Australian growers and advisors have a responsibility to ensure chemicals are used in line with label instructions and that harvested crops do not contain chemical residues at above Maximum Residue Levels (MRLs).

MRLs are the maximum concentration of a crop protection product legally permitted in or on food, agricultural commodities or animal foodstuffs. They are intended to provide a measure of whether an agricultural chemical has been used in line with its label instructions. MRLs provide an important framework to allow crops to be traded within and between countries.

The use of paraquat herbicides, including GRAMOXONE and SPRAY.SEED in the lead up to harvest in canola, wheat or barley crops contravenes product labels, **is illegal** and **will lead to residue violations at above Australian and export MRLs**!

Illegal use patterns have the potential to threaten individual growers, their advisors and the entire Australian grain and oilseed industry.

**CANOLA (OVER THE TOP APPLICATIONS) = MRL VIOLATIONS**

Research trials indicate that using paraquat-based herbicides over the top of canola crops will lead to residues up to **134-times the Japanese MRL!** The Australian MRL for paraquat in canola seed is ZERO!

**CANOLA (APPLICATION WHILE SWATHING) = MRL VIOLATIONS**

Plot experiments indicate that using paraquat-based herbicides while swathing has the potential to result in detectable residues in harvested canola seed, breaching the Australian MRL. These variable results were observed using a 7.6m wide swather with a commercially available swather spray kit under controlled conditions. Residues levels could potentially be higher under commercial scale application conditions.

<table>
<thead>
<tr>
<th>Specimen code</th>
<th>Specimen type</th>
<th>Paraquat residues (mg/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10MT07-30</td>
<td>Canola seed</td>
<td>0.05</td>
</tr>
<tr>
<td>10MT07-35</td>
<td>Canola seed</td>
<td>0.08</td>
</tr>
<tr>
<td>10MT07-06</td>
<td>Canola seed</td>
<td>&lt;LOQ*</td>
</tr>
</tbody>
</table>

*LOQ = Limit of Quantification - 0.01mg/kg (paraquat cation)
**WARNING:** USING PARAQUAT IN CANOLA, WHEAT OR BARLEY CROPS WILL CAUSE RESIDUE VIOLATIONS

**BARLEY (OVER THE TOP APPLICATIONS) = MRL VIOLATIONS**

Research trials indicate that using paraquat-based herbicides over the top of barley crops will lead to residues at up to 28-times the Australian MRL.

**WHEAT (OVER THE TOP APPLICATIONS) = MRL VIOLATIONS**

Research trials indicate that using paraquat-based herbicides over the top of wheat crops will lead to residues at up to 12-times the Australian MRL.

**DO MRL BREACHES POSE A FOOD SAFETY RISK?**

Although MRLs are not intended to be a direct measure of food safety, through following labels and complying with MRLs, growers can ensure their crops are fit for sale as either food ingredients or animal feed.

**FOR MORE INFORMATION**


This document is intended only as a reference. It contains information that was accurate at the time of original publication, and given to the best knowledge of Syngenta, Grain Producers Australia, the Government of Western Australia and the Australian Oilseeds Federation, but which may become outdated over time. Such information shall not, as far as legally permissible, create any guarantee or representation of any kind or any liability against these organisations and shall not relieve the stakeholder-user from undertaking his/her own investigations and/or tests and seeking independent advice where appropriate. These organisations further assume no responsibility for errors or misspellings nor for updating or deleting outdated information in this document. © 2012 Syngenta Crop Protection Pty. Limited TN12/530.