KNOW THE MARKET IMPACTS OF YOUR CROP PROTECTION PRODUCT CHOICES

The success of the Canadian pulse industry relies on the ability to export the pulses produced in Canada. More than 85% of Canada’s pulse production is exported to feed the world, and the demands of the end user are becoming increasingly complex. Market access is important to the Canadian pulse industry, and growers play a key role in keeping the doors to export markets open. Growers are encouraged to review the information on the next page of this document before proceeding with their pulse crop management plans. The use of certain crop protection products may restrict marketing options due to missing or misaligned MRLs in the export market.

The chart on the next page of this document outlines the regulatory impediments and challenges to market access that can arise from using certain crop protection products. In addition to meeting the science-based regulatory requirements of our domestic and export markets, Canadian pulses must also meet the requirements of consumer acceptance. Buyers of Canadian pulses will reflect consumer acceptance of various production practices in addition to meeting government regulations on food safety, which govern trade.

Keep it Clean is a joint initiative of the Canola Council of Canada, Pulse Canada, Cereals Canada, Barley Council of Canada and Prairie Oat Growers Association, providing growers with resources for growing crops that meet the requirements of our domestic and export customers.
IMPORTANT INFORMATION FOR PULSE GROWERS

CROP PROTECTION PRODUCTS: WHAT ARE THE RISKS?
Late-season applications of herbicides, fungicides, insecticides or desiccants may result in residue levels found in the seed. Growers must take appropriate risk mitigation steps to ensure product residues remain below maximum residue limits (MRLs) set by regulatory agencies.

WHAT CAN YOU DO TO MITIGATE RISK?
Ensure product residues remain acceptable for both domestic and export customers by following these tips:

1. USE ACCEPTABLE PESTICIDES ONLY
   Only apply pesticides that are both registered for use on your crop in Canada and won’t create trade concerns.
   - Consult with your grain buyer to ensure the products you are using are acceptable to both domestic and export customers. Grain buyers have a good sense of which international markets may be sensitive to specific crop protection products and may restrict the use of certain crop protection products.
   - Refer to the Pulse MRL Advisory (below) for information on market considerations and classifications of specific crop protection products. Visit keepingitclean.ca for the most up-to-date information.

2. ALWAYS READ AND FOLLOW THE LABEL
   Always follow the label for application rate, timing and pre-harvest interval (PHI).
   - Rate: Follow the proper application rate to ensure the product is safe to use and won’t exceed the MRL.
   - Timing: Specific crop staging information is provided for the proper application timing. Follow label instructions and apply crop protection products only at the recommended crop stage.
   - Pre-harvest interval: The PHI is the number of days that must pass between spraying pesticides or desiccants and swathing or straight-cutting the crop. If the crop is harvested too soon, too much residue may remain on the grain and exceed the MRL.

IMPORTANT INFORMATION REGARDING THE PRE-HARVEST APPLICATION OF GLYPHOSATE
Glyphosate (e.g. Roundup) is registered for pre-harvest weed control and is not to be used as a desiccant. Pre-harvest glyphosate must only be applied when grain moisture content is less than 30% in the least mature part of the field to prevent unacceptable residues in the harvested grain.

When using glyphosate for pre-harvest weed control in a tank mix with other products, such as Saflufenacil (Heat™), glyphosate and the tank mix partner must still be applied when grain moisture content is less than 30% in the least mature part of the field and must also follow the pre-harvest interval (PHI) of the most restrictive product label.

In order to keep our export markets open, it is imperative to follow the application rate, timing and PHI on the label of glyphosate products. For more information, including proper application timing and resources, visit keepingitclean.ca/glyphosate.

PULSE MRL ADVISORY – UPDATED APRIL 2020

<table>
<thead>
<tr>
<th>CROP PROTECTION PRODUCTS</th>
<th>PEAS</th>
<th>LENTILS</th>
<th>CHICKPEAS</th>
<th>DRY BEANS</th>
<th>FABA BEANS</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Pre-harvest weed control</td>
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<tr>
<td>Glyphosate (e.g. Roundup)</td>
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<td>!</td>
<td>Glyphosate is registered for pre-harvest weed control and is not to be used as a desiccant. Pre-harvest glyphosate must only be applied when grain moisture content is less than 30% in the least mature part of the field to prevent unacceptable residues in the harvested grain. Growers are advised to consult with their grain buyer before using this product on pulse crops. Some grain buyers may not accept pulse crops treated with pre-harvest glyphosate due to scrutiny in the global marketplace and low MRLs for some pulse crops in certain major markets.</td>
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<td>B. Desiccant</td>
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<td>Diquat (e.g. Reglone)</td>
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<td>!</td>
<td>Growers are advised to consult with their grain buyer before using this product on pulse crops. MRLs are established in most major markets but are set at low levels in the U.S.</td>
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<tr>
<td>Glufosinate - Western Canada (e.g. MPower Good Harvest)</td>
<td>NR</td>
<td>X</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>Growers are advised to not use glufosinate on lentils as a crop desiccant. There is an elevated risk of MRL-related trade disruption due to missing or very low MRLs in most major markets. Treated lentils will not be accepted by grain buyers.</td>
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<tr>
<td>Glufosinate - Eastern Canada (e.g. Ignite)</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
<td>!</td>
<td>NR</td>
<td>Growers are advised to consult with their grain buyer before using this product on dry beans in Eastern Canada. MRLs are missing or set at low levels in most major markets.</td>
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</table>

Be informed. Treated pulse crops may not be accepted by some grain buyers. Consult with your grain buyer before using this product.

Do not use. There is an elevated risk of MRL related trade disruptions. Treated grain will not be accepted by grain buyers.

Not registered. Only use registered product.

For more tips and tools to help you grow a market-ready crop, visit keepingitclean.ca.