Strategy for International Development of Crop Protection Products

- Navigating the MRL Maze

CLA RISE Spring Conference 2018
Trading Up: How Crop Protection Influences Agricultural Exports

Carmen Tiu, April 26, 2018

Low risk sensitivity
Presentation Outline

1. MRL & IT Strategy during Product Development
2. Trade considerations
3. Global MRL & IT Map
4. Navigate the MRL Maze post-registration
MRL & Import Tolerance Strategy
During Product Development

- **Discovery**
  - Biology profile (GAP)
  - Business concepts: crops x countries *(MRL for domestic uses)*

- **Pre-Development**
  - Trade analysis – Trade maps *(Global MRL & IT map)*
  - Timelines for MRL & IT *(Gantt charts)*

- **Development**
  - Registration submissions *(primary submissions)*
  - Codex MRL & IT setting

- **Commercial**
  - Label extensions *(secondary entries, new use MRL & IT)*
  - Food-chain sheets *(include MRL, PHI data)*
2. Trade Considerations

UN- COMTRADE, confirmed by business units, and food-chain

https://comtrade.un.org/

Typically averages of last 5 years trade (by volume, and value)
Top 10 countries, or summing-up to 95% of the trade
Will trigger planning resources for Import Tolerances
Prioritization is often needed to accommodate the approved budget
3. Global MRL & IT Maps

US Trade of Nuts (2011)
4. Navigate the MRL Maze

Post-launching: new uses MRL & IT, inadvertent MRL, default-MRL, etc.
Compliance with Multiple MRL Standards

Residue Decline Curves used for registration

Need confirmation from growers, as per their crop use practices

**EXAMPLE:**

**COFFEE** BEANS MAY BE TRADED AS

- **GREEN** BEANS (WITH SKIN/SHELL ON)
- **GREEN** BEANS (NO SKIN)
- **ROASTED** BEANS/ GROUND COFFEE (AS CONSUMED)
- **INSTANT** COFFEE

**ONE SET OF DATA, MAY PROMPT VERY DIFFERENT MRL STANDARDS**

- TO BE MONITORED FOR TRADE

WHICH STANDARD SHOULD A PRODUCER/IMPORTER FOLLOW?...
Insecticide - Coffee Beans (in shell)

<table>
<thead>
<tr>
<th>No. of Trials</th>
<th>Field or Glasshouse</th>
<th>Application Method</th>
<th>No. of Apps</th>
<th>Application Intervals</th>
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<tbody>
<tr>
<td>3</td>
<td>Colombia</td>
<td>Foliar Application</td>
<td>3</td>
<td>17 and 6 weeks</td>
<td>883 - 1046</td>
<td>Parent</td>
</tr>
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MRL Current
- Australia = 0.5 mg/kg
- EU, Norway, Switzerland, Taiwan, Turkey = 0.2 mg/kg
- New Zealand = 0.1 mg/kg
- ASEAN countries, Brazil, Codex, Hong Kong, Indonesia, Japan, Korea, Russia, Vietnam = 0.05 mg/kg

Authorities have established MRLs based on the Good Agricultural Practices represented by these data. Any use of these data for other purposes such as reduced application rates or extended pre-harvest intervals are the sole responsibility of the user and Corteva makes no warranty as to the reliability of these data when used for those purposes.
### Insecticide - Coffee Beans (no shell)

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Insecticide on **Roasted Beans & Instant Conee**

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Further Needs

IMPORT TOLERANCES
• Exponential increase in demand, along with trade increase is not sustainable
• Recognition of production country MRL as IT in importing country is key
  • Based on acceptable risk to consumers in importing country
  • APEC Guideline 2016 is a great precedent, implemented in a few countries

MISSING MRL
• Tolerance Exemption implementation beyond USA
• Tolerances for inadvertent uses (successive crops) outside of USA
• Tolerances for food-handling uses outside of USA, Australia & New Zealand
• Import Tolerance regulations in key countries (China, Brazil)
Further Needs to “Trade-Up”

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…Food… for thought!
Thanks!
Questions?...
Comments?...

Lessons Learned:
Learn your global standards
Learn the differences
Address the gaps
Be a maze runner &
Enjoy your meals!

Contact
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