grades on your farm? Are you intending to grow a Clearfield® variety on a paddock that is set up to achieve higher protein grades, or are you using these varieties on poorer, problem paddocks? Answering these questions may help you decide if a high yielding, ASW, Clearfield® wheat variety has a fit in your program.

Grain yield of Razor CL Plus® versus established Clearfield® varieties

Disease resistance comparisons versus Clearfield® varieties

Source
NVT long term MET analysis, main season trial series 2015-2019
( ) Total number of trials per region
( ) Number of trials that each variety was present in across the western Vic dataset [44]

Tested as RAC2517
Released Autumn 2018
EPR $3.30 + GST/tonne
Seed Availability AGT Affiliates, Retailers
In 2020, we will:

- Create more than 1,000,000 new and unique genetic combinations
- Collect and analyse 600,000 data points
- Manage 60 unique breeding trial sites across Australia
- Plant and harvest 380,000 yield plots
- Run 270,000 molecular marker tests
- Mill 1,500 wheat samples into flour
- Bake 2,500 loaves of bread to examine quality
- Generate 800 samples of malted barley
- Produce 500 tonne of foundation seed
- Oversee 6,000 hectares of AGT Affiliate seed multiplication

Fast Facts

- 5 crop types: Wheat, Barley, Durum, Lupin, Canola
- 65 Staff members nationally
- 4 Regionally based breeding stations: Narrabri, NSW, Northam, WA, Roseworthy, SA, Wagga Wagga, NSW
Durum Varieties

Durum production is predominantly confined to the more reliable, higher production environments of the western Wimmera, where high yielding, high quality grain suitable for pasta making is achievable.
Bitalli

- The highest yielding durum variety currently available
- ADR quality classification
- Very good physical grain characteristics with low screenings and high test weight
- Quick-mid maturity providing good adaptation in tough finishes to the growing season
- Small improvement in crown rot resistance over most other varieties
- Good levels of black point resistance
Bitalli™ is one of our first durum variety releases in over ten years, and we believe that it has been worth the wait. Bitalli™ represents our breeding aim of producing a 'low risk' durum variety, combining adaptation to a range of environments and growing conditions, excellent grain quality with low screenings risk and high test weights, and suitable levels of straw strength. Most importantly however, Bitalli™ has achieved our goal of developing a durum variety that sets a new yield benchmark across all Southern Australian durum growing environments.

Bitalli™ is derived from a Saintly™ cross, maturing 1-2 days later than Saintly™; and a few days earlier than DBA Aurora™. Unlike Saintly™, Bitalli™ is a fully awned variety.

The disease profile of Bitalli™ is comparable with most durum varieties currently on the market, with good resistance to most foliar diseases. Pathology data suggests that Bitalli™ may offer a slight improvement in crown rot resistance over most other commonly grown varieties. As crown rot is a major constraint on durum production, even a small improvement in this trait is likely to benefit growers.

Bitalli™ has an ADR quality classification and produces grain with low screenings similar to DBA Aurora™ and Saintly™; and substantially better than Hyperno™.

The naming convention we use for our durum varieties is Melbourne Cup winners, with ‘Bitalli’ taking the cup in 1923.

### Variety comparisons

<table>
<thead>
<tr>
<th>Disease</th>
<th>Bitalli™</th>
<th>DBA Aurora™</th>
<th>DBA Artemis™</th>
<th>DBA Spes™</th>
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<td>Crown rot</td>
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### Grain yield of Bitalli™ across Southern durum growing environments

<table>
<thead>
<tr>
<th>Region</th>
<th>Bitalli™ (18)</th>
<th>DBA Spes™ (24)</th>
<th>DBA Aurora™ (30)</th>
<th>Hyperno™ (30)</th>
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</table>

Source: NVT long term MET analysis, durum trial series 2015-2019

### Tested as AGTD088

Released Spring 2019

EPR $3.50 + GST/tonne

Seed Availability AGT Affiliates, Retailers, Seed Sharing™
Barley Varieties

Barley is the second largest cereal crop in Australia, and is grown for either use in malting or as stock-feed. We are excited to now add barley to our portfolio of field crop varieties available to growers.
Beast

- Very high yielding in low-medium rainfall or Mallee type environments
- Quick maturity, almost a week quicker than Compass
- Excellent performance in stressed, tight finishing environments and seasons
- Compass plant type, with similar early vigour
- Competitive physical grain quality package, with test weight and grain size comparable to most commonly grown varieties
- Feed quality, but has entered the malt accreditation process
In 2014, on the back of success in wheat breeding, we made a commitment to begin a breeding programme for Australia’s second largest broadacre crop, barley. The decision to enter into barley breeding helps us to build on our mission of improving the strength of Australian rural communities through the development and adoption of improved field crop varieties.

Beast® is our first ever barley variety, and comes only six years since the commencement of our nationally-focussed barley breeding programme. Beast® has been selected from the advanced germplasm pool that we sourced from the University of Adelaide, and is derived from a cross including Compass® and Hindmarsh®. Like Compass®, Beast® boasts a vigorous plant type, which is highly desirable in lower rainfall or Mallee type environments, with improved early vigour over the more erect Hindmarsh® types (LaTrobe®, Spartacus CL®, Rosalind®). However this also suggests that Beast® may be best suited to low-medium rainfall situations where lodging is less of a concern.

Beast® is a quick maturing variety that has recorded its best yields in low-medium yield potential environments. Beast® has consistently out-yielded Compass® across many environments, and has performed very competitively with Rosalind®.

Beast® will be released as a feed variety and has been accepted into the Barley Australia Malt Accreditation Programme, however a result on its malt status will not be known until at least the 2023 season.

The naming convention we have selected for our barley varieties is ‘mythical creatures’.

Grain yield of Beast® versus comparators across a range of growing conditions – AGT long term data

Variety comparisons

Source: Agriculture Vic Cereal Disease Guide 2020, NVT and AGT data.

<table>
<thead>
<tr>
<th>Disease</th>
<th>Beast®</th>
<th>Compass®</th>
<th>RGT Planet®</th>
<th>Rosalind®</th>
<th>Spartacus CL®</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scald</td>
<td>SVS</td>
<td>SVS</td>
<td>SVS</td>
<td>S</td>
<td>SVS</td>
</tr>
<tr>
<td>Leaf rust</td>
<td>S*</td>
<td>SVS</td>
<td>MS</td>
<td>MR</td>
<td>S</td>
</tr>
<tr>
<td>SFNB</td>
<td>MSS</td>
<td>MS</td>
<td>S</td>
<td>S</td>
<td>SVS</td>
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<tr>
<td>NFNB</td>
<td>MS*</td>
<td>MSS</td>
<td>SVS</td>
<td>MR</td>
<td>MSS</td>
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<tr>
<td>CCN</td>
<td>MR*</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td>Powdery mildew</td>
<td>MSS</td>
<td>MRMS-S</td>
<td>R</td>
<td>SVS</td>
<td>SVS</td>
</tr>
</tbody>
</table>

R Resistant
MR Moderately Resistant
MS Moderately Susceptible
VS Very Susceptible
S Susceptible

A range of reactions is provided (separated with -) where different strains of the pathogen exist and where the variety may respond differently to them.

Tested as AGTB0113
Released Spring 2020
EPR $4.00 + GST/tonne
Seed Availability AGT Affiliates, Retailers, Seed Sharing™
Lupin Varieties

Lupin is Australia’s largest pulse crop, with the majority of the production being grown in Western Australia. The main type of lupin grown in Australia is narrow-leaf lupin (*Lupinus angustifolius*), also known as Australian sweet lupin.
Coyote

The highest yielding lupin variety in southern Australia

Widely adapted throughout western Victorian lupin growing regions

Stable yields across a range of conditions

Metribuzin tolerant

Similar maturity to PBA Jurien, slightly later than Mandelup
In 2016, AGT took over the responsibility of breeding lupins from the WA Department of Primary Industries and Regional Development (DPIRD). We accepted this challenge because we believe that grain legumes are a critical component of a healthy and sustainable farming system.

Coyote is the first narrow-leaf lupin variety to be released by AGT. Coyote offers growers very high and stable yields, and sets a new yield benchmark for lupin varieties across all western Victorian and South Australian lupin growing regions. Long term yield data across the Southern region showed that Coyote had a 12% yield improvement over popular varieties Mandelup and PBA Jurien, and a 3% advantage over newer variety PBA Bateman.

In high rainfall environments where sheep graze lupin stubble over the summer, it is advantageous to monitor crops in season for stem phomopsis. Where the risk of stem phomopsis is high, monitor livestock when grazing stubbles or remove grazing livestock completely. Coyote’s resistance to stem phomopsis is lower than Mandelup, PBA Bateman and PBA Jurien.

The naming convention we have selected for our lupin varieties is Western Australian gold mines, with ‘Coyote’ being a mine located in the Tanami Desert in the state’s north-east.

<table>
<thead>
<tr>
<th>Disease resistance comparisons</th>
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</thead>
<tbody>
<tr>
<td>Anthracnose</td>
</tr>
<tr>
<td>Brown Spot</td>
</tr>
<tr>
<td>Grey Leaf Spot</td>
</tr>
<tr>
<td>Stem phomopsis</td>
</tr>
<tr>
<td>Beet Yellow Mosaic Virus</td>
</tr>
<tr>
<td>Cucumber Mosaic Virus</td>
</tr>
<tr>
<td>R Resistant</td>
</tr>
<tr>
<td>MR Moderately Resistant</td>
</tr>
<tr>
<td>MS Moderately Susceptible</td>
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</table>

Tested as WALAN2546
Released Spring 2019
EPR $3.00 + GST/tonne
Seed Availability AGT Affiliates, Retailers, Seed Sharing™
We want to make it easy for every grain grower in Australia to enjoy access to seed of our improved varieties.
AGT Affiliates are responsible for production, grading, sales and distribution of all our new and existing varieties. AGT Affiliates offer both wholesale and retail sales capacity and thereby growers can access seed of our varieties from AGT Affiliates directly, or through most agricultural merchandising retail stores. AGT does not sell seed direct to growers, nor does AGT earn any income from the sale of seed.

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An initiative first developed by AGT, Seed Sharing™ is a low cost way of introducing our improved genetics into your program. Seed Sharing™ is a licensed farmer to farmer trading scheme whereby grain of selected AGT varieties may be traded between farmers to use as seed.

Farmers who have grown a crop using commercial seed purchased from a recognised seed retailer or AGT Affiliate may sell seed to another farmer at a price or arrangement negotiated between them, providing they complete an AGT Seed Sharing™ License Agreement form. End Point Royalties are not charged on seed sold through Seed Sharing™.

Seed Sharing™ is allowed for all AGT wheat, durum, barley and lupin varieties except Clearfield® Plus wheat varieties.

For the full terms and conditions and to download the AGT Seed Sharing™ License Agreement visit: agtbreeding.com.au/sourcing-seed/seed-sharing
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