

# AGRI BOTANICA

NEWSLETTER

*STRENGTHENING PESTICIDE REGULATORY SYSTEMS AND EMPOWERING  
AGRICULTURAL INNOVATION*

## Global Regulatory Capacity Building Initiative (GRCBI)

ISSUE 2 - APRIL 2022



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## FROM THE DESK OF THE DIRECTOR

As if 2020 and 2021 weren't difficult enough already with the global pandemic, imagine if your country was being unjustly attacked by a crazy person... Our Secretary of State, Anthony Blinken (someone I am distantly related to, by the way!) stated it better than I possibly could, when he said: "In this time of uncertainty, we have a clear way forward: Help Ukraine defend itself. Support the Ukrainian people. Hold Russia accountable." While it seems that those of us on American soil, or others of us on the oldest, flattest, and driest inhabited continent (that's you, Australia) are far from the conflict in Ukraine, we should all take time to honor those who have been lost, and do our part in swapping the Stoli for Tito's in our drinks. Or better yet, navigate on over to <https://www.cidi.org/disaster-responses/war-in-ukraine/>, where US AID has a great deal of information on best way to help survivors and disaster relief efforts in Ukraine, and how you can help easily and swiftly by donating responsibly. We all stand with Ukraine.

**Interested in learning more about who we are** and what we do? Good news; our program details are finally available online! Our new website <<https://cersa.cals.ncsu.edu>> will give you access to not only our back catalogue of newsletters and workshop materials, but also information on internship opportunities for students, mentoring opportunities, upcoming workshop information, and much much more. Be sure to sign up for this newsletter and join us on social media while you are there.

**The GRCBI is pleased to announce** the availability of 4 new **Pesticide Training Modules**. This series of modules is accessible to anyone online at the CERSA website. There are 2 Evaluation of Dietary Risks modules where participants will learn about Hazard Identification, Dose Response Assessment, Risk Characterization, and Exposure Assessment as it applies to dietary risk. The Environmental Fate Assessment module explores the evaluation of pesticide risks which include considerations for what happens after a pesticide is released into the environment (environmental fate). This module explains how this is performed using Costa Rica as the example. And finally, the International Harmonization of MRLs module covers how pesticides and MRLs are established based on agricultural need of a crop or climate zone, not by individual countries. This particular training covers harmonization efforts undertaken by The Asia-Pacific Economic Cooperation (APEC), a regional economic forum established in 1989 to leverage the growing interdependence of the Asia-Pacific region.



I hope that you enjoy our newsletter and the exciting new information we have to offer. Protecting agriculture and harmonizing regulatory efforts is a big job, but we here at CERSA and the GRBCI are up for the task! Thanks for your support, and we look forward to sharing more impacts and stories with you next quarter.

Best, Danesha Seth Carley

### OUR MISSION

Our mission is to strengthen and empower pesticide regulatory systems to make science-based decisions through expert technical education for the benefit of farmers in the US and emerging nations to more freely market safer, higher quality food.

### OUR VISION

We envision a more optimized and efficient global regulatory system where growers, accessing the safest crop protection products, may trade freely without technical barriers.

# WEBSITE AND TRAINING MODULES

## WORKSHOPS and TRAININGS

## ACCESS TRAININGS

### Pesticide Risk Assessments

#### Assessing Pesticide Risk:

In the United States, the Environmental Protection Agency (EPA) is responsible for assessing the risk associated with pesticides and make decisions pertaining to registration and MRLs.

[ACCESS Dietary Risk M1 →](#)

[ACCESS Dietary Risk M2 →](#)

[ACCESS Environmental Fate →](#)

[ACCESS International Harmonization →](#)



### CURRENT TRAINING

Please follow the MRL Training to the left to access our current training.

In a four modules series you will learn about, **Evaluation of Dietary Risks, Environmental Fate Assessment, and International Harmonization of MRLs.**

These modules are presented by the EPA and FAS/USDA, but we will continue to provide information updates on other events that are being implemented.

We have been working hard to provide a website for the regulatory community to access the GRCBI portfolio of work. For more information, please visit:

<https://cersa.cals.ncsu.edu/grcbi/>.

In a four module series you can now access our trainings: **Evaluation of Dietary Risks, Environmental Fate Assessment, and International Harmonization of MRLs.**

These modules are presented by the **EPA** and **FAS/USDA** and brought to you by **GRCBI** and **IICA**.

These modules can be accessed individually and will coach participants through the series.

Each module is 30minutes – 1hour in length and is broken up into easily digestible videos. At the end of each module the participants will be tested for their retention of the training.

If you would like to access these modules, please follow the links at the bottom of this page.

[Dietary Risk Assessment](#)

[Environmental Risk Assessment](#)

[International Harmonization](#)

## WHAT'S NEW?



### EPA Posts Revised Draft: Malathion, Chlorpyrifos, and Diazinon is Open For Public Comment

On March 2<sup>nd</sup>, the U.S. Environmental Protection Agency (EPA) posted and is seeking public comment on the biological opinion (BiOp) for malathion, chlorpyrifos, and diazinon. These three organophosphate insecticides are commonly used to control foliage and soil insects.

In 2017, EPA released its biological evaluations for malathion, chlorpyrifos, and diazinon, which found potential effects on listed species and their critical habitats.

In 2019, EPA requested to reinstate a formal discussion on these pesticides to consider new information that was not available when the final BiOp was issued in 2017.

After the current public comment period, the EPA will assess the comments received and issue a new BiOp. If you would like to comment on these three pesticides, you can make comments for the next 30 days.

[Access Public Opinion →](#)



## MEET ROCIO DAVILA



### Our Newest Intern



One year ago, CERSA launched the country's first regulatory science internship and mentoring program to connect NC State University and LSU students to Industry and Governmental positions. This mentoring program is meant to prepare students to step into an agriculturally-focused regulatory science career, become better stewards of our environment, and to help make difficult decisions that will impact the most vulnerable populations.

CERSA is proud to introduce Rocio Davila; who will be working with the USDA–FAS team this coming summer.

"I am so excited about the upcoming opportunity that CERSA has put together for this summer at the Foreign Agricultural Service. As an international student with agricultural experience in South America, I am in a unique position to understand the challenges and significance of trade while protecting US agriculture from pests and diseases."

"This internship combines my training in entomology research with my prior international regulatory experience with similar agencies in Peru, and I look forward to achieving FAS goals and contributing to the growth of global agriculture." – Rocio Davila

### Rocio Davila

Master's student at  
NC State University in the  
Department of Entomology  
and Plant Pathology

## HIGHLIGHTED TEAM MEMBERS



### JANIE DUBOIS

Dr. Janie Dubois is a specialist in education for foreign governments on risk-based food safety systems and laboratory testing to verify compliance of food commodities with domestic and international regulations. She has taught students from some 60 countries and on the ground in 25 countries. Janie is involved in international efforts to harmonize the food safety regulatory environment to support the production and trade of safe food globally. As such, she is an International Advisor to the Africa Center of Excellence for Food Safety and Mycotoxins and contributes to activities of Asia Pacific Economic Cooperation's Food Safety Cooperation Forum and various efforts around the world.



### ALAN NORDEN

Alan Norden is one of our technical experts working as part of the GRCBI group with over 27 years of regulatory experience. Alan was a former Executive Director of Registration with the Australian Pesticides and Veterinary Medicines Authority (APVMA), has also held several international roles as a member of the Organizing Committee for previous Global Minor Use Summits, as former Chair of the OECD Expert Group on Minor Uses and is a serving Board member of the Minor Use Foundation. Alan's current work with GRCBI includes assisting our partners in East Africa with developing mutual recognition procedures and with harmonization of bio-efficacy requirements and for the registration of crop protection products in Asia.

## EDITORIAL

### **The Importance of Specialty Crops to Addressing Global Food Security Challenges**

One of the most devastating consequences of the COVID-19 pandemic has been the massive uptick in global food insecurity. Nearly 1/3 of humanity is now considered to be food insecure, about 2.3 billion people.

One of the primary drivers of this troubling trend is a 30% rise in global food prices. Limited labor availability in the pandemic, the increasing price of fuel, increased speculation in the face of economic uncertainty, and supply chain challenges have all been driving forces behind this drastic increase. At the same time, there has been a massive (estimated at 60%) decrease in smallholder farmer income globally, further limiting farmers' ability to be resilient in the face of these changes.<sup>1</sup> While it is essential that we as a global community don't lose focus on staple crop producers in those regions most affected, specialty crop production is an often overlooked but critical part of the solution.

Specialty crops not only provide an excellent source of nutrition and dietary diversity, but they are often also high value crops in international global markets that can be a crucial source of income for rural farmers. Vietnam, for example, exported over \$1.2 billion of dragon fruit to Vietnam, Canada, and the U.S. in 2016. Tea exports from East Africa to the U.S. alone were over \$1.45 billion in 2020.

The term specialty crop itself presents its own challenges. There is no internationally accepted definition for the term. USDA's AMS defines it as "fruits and vegetables, tree nuts, dried fruits, and horticulture and nursery crops, including floriculture." In my experience, specialty crops tend to be commodities that are not widely grown, but have high economic value and cultural or nutritional significance. Quinoa, cowpea, bittermelon, papaya, mango, dragonfruit, long beans, and spinach are some examples from around the world.

Unfortunately, because they don't drive markets and aren't as well understood, specialty crops are often overlooked in regulatory frameworks and extension services. While there are certainly examples of excellent work supporting the production of these commodities, the significant majority of international support is focused on staple crops. The preservation of local varieties and plant diversity is beneficial for everyone and can be highly rewarding work as it is meaningful to the communities growing those products. It can also have a massive economic impact as specialty crops tend to be high value commodities.

It is my sincere hope that as we set priorities as a global community and respond to the formidable challenges increased food insecurity caused by the global pandemic and pervasive geopolitical uncertainty, we continue to focus on investing in specialty crop research and development with a focus on targeting those who are most in need.

*Remarks made by Anna Gore*

<sup>1</sup> <https://www.devex.com/news/agriculture-in-the-time-of-covid-19-99908>

## JOB BOARD

### Residue Science Technical Lead: Syngenta

[\*\*Apply for Job\*\*](#)**Location**

Greensboro, North Carolina, United States of America

**Job Function**

Research & Development (R&D)

**Job Reference**

18039717



### Technical Expert – Safety Risk: Syngenta

[\*\*Apply for Job\*\*](#)**Location**

Greensboro, North Carolina, United States of America

**Job Function**

Research & Development (R&D)

**Job Reference**

18030402

### Director - Global Hemp Innovation Center: OSU

[\*\*Apply for Job\*\*](#)**Location**

Corvallis, Oregon, United States of America

**Job Function**

Administrative/Professional Faculty

**Job Reference**

P05291UF

Internships Available: [VISIT CERSA →](#)



## COMING EVENTS

### IR – 4 Project Research Symposium

**Date:** April 12<sup>th</sup>, 2022

**Time:** 11:30am – 3pm, EST

**Location:** Virtual

<https://www.ir4project.org/events/2022-rs-food-crops/>

### NC State Plant Sciences Dedication

**Date:** April 12<sup>th</sup>, 2022

**Time:** 9am – 12pm, EST

**Location:** Raleigh, NC USA

<https://go.ncsu.edu/zgx2s84>

### CLA, RISE & CPDA Regulatory Conference

**Date:** April 20<sup>th</sup> - 22<sup>nd</sup>, 2022

**Time:** 8am – 5pm, EST

**Location:** Washington, DC, USA

<https://go.ncsu.edu/hsgvysf9>

### MRL Harmonization Workshop

**Date:** May 25<sup>th</sup> – 26<sup>th</sup>, 2022

**Time:** 8am – 5pm, PST

**Location:** San Francisco, CA, USA

<https://go.ncsu.edu/zgx2s84>

### APS Plant Health

**Date:** August 6<sup>th</sup> – 10<sup>th</sup>, 2022

**Time:** 8am – 5pm, EST

**Location:** Pittsburgh, PA, USA

<https://go.ncsu.edu/azpkmb0>

### ASHS Annual Meeting

**Date:** June 30<sup>th</sup> – July 3<sup>rd</sup>, 2022

**Time:** 8am – 5pm, EST

**Location:** Chicago, IL, USA

<https://ashs.org/page/GeneralConference>