Australian barley growers have built an international reputation for producing high quality, clean and food safe grain which is highly sought after worldwide.
A reputation for quality

Australian barley is in high demand globally for use in beer brewing, distilling and as a high quality, clean animal feed.

Australia produces two-row spring barley that is plump and bright with moderate protein content. Harvested grain has low moisture content with long storage viability and is highly regarded globally by malting, brewing, distilling, shochu and feed industries. Australian malting barley has a strong reputation because of its quality characteristics and versatility to suit different end-product uses. Australian barley grain has a high germination rate with uniform malting characteristics. Accredited varieties produce malt with an excellent level of extract and a range of enzyme levels to suit different style end-products.

Growing barley in Australia

Barley is integral to Australian crop farming
- Adaptable
- High yield potential
- Strong demand

On average, more than 9 million metric tonnes (mmt) of barley is produced across 4 million hectares (see Table 1). 30-40% of the yield achieves malting grade, with the remainder used for human consumption or stock feed.

Growing through Australia’s winter months, barley is rotated with other crops including wheat, canola, oats and pulses.

At a glance
- There is strong international and domestic demand for Australian barley because of its excellent malt and feed qualities.
- Australia is a major barley exporter, supplying 30-40% of the world’s exported malting barley and 20% of global feed barley.
- New malting barley varieties are evaluated and accredited through a voluntary scheme managed by Barley Australia.

In Australia’s spring months (September to November), barley crop harvesting begins in the country’s northern regions. The harvesting season usually finishes during December in Australia’s southern areas.

Research and development

Australian grain breeding organisations develop new barley varieties that are high yielding, well adapted and have specific qualities that meet customer requirements (see Table 2).

In collaboration with the Australian industry, AEGIC conducts in-market and laboratory research to ensure the Australian industry understands and can meet customer requirements.

Table 2 Australian barley varieties

<table>
<thead>
<tr>
<th>Malting grade</th>
<th>Bass</th>
<th>Flinders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baudin</td>
<td>GrangeR</td>
<td>La Trobe</td>
</tr>
<tr>
<td>Buloke</td>
<td>Commander</td>
<td>Scope CL</td>
</tr>
<tr>
<td>Fairview</td>
<td>Westminster</td>
<td></td>
</tr>
</tbody>
</table>

Food grade
- Hindmarsh

Varieties under evaluation (due March 2018): Compass, Spartacus
For the full list of all accredited varieties, please visit the Barley Australia website.
Pilot Malting Australia

The Australian industry has access to Pilot Malting Australia, Australia’s first national pilot malting facility.

Located at Edith Cowan University in Perth, Western Australia, the pilot malting plant has been specifically designed to simulate commercial malting practice and consists of one universal chamber that caters for steeping, germination and kilning. Pilot Malting Australia provides capacity to evaluate pre-released barley lines, a platform to improve pathway to market and equipment for industry research.

Major markets for Australian barley

Australia is a major malting and feed barley exporter, accounting for 30–40% of the world’s exported malting barley and 20% of global feed barley exports.

**Figure 2** Major markets for Australian barley

Four calendar year average up to 2016

Source: ABS

<table>
<thead>
<tr>
<th>Country</th>
<th>Value (AUD)</th>
<th>Barley (tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>$1.58 billion</td>
<td>5,271,949 tonnes</td>
</tr>
<tr>
<td>Japan</td>
<td>$187 million</td>
<td>638,000 tonnes</td>
</tr>
<tr>
<td>U.A.E.</td>
<td>$56 million</td>
<td>201,000 tonnes</td>
</tr>
<tr>
<td>China</td>
<td>$568 million</td>
<td>3,148,000 tonnes</td>
</tr>
<tr>
<td>Vietnam</td>
<td>$10 million</td>
<td>33,000 tonnes</td>
</tr>
<tr>
<td>Kuwait</td>
<td>$41 million</td>
<td>156,000 tonnes</td>
</tr>
<tr>
<td>Oman</td>
<td>$11 million</td>
<td>39,000 tonnes</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>$290 million</td>
<td>1,064,000 tonnes</td>
</tr>
<tr>
<td>South Africa</td>
<td>$21 million</td>
<td>58,000 tonnes</td>
</tr>
<tr>
<td>Other Markets</td>
<td>$37 million</td>
<td>120,000 tonnes</td>
</tr>
<tr>
<td>Australia</td>
<td>$370 million</td>
<td>1,064,000 tonnes</td>
</tr>
</tbody>
</table>
End uses

Australian barley is well-suited to malt production (mostly for beer brewing), animal feed and in the distillation of spirits such as malt whiskey and Japanese shochu.

Unmalted barley for human consumption is relatively minor, but growing. There is also some interest in using raw barley for enzyme brewing.

Malting varieties

New barley varieties in Australia undergo a rigorous evaluation process before they gain accreditation and classification.

To gain official malting accreditation, new barley varieties are reviewed for characteristics including quality, agronomic performance and disease resistance. Varieties are then appraised for commercial processing capabilities.

Barley Australia sets the accreditation standard and manages Australia’s malting barley evaluation process. The Malting and Brewing Industry Barley Technical Committee (MBIBTC), which is part of Barley Australia, is the Australian body for assessing malting barley varieties and determining whether a variety meets international and/or domestic criteria. Barley Australia publishes a list of accredited varieties and those currently under evaluation. The list is updated annually and can be viewed at www.barleyaustralia.com.au

Each malting barley variety displays different traits which suit particular growing conditions, with characteristics determining which variety is grown. These include:

- Physical quality
- Yield potential
- Disease resistance
- Maturity length
- Adaptation

Availability of new varieties allows growers to select that which best suits their farming operations. This results in periodic transition (when necessary) between malting varieties and the volume that is available for domestic and international customers.

Malting quality characteristics

Australia produces a selection of malting barley varieties that are bright, with high hectolitre weight and moderate protein. Australian barley varieties are versatile with quality characteristics that suit a range of processing requirements and beer styles.

Feed barley

Australian barley is well suited for animal feed, including all types of poultry. Australian feed barley is low in mycotoxin contamination with good nutritional attributes and energy content. Australian barley has higher fibre than some other feed grains, which can be beneficial for gut development and function.

This Australian Barley Grain Note is proudly supported by Barley Australia