Maximum Residue Limit for Pesticides
Overview

Alberta Agronomy Update 2016

Carol Saunders, January 19 2016
What are MRLs?

- Maximum Residue Levels (MRLs) are the highest residues legally allowed to be in/on food items after use of pesticides according to label directions.
- MRLs indicate proper use of pesticides.
- MRLs are determined to be safe for consumers, but are not the safety level.
Why Do We Need MRLs?

- Food is traded around the world more than ever before, and MRLs are trading standards.
- Countries are increasing monitoring of imported food items.
- If MRLs are not harmonized, or are missing, there is a potential trade barrier.
How Do You Get MRLs?

- Residue trials test the “worst case” labelled use directions (highest application rate, shortest interval between applications, max number of applications, and shortest Pre-Harvest Interval).

- Residue levels from trials are used to calculate MRLs.

Conduct Residue Trials
Submit to appropriate Authorities as part of registration
Authorities Review Studies and Calculate MRLs
MRLs are published to support use of the chemical
How do we get an Import Tolerance (IT)?

- An IT is an MRL based on foreign residue data that facilitates trade.
- Only some authorities (countries in green) have a process to establish ITs.

Countries with Import Tolerance Processes
What is Codex?

- The Codex Alimentarius Commission was established by WHO and FAO to develop international food standards covering all world diets.
- It is not a regulatory body, and its standards are voluntary, including Codex MRLs, called CXLs.
- CXLs are very important for countries without a well developed MRL system.
What is a Default MRL?

- Some countries use a Default MRL when no MRL has been established for the chemical-commodity combination.
- Who uses an official Default MRL?
  - European Union (0.01 ppm)
  - Japan (0.01 ppm)
  - Canada (0.1 ppm)
  - Korea (0.01 ppm in 2017)
Challenges to MRL Harmonization

- **Registration Timing**: Time to obtain registrations and ITs vary
- **Crop Differences**: Crop Groups differ, Crops not grown everywhere
- **GAP (use directions)**: Pest pressure differs around the world, so uses (and residues) may differ
- **Regulatory Data**: Requirements differ by country, Data may be interpreted differently by authorities
Current Canadian Examples of MRL Challenges

   - Codex MRL established, however no MRL for the United States established in 2015 or 2016.
   - Growers interested in using this product should talk to their grain buyer before using this product and accurately declare if grain has been treated with this product when delivering.
2. Canola. Quinclorac is the active ingredient in several current and historic products including Accord and Clever.

Canola Council Advises Against Using Quinclorac in 2016

January 11, 2016 – The Canola Council of Canada is continuing to advise against use of quinclorac on canola because of ongoing questions about residue limits in one of our largest export markets.

Until these questions are resolved, growers should use other options to control cleavers on their farms. More information about herbicide and agronomic solutions can be found by contacting a Canola Council agronomist. If growers have used quinclorac on their canola in 2015, they should contact their local elevator or processor to discuss options.
3. Pulse Crops. Use of crop dessicants/harvest management tools


- In 2015, there were 6 dessicants of concern (e.g. diquat, glyphosate, glufosinate, saflufenacil, flumioxazin and carfentrazone).

- Document outlines the risks and provides suggested mitigation activities (e.g. follow the label (application rate and timing), consult with the exporter/processor, and refer to chart outlining market considerations and status for specific products for EU, Japan, US and Codex).
In Summary, MRLs are...

- **Necessary**
  - Ensure proper use of crop protection products
  - Allow trade of commodities with residues

- **Complex**
  - Regulations differ between countries
  - Regulations and interpretations change

- **Often not Harmonized**
  - Challenges in crop grouping
  - Challenges in data review and timing
CropLife Canada activities

• **CODEX**
  – CLC is working with government regulators and grower’s groups to nominate pesticides for CODEX MRLs.
  – Working with like-minded organizations to advocate for reforms at CODEX, seek efficiencies
  – Canada does not defer to CODEX.

• **OECD Joint Reviews**
  – “Global” submissions now commonplace for new actives
  – Same data package, equal access for growers and MRLs aligned most of the time
  – Advocate for more participation and even better sharing of workload
CropLife Canada activities

• Communication with government
  – CLC works with the PMRA on topics such as residue data generation and MRLs. For example, efforts in developing regulatory science in the areas of residue proportionality and residue exchangeability.
  – Our ultimate aspiration is one truly Global residue GAP that can be submitted simultaneously in all countries to ensure MRL harmonization.
  – Regulatory Cooperation Council (RCC) and NAFTA

• Communication with public / stakeholders
  – Correcting misinformation about MRLs and residues in food
  – Various fora such ACS, California specialty crops meeting, Spring Dialogue days, Minor Use Summits, etc.
  – Secondary standards are very problematic
CropLife Canada activities

• Communication with growers
  – An open communication channel with key export grower groups is key to the success of MRL harmonization.
  – Communication to registrants regarding crop/product, acreage, developing export market (country, value) and anticipated growth in new export markets is critical to ensure that the registrants (CLC members) are aware of the needs and plans within the value chain.
  – Communication from registrants regarding MRL landscape and chemistry properties – consideration of multiple factors
  – Participation in the MRL Task Force
  – CLC members have created a flow chart which assists grower groups in deciding when to ask for the registrant’s technical support in understanding MRL values and risks for trade.
• Despite many ongoing efforts to harmonize MRLs, it is a very complex issue. Overcoming the challenges associated with harmonizing MRLs is critical to supporting global trade of agricultural commodities.

• Global MRL harmonization is a much more political issue than a regulatory technical issue. Therefore, CLC believes that communication, partnership and cooperation between growers, ag industry and regulators are critical to everyone’s success.

• CLC supports risk-based evaluations to address any particular trade concerns within the value chain in regards to MRL discrepancies.
QUESTIONS?

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