



Improving the Linkage between Global MRL Standards and Growers

A Collaboration between Bryant Christie Inc. and Agrian, Inc.

Presented to

MRL Harmonization Workshop June 3, 2015 San Francisco, CA

Outline

- 1. Background
- 2. The Need for Better MRL Awareness
- 3. Solution: MRL Export Review Tool
- 4. Project Status
- 5. Questions





Bryant Christie Inc.

Bryant Christie Inc. helps organizations open, access, and develop international markets. Founded in 1992, we focus on the agricultural, food, and beverage sectors.

Global MRL Data Overview

- Since 1992 BCI has provided regulatory MRL database solutions
- Key benefits are BCI's MRL data accuracy, detailed notes, and transparent global

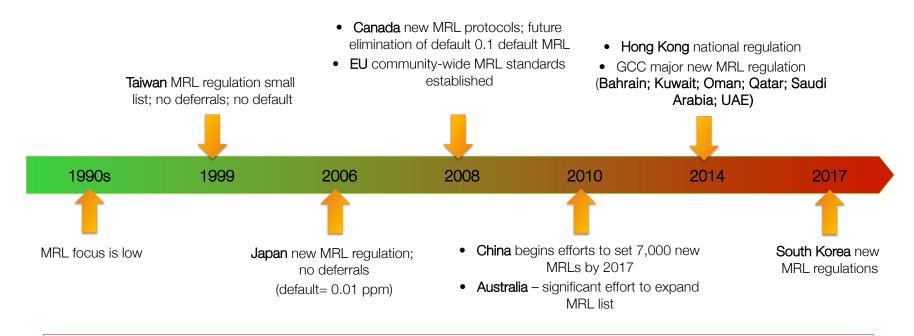




- Launched in February 2015 to replace mrldatabase.com
- Over 100 markets, 800 active ingredients, and 700 commodities
- General, default, pending, and proposed MRLs, as well as exemptions
- Regulation notes and names, effective dates, and residue definitions



INCREASED FOCUS ON MRLS IN GLOBAL TRADE

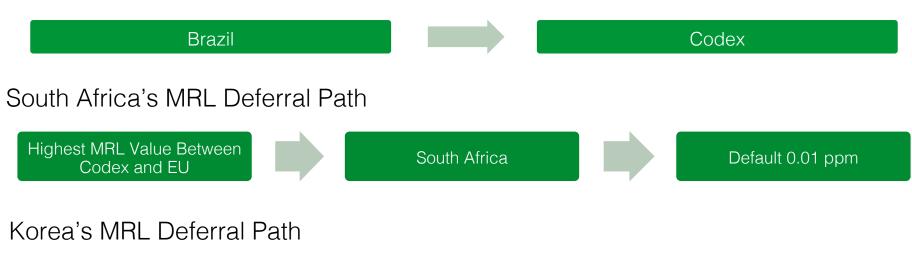


Other markets with new MRL regulations pending: Mexico; Morocco; Peru, Dominican Republic



MRL DEFERRAL PATHWAY VARIATIONS

Brazil's MRL Deferral Path





MRL VIOLATIONS AND CONSEQUENCES

Japan:

- •256 pesticide violations since Jan 1, 2014
- US violations on blueberries and crushed red pepper
- Previous violations on soybeans, lettuce, citrus, and numerous others
 - 100% "test and hold" consequences with two violations

United States:

- Carbendazim residue detections in Brazilian orange juice concentrate in 2012
 - No US MRL for Carbendazim on oranges
- Front page of the NY Times media problems

Taiwan:

- Violations by US potatoes, nectarines, grapes, spinach
- Several US violations in 2014. All publicized and accompanied by media stories

South Korea:

A US cherry violation in 2010 led to increased testing for six years

European Union:

- 602 violations since Jan 1, 2014
- Eight violations on US product including baby carrots, almonds, and lentils
 - Previous violations by apples, grapes, and cranberries





AGRIAN SYSTEM AND REC WRITING TOOL

Agrian offers free and subscription-based Web-based solutions for Ag retailers, crop advisors, agronomists, growers, and food handlers/processors.

Agrian System

- Largest US crop protection, nutrient, and adjuvant database with an award winning mobile app.
- One of only two such systems in the world, includes over 8,000 labels and 320 manufacturers
- Broad field adoption in the US, it contains over 500 million acres of documented applications
- All major retailers use the system and work with Agrian

Agrian REC Writing Tool

- Allows crop advisors to enter and store product recommendations within the Agrian system
- Recommendations can printed or growers can access them directly from their Agrian system
- REC tool has direct access to over 8,000 labels from participating manufacturers.

DEMAND FOR BETTER GLOBAL MRL AWARENESS

- Grower demands have increased for better global MRL awareness
- Major AgChem retail's and independent crop advisors have requested that MRL data be incorporated into Agrian's REC writing tool
- Agrian approached BCI for its comprehensive MRL data





SOLUTION: MRL EXPORT REVEW TOOL

March 2014

Dear Supplier

Pesticide residue testing on food and feed crops continues to rise globally. Importing countries are steadily increasing the volume of commodities tested, as well as the number of chemicals for which they test. Therefore, any export-dependent agricultural commodity is vulnerable to issues related to maximum residue levels (MRLs) of crop protection materials. That being said, when it comes to liability mitigation and risk management, MRLs are rapidly becoming an issue that our collective customers will need to address.

The coalition of retail distributors listed intend to enter into an agreement with Agrian Inc. and Bryant Christie Inc. (BCI) to collectively develop and deploy an MRL "checking" tool for crop consultants. This tool will utilize the current Agrian recommendation (REC) writing system, but will not fall under current Agrian label data agreements.

While we will be asking all of our suppliers to eventually take part in this initiative, we would like to invite four of our top ten suppliers to comprise the core group for the initial planning and deployment of our MRL checking tool. As a leader in the industry, we want to give you an opportunity to be one of the first companies to collaborate with our coalition to address this issue.

As a next step, please respond back to Nishan Majarian at Agrian (nish@agrian.com), if you are interested in being one of the first four companies to join this effort. Once the initial four companies have been determined, representatives of Agrian and BCI will schedule a meeting in the month of December to discuss the "checking tool" envisioned by the signatories of this letter.

A. Nishan Majarian

We appreciate your participation in this effort.

Signed,

Cesar Anzola
Crop Production Services Inc

Stu E Suxandu

Steven E. Alexander

at fell

Patrick Menagh Independent Agribusiness Professionals

Dan Phillips
Simplet Grower Solutions

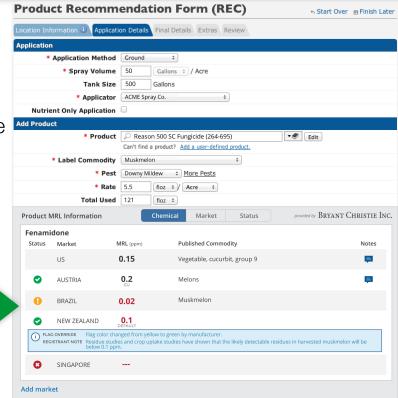
CPS, Helena, IAP, and Simplot are partners

- Signed a letter of support/agreement:
 - 1. MRL export review check solution be built into the REC writing system
 - 2. Requests that suppliers to take part in the program



OVERVIEW: MRL EXPORT REVIEW TOOL

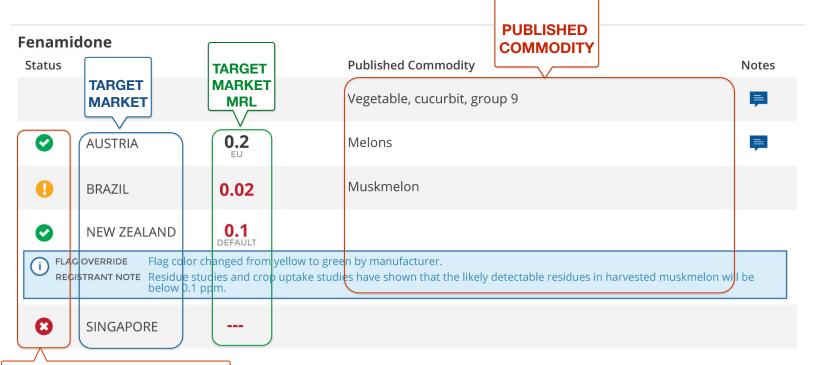
- A tool for Crop Advisors that helps prevent MRL export problems before they occur
- Prior to recommendation (REC) writing, target markets are indicated for each grower site
- The MRL Export Review Tool integrates with the Agrian REC system to cross-reference MRLs with each site's target markets

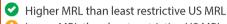






OVERVIEW: MRL EXPORT REVIEW TOOL





Lower MRL than least restrictive US MRL

No MRL in export market





MRL EXPORT REVIEW TOOL

- ✓ Only participating suppliers will have the MRL Export Review Tool service appear with their products
- ✓ Post-patent suppliers (generics) will require their own subscription
- ✓ MRLs will be updated continuously from the BCI GMRL Database
- ✓ Users can be directly linked to supplier help lines in the service



PROJECT STATUS

- 1. Initial planning began in 2013
- 2. System development underway
- 3. Bayer CropScience an initial partner
- 4. In discussions with other early adopters
- 5. System launch in early 2016









THANK YOU AND QUESTIONS

REC WRITING AND MRL EXPORT REVIEW SOLUTION

- ✓ MRL Violation Prevention
- ✓ Transparency
- √ Key Indicators
- ✓ Interpretation/Guidance
- ✓ Minimize Trade Disruption



