Joint Statement from:
Barley Australia
Grains Industry Market Access Forum
National Working Party on Grain Protection
Grain Producers Australia
Grain Growers Limited
InterGrain
Seednet

Industry Update on Market Access for IMI tolerant barley varieties
29 March 2019

Key Messages

1. It is recommended that growers carefully consider the use of imidazolinone chemicals on their IMI tolerant barley varieties (Spartacus CL or Scope CL).
2. Industry is working with key markets (such as South Korea and Japan) to establish appropriate import tolerances for imazamox, imazapic and imazapyr.
3. Growers should be mindful of their intended grain sales options for the 2019 harvest. There will potentially be a requirement for a commodity vendor declaration process. Growers are encouraged to contact their local grain traders for further information.

Important Information for Growers

Establishment of MRLs for use of imidazolinone chemicals on Australian barley for some markets where an MRL currently does not exist requires extensive data as part of an Import Tolerance submission. This process takes some time and is not always successful. It is highly probable that suitable MRLs for some key markets may not be available, if approved, by the 2019 barley harvest.

It is recommended that growers carefully consider the use of imidazolinone chemicals on their IMI tolerant barley varieties (Spartacus CL or Scope CL).

Growers should be mindful of their intended grain sales options for the 2019 harvest. It is expected that some bulk handers and grain traders will increase their focus on the residue status of barley received from growers. This will potentially include requiring a commodity vendor declaration from the grower on the use of imidazolinone chemicals and potential receival site segregation of Spartacus CL or Scope CL.

The Australian barley industry has a good record of compliance with market requirements. To maintain this strong performance, the industry needs to work together to consider recommended management practices and market plans to ensure continued access to our international markets in the coming season.
The Broader Issue

The Australian grain industry is heavily reliant on export markets. It is not unusual for export country Maximum Residue Limits (MRLs) to not align with Australian MRL's. The supply of barley requires industry wide management to ensure we continue to meet regulatory requirements for MRLs both domestically and internationally.

Unfortunately, the situation may occur where a grower complies with the chemical label directions for use of registered chemicals in Australia for barley and the harvested barley meets the Australian MRL, but it exceeds particular international market MRLs. In this instance supply of the barley to that market cannot occur and the barley must be sold into an alternative market or used domestically.

Globally there is heightened vigilance on chemical residues in grain. Consequently, many of our international markets are increasing their monitoring of chemical residues on imports. Exporters of grain are required to meet importing country MRLs. Therefore, the Australian barley industry must carefully manage the use of particular chemicals to ensure we do not violate our customers MRLs, which could potentially jeopardise future market access.

Initiatives to Assist Industry Compliance with MRLs

A number of activities are being undertaken to assist industry to comply with international market MRLs and to protect our market access. These activities assist in ensuring growers have access in the longer term to the IMI tolerant barley varieties, which helps support a profitable Australian grains industry:

1. BASF and the Australian Government have approached the Japanese authorities to establish an import tolerance for imazapyr.

2. BASF is also submitting an import tolerance application to South Korean authorities.

3. Bulk handlers and barley grain traders are undertaking increased measures to ensure varieties are segregated and to confirm the residue status of grain received. An increased focus on stock selection following sampling and testing for chemical residues is occurring to minimise the risk of any MRL breaches on out-turned grain.

4. Breeders of IMI tolerant barley varieties are providing further grower stewardship programs to help ensure the ongoing correct use of the chemicals.

Imidazolinone Tolerant Barley Situation

The Australian barley breeding industry has previously released two imidazolinone (IMI) tolerant barley varieties Spartacus CL and Scope CL. Growers have rapidly adopted these varieties resulting in the potential for over 50% of the Australian barley crop to be planted with these two varieties in 2019.
Imidazolinone Tolerant Barley Situation Continued

In Australia, two herbicide products containing imidazolinone are registered for use post-emergence on IMI tolerant barley; Intervix® herbicide and Intercept® (both containing imazapyr and imazamox) and one product containing imidazolinone is registered for pre-emergence only – Sentry® herbicide (containing imazapyr and imazapic). There are no other imidazolinone herbicides registered for use on barley.

While some markets default to Codex standards for chemical MRLs, in recent years some markets have established their own MRL standards, which may not list MRLs for some chemical products on all commodities. Codex may not have an MRL for all chemicals and commodities such as barley.

The Australian MRLs for imazapyr, imazamox and imazapic in comparison to some of our barley export markets and Codex are in the table below:

<table>
<thead>
<tr>
<th>Barley grain</th>
<th>Australia</th>
<th>Codex</th>
<th>Japan</th>
<th>EU</th>
<th>South Korea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imazamox</td>
<td>0.05</td>
<td>0.02</td>
<td>0.01</td>
<td>0.05</td>
<td>0.01</td>
</tr>
<tr>
<td>Imazapic</td>
<td>0.02</td>
<td>-</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Imazapyr</td>
<td>0.7</td>
<td>0.7</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
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</tbody>
</table>

Supply chains and barley grain traders implement a range of measures to ensure that barley supplied to domestic and international markets meet regulatory and contractual requirements. Results of post-harvest chemical residue testing programs implemented on grain held in storage following receipt from growers have indicated that in some instances, detections of residues of imazapyr in grain is at levels that exceed some markets such as the Japanese and South Korean MRLs (currently 0.01mg/kg).

In this situation Australian growers have correctly followed the label directions for these registered products. However, due to the legal right of importing countries to set their own MRL for these imidazolinone chemicals, the barley grain or malt has not been able to be supplied to those markets given the lower MRL that applies.

The Australian barley industry is aware of the benefits being provided by the IMI tolerant barley varieties. However, the increasing percentage of IMI tolerant barley being sown in the Australian barley crop makes it more challenging to meet the individual market requirements for quality and chemical residues on both barley grain (malting and feed) and malt.
Level of potential impact on Australia’s barley sales options

The export market is very important for Australia’s barley industry. The table below indicates the breakdown between markets that have an imazapyr MRL equivalent to Australia versus the percentage of export markets that have an MRL lower than Australia.

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<tbody>
<tr>
<td>Markets with MRL below</td>
<td>60%</td>
<td>70%</td>
<td>90%</td>
<td>69%</td>
<td>81%</td>
<td>93%</td>
</tr>
<tr>
<td>Australian MRL</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Markets with MRL</td>
<td>40%</td>
<td>30%</td>
<td>10%</td>
<td>31%</td>
<td>19%</td>
<td>7%</td>
</tr>
<tr>
<td>equivalent to Australia</td>
<td></td>
<td></td>
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<tr>
<td>Total Barley Exports</td>
<td>5,297,888</td>
<td>6,861,290</td>
<td>5,855,923</td>
<td>5,892,235</td>
<td>9,726,859</td>
<td>6,697,350</td>
</tr>
</tbody>
</table>

Whilst the domestic market utilises a significant share of the Australian barley production (average domestic demand is approximately 3.4mmt per annum), approximately 750,000t of this volume is used by the domestic malt industry for export malt, and consequently it also needs to adhere to international MRLs.