KNOW THE MARKET IMPACTS OF YOUR CROP PROTECTION PRODUCT CHOICES

More than 85% of Canada’s pulse production is exported to feed the world. Market access is important to the Canadian pulse industry, and growers play a key role in keeping the doors to export markets open. Pulse growers need to know that the use of certain crop protection products may restrict marketing options. Growers are encouraged to review all of the following information before proceeding with their pulse crop management plans. Guidelines for specific products are available on the last page of this document.
IMPORTANT INFORMATION FOR PULSE GROWERS

The success of the Canadian pulse industry relies on the ability to export the pulses produced in Canada. The demands of the end user are becoming increasingly complex. The chart on the last page of this document outlines the regulatory impediments to market access that can arise from using certain crop protection products. In addition to meeting our customers’ science-based regulatory requirements, Canadian pulses must also meet the requirements of consumer acceptance. In addition to meeting government regulations on food safety which govern trade, buyers of Canadian pulses will reflect consumer acceptance of various production practices.

WHAT ARE THE CROP PROTECTION PRODUCTS TO PAY ATTENTION TO THIS SEASON?

For pulse crop production in Western Canada, products that may pose market risks include diquat (Reglone®), glyphosate (Roundup®), saflufenacil (Heat®), glufosinate (MPower® Good Harvest®), flumioxazin (Valtera™), carfentrazone (Aim®, CleanStart®), and chlorpyrifos (Lorsban™ and other trade names).

WHAT ARE THE RISKS OF USING THESE PRODUCTS?

Late-season applications of fungicides, insecticides, pre-harvest weed control products, 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.

IMPORTANT INFORMATION REGARDING THE PRE-HARVEST APPLICATION OF GLYPHOSATE ON ALL PULSE CROPS

The pre-harvest application of glyphosate is important for three reasons:

1. Glyphosate use in general and specifically pre-harvest use is under increased scrutiny by customers of the Canadian pulse industry.
2. Pre-harvest glyphosate must only be applied to pulse crops when seed moisture content is below 30% to avoid residue levels greater than the maximum allowable limit.
3. A growing number of markets are testing pulse imports for glyphosate residues. In order to keep our export markets open, it is imperative to follow the application rate and timing as indicated on the label of glyphosate-based crop protection products. Glyphosate is registered for pre-harvest weed control. Glyphosate is not a desiccant nor is it a tool to speed up crop maturity or dry-down. Pre-harvest glyphosate must only be applied to pulses when seed moisture content is below 30% in the least mature plants in the field. When using glyphosate in a tank mix with other products such as saflufenacil (Heat™), glyphosate and the tank mix partner must still be applied when seed moisture content is below 30% in the least mature plants in the field.

WHAT CAN YOU DO TO MITIGATE RISK?

Ensure product residues remain at trace levels or levels well below accepted maximums by following these steps:

1. DO NOT EXCEED THE PRODUCT’S LABELLED RATE

Application guidelines for individual pesticides are set to allow growers to properly use the product. Guidelines assume that the labelled rate is not exceeded. Exceeding the labelled rate increases the risk of surpassing recognized MRLs and this can have serious consequences in terms of international acceptance of the crop.

2. TIME THE APPLICATION ACCORDING TO THE LABEL

Labels are very specific in terms of crop staging. Follow label instructions and apply crop protection products only at the recommended crop stage.

3. CONSULT WITH YOUR EXPORTER/PROCESSOR ABOUT WHICH CROP PROTECTION PRODUCTS ARE ACCEPTABLE IN INTERNATIONAL MARKETS

Exporters/processors have a good sense of which markets may be sensitive to specific products, and may restrict their purchases to crops that conform with buyer specifications.

4. CONSULT THE CHART ON THE FOLLOWING PAGE INDICATING MARKET CONSIDERATIONS AND STATUSES FOR SPECIFIC PRODUCTS, OR VISIT WWW.KEEPINGITCLEAN.CA
**MARKET CONSIDERATIONS FOR USE OF PULSE CROP PROTECTION PRODUCTS – MARCH 2019 UPDATE**

### CROP PROTECTION PRODUCTS

#### A. Pre-harvest weed control

**Glyphosate** *(e.g. Roundup)*

<table>
<thead>
<tr>
<th>CROP PROTECTION PRODUCTS</th>
<th>PEAS</th>
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<th>CHICKPEAS</th>
<th>DRY BEANS</th>
<th>FABA BEANS</th>
<th>COMMENTS</th>
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<tbody>
<tr>
<td><strong>ATTENTION!</strong> Pre-harvest glyphosate must only be applied to pulse crops when seed moisture content is below 30% to prevent residue levels greater than the maximum allowable limit. Consult page 2 of this document for more information.</td>
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<td>Product is restricted to pre-harvest weed control and is not registered for use as a crop desiccant. Consult with your exporter/processor before using this product for certain crops/destinations. MRLs are established in key markets. However, MRLs are set at very low levels for dry beans in the EU, and all pulse crops in South Korea.</td>
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#### B. Desiccant

**Diquat** *(e.g. Reglone)*

- NR

**Saflufenacil** *(e.g. Heat)*

- NR

**Glufosinate** *(e.g. MPower Good Harvest)*

- NR

**Carfentrazone** *(e.g. Cleanstart, Aim)*

- NR

**Flumioxazin** *(e.g. Valtera)*

- NR

Consult with your exporter/processor before using this product. MRLs are established in the EU, US and Japan, but not at CODEX.

#### C. Other crop protection products

**Chlorpyrifos Insecticide** *(e.g. Lorsban, other trade names)*

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<td>If applied according to label rates early in the crop year at vegetative stage or during flowering, there’s no need for caution. In cases of late-season application during pod development or seed fill to maturity (e.g. for late-season grasshopper control), consult with your exporter/processor.</td>
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**Benzovindiflupyr Fungicide** *(e.g. Elatus, Solatenol)*

- NR

For dry beans and peas, MRLs have been established for all major export markets. For chickpeas, lentils, and faba beans, CODEX MRLs have not been established. If applied according to label rates and only early in the crop year (e.g. single application at 0-20% flowering,) there are no export marketing issues. For chickpeas, lentils, and faba beans, do not apply later than the 20% flowering stage.

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*No regulatory issues.*

*Know your market. There is at least one market where MRLs are not established. Consult with your exporter/processor.*

*No regulatory issues when applied according to label. Always consult with your exporter/processor prior to application.*

*Do not use after 20% flowering.*

*Not registered. Only use registered product.*

*This product is not registered for pre-harvest use on green lentils.*