The highest yielding durum variety currently available

ADR quality classification

Very good physical grain characteristics with low screenings and high test weight

Early-mid maturity providing good adaptation in tough finishes to the growing season

Small improvement in crown rot resistance over other varieties

Good levels of black point resistance
Breeder’s comments

Bitalli™ (tested as AGTD088) 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 improved 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 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. Provisional pathology data suggests that Bitalli™ may offer a slight improvement in crown rot resistance over other 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 in the Southern Zone (SA/Vic) and produces grain with low screenings similar to 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.

Seed Availability

Commercial quantities of Bitalli™ may be available through AGT Affiliates, or your local retailer. Please consult the AGT website for AGT Affiliate contact details.

Bitalli™ is able to be traded between growers upon the completion of a License Agreement as part of AGT’s Seed Sharing™ initiative.

PBR and EPR

Bitalli™ is protected by Plant Breeders Rights (PBR) and all production (except seed saved for planting) is liable to an End Point Royalty (EPR), which funds future plant breeding. Bitalli™ growers will be subject to a Growers License Agreement that acknowledges that an EPR of $3.50/tonne + GST has to be paid on all production other than seed saved for planting.
Yield

Bitalli has set a new yield benchmark in the Southern durum growing regions, outperforming other commonly grown varieties (Figure 1).

Figure 1  Predicted YIELD of Bitalli across Southern durum growing environments

Source / NVT long term MET analysis, DURUM TRIAL SERIES 2014-2018
Physical Grain Quality

Bitalli has an ADR quality classification for the Southern Zone (SA/Vic). Sound grain size and weight are regarded as very important traits to have in a durum variety, and over two years of NVT testing in SA/Vic, Bitalli has on average produced grain with lower screenings and higher test weight than other commonly grown varieties (Figures 2 and 3).

**Figure 2  SCREENINGS of Bitalli versus comparators**

Source / NVT DURUM TRIAL SERIES 2017-2018 (SA/Vic sites)  
- All (11 Sites)  
- 2017 (6 Sites)  
- 2018 (5 Sites)

**Figure 3  TEST WEIGHT of Bitalli versus comparators**

Source / NVT DURUM TRIAL SERIES 2017-2018 (SA/Vic sites)  
- All (11 Sites)  
- 2017 (6 Sites)  
- 2018 (5 Sites)
Standability

Limited data from AGT trials in the high yielding season of 2016 showed that Bitalli® had improved resistance to lodging than Saintly® and Hyperno®, while not quite as good as Aurora® (Figure 4).

**Figure 4  LODGING resistance of Bitalli® versus comparators**

Source / AGT durum trials 2016. High yielding sites, where lodging was evident. Trial mean yield in brackets. Scale: 1 = Standing vertically 9 = Fully lodged on the ground
**Disease Resistance**

The disease resistance ratings for Bitalli® are comparable to most other commonly grown durum varieties, however it has a preliminary rating of S to crown rot versus SVS and VS ratings for other varieties.

**Table 1  Variety comparisons**

<table>
<thead>
<tr>
<th>Disease Resistance</th>
<th>Bitalli®</th>
<th>Aurora®</th>
<th>Hyperno®</th>
<th>Saintly®</th>
<th>Spes®</th>
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<tbody>
<tr>
<td><strong>Stem Rust</strong></td>
<td>MR</td>
<td>RMR</td>
<td>RMR</td>
<td>MR</td>
<td>RMR</td>
</tr>
<tr>
<td><strong>Stripe Rust</strong></td>
<td>RMR</td>
<td>RMR</td>
<td>MR</td>
<td>MR</td>
<td>RMR</td>
</tr>
<tr>
<td><strong>Leaf Rust</strong></td>
<td>MR</td>
<td>R</td>
<td>RMR</td>
<td>MRMS</td>
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<tr>
<td><strong>Yellow Leaf Spot</strong></td>
<td>MRMS</td>
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<td>MRMS</td>
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<tr>
<td><strong>Septoria tritici Blotch</strong></td>
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<td>MRMS</td>
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<td><strong>Crown Rot</strong></td>
<td>S</td>
<td>VS</td>
<td>SVS</td>
<td>VS</td>
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<tr>
<td><strong>CCN</strong></td>
<td>MS</td>
<td>MSS</td>
<td>MS</td>
<td>MS</td>
<td>MRMS</td>
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<tr>
<td><strong>Black Point</strong></td>
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<td>MSS</td>
<td>MS</td>
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<td>MS</td>
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<tr>
<td><strong>Maturity</strong></td>
<td>Early-Mid</td>
<td>Mid</td>
<td>Mid</td>
<td>Early</td>
<td>Early-Mid</td>
</tr>
</tbody>
</table>

**Source / NVT and AGT data.**

R  Resistant  S  Susceptible  Source / NVT and AGT data.
MR Moderately Resistant  VS Very Susceptible
MS Moderately Susceptible  * Provisional ratings
Disclaimer / The information contained in this brochure is based on knowledge and understanding at the time of writing. Growers should be aware of the need to regularly consult with their advisors on local conditions and currency of information.