



# The Regulatory Pulse

In conversation with the experts

A guide with regulatory insights on registration of microbial bioproducts



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## **Editor's Note**

Welcome to the inaugural edition of The Regulatory Pulse - a publication designed to share timely regulatory insights on microbial bioproducts. Our goal is to support researchers, start-ups and industry partners in navigating the complex world of bioproduct registration by bringing expert insights directly to the registrants. Through engaging conversations with leading experts in bioproduct regulation, we aim to provide practical perspectives that not only clarify regulatory pathways but also inspire confidence for innovators working in this space.

In this inaugural edition, Dr. Deborah Henderson, Director of the Institute for Sustainable Horticulture (ISH), introduces the series and outlines how expert-led discussions will provide a roadmap of key topics; from data requirements, study protocols and regulatory challenges to opportunities for advancing sustainable solutions.

We invite you to follow along as each edition highlights expert advice, and actionable insights to help you stay informed and prepared for regulatory success.

Dr. Jaswinder Kaur

# **EDITED & COMPILED BY**

Dr. Deborah Henderson Dr. Jaswinder Kaur

# **Spotlight Interview - In Conversation with**

#### Dr. Deborah Henderson

Director, ISH & BC regional Innovation Chair

Deborah Henderson has been the Director of the Institute for Sustainable Horticulture (ISH) since 2005 and BC Regional Innovation Chair since 2009 at Kwantlen Polytechnic University. She received her PhD from the University of British Columbia (UBC) and established E.S. Crop Consult Ltd. to offer IPM and research services to both conventional and organic agriculture in the Fraser Valley. At the Institute for Sustainable Horticulture, Deborah developed an active program in biological and non-chemical management strategies for pests and diseases to advance agriculture and landscapes towards ecologically sound alternatives. ISH develops microbial biocontrol environmentally sound bioproducts in partnership with agricultural industry partners with the goal of putting more bioproduct options in the hands of growers.



# Questions & Answers - Insights from the expert

The following interview was coordinated and edited by Dr. Jaswinder Kaur, Publication Editor.

1. To help our audience get to know you better, could you please share a bit about you and your work at ISH?

**Dr. Deborah Henderson**: I serve as the Director of the Institute for Sustainable Horticulture (ISH) at Kwantlen Polytechnic University. As a polytechnic institution, our research is highly applied and focused on addressing the needs of industry and the community. At ISH, we support innovation and sustainability in agriculture and landscapes in three main areas: microbial bioproducts and biological control tools that manage pests and crop diseases while enhancing plant health and productivity; novel growing systems and technologies that contribute to more sustainable production practices, clean energy solutions for greenhouses and closed growing environments that reduce environmental impact and improve efficiency.

Within the microbial bioproducts theme, we work closely with industry partners to support the development and registration of biological products, while also exploring native beneficial fungi from British Columbia as potential resources. Across all our initiatives, our overarching goal is to strengthen sustainability and resilience in agricultural cropping systems.

2. Could you please briefly tell us about the inspiration behind launching this publication series on microbial bioproduct registration?

**Dr. Deborah Henderson**: The inspiration for launching this series comes from my experience working in the private sector, where growers were eager to integrate biocontrol into their practices but had very few options to replace chemical pesticides. When I joined KPU, I saw the opportunity to build an applied research program focused on developing native microbial biocontrol and other bioproducts, something no one else in Canada was doing at the time. Much of the world, including countries like Cuba, was already far ahead in producing and using biological products, while in Canada, promising research often stayed in the lab and never reached growers.

At ISH, we designed our program to help bridge that gap by moving promising products further along the commercialization pathway - into mass production and through the regulatory requirements needed for approval. As a result, many industry partners now come to us for support in preparing their microbial and other biologically based products for registration. This publication series is a natural extension of that work, providing another way to share knowledge, perspectives, and practical guidance with a broader audience.

3. So, how does this initiative align with your Institutes broader mission?

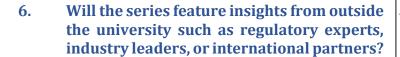
**Dr. Deborah Henderson**: This initiative aligns closely with the Institute's broader mission and vision. Our vision is a future in which the agriculture and landscape sectors provide exemplary leadership in building and sustaining healthy ecosystems. Through applied research, innovation, knowledge sharing, and strong partnerships, our mission is to improve ecosystem resilience by equipping the agriculture and landscape sectors with practical tools and strategies. Almost all of our work is conducted in collaboration with industry, community, and academic partners, focusing on addressing real-world challenges and translating research into tangible solutions.

4. Could you please walk us through the key topics this publication aims to cover regarding microbial bioproduct registration?

**Dr. Deborah Henderson**: This publication aims to provide a comprehensive overview of microbial bioproduct registration, covering topics that range from basic regulatory frameworks to case studies of successful product approvals. We will explore regulations and data requirements outlined by the Pest Management Regulatory Agency (PMRA) and Canadian Food Inspection Agency (CFIA), as well as the Organization for Economic Co-operation and Development (OECD) framework for global registration. Each publication issue will guide readers step-by-step through the registration process, including strategies for engaging with regulatory agencies, common challenges faced by registrants, emerging trends such as global harmonization of standards, and best practices for value and safety assessments. In addition, we will feature insights from industry registrants through real-world case studies to provide practical perspectives and actionable guidance.

5. Well, who is the intended readership for this series and how will it benefit them?

**Dr. Deborah Henderson**: The primary readership includes start-ups and small to medium-sized companies developing microbial products with a strong focus on improving the environment, protecting soils, and addressing global challenges. Many of these innovators have limited experience with regulatory processes, and even international companies familiar with biological products elsewhere often find Canada's regulatory system complex and unfamiliar. Through this series, we want to shed light on the regulatory landscape in Canada and beyond, share our expertise to help bring more biological products to growers and landscape managers, and foster opportunities for collaboration within the industry.



**Dr. Deborah Henderson**: Yes, it will. We plan to connect with regulators, researchers, and industry professionals who are experienced in registering biological products, as well as those just beginning the process. Additionally, we will include a global perspective, featuring an expert on the OECD joint review process to discuss the benefits of creating a single data package for multiple markets.

7. How does the university plan to promote the publications to reach beyond academic circles?

Deborah Henderson: While the publications will be available the on university's website https://www.kpu.ca/ish/publications for institutional visibility, our primary goal is to serve as a bridge between academia and the public. To maximize accessibility engagement, we may also explore social media channels like Instagram and LinkedIn to further promote the series.

8. In the long run, what impact do you hope this series will have on the bioproduct sectors?



- Feeling stuck with complex regulatory requirements?
- Wondering which data requirement, guideline, or standard applies to your product?
- Unsure about how to prioritize studies or prepare your data package?
- Need clarity on where to begin your registration journey?

# Then don't miss this series!

Stay tuned with

The Regulatory Pulse
for expert insights,
practical strategies, and
real-world guidance to
move your product from
research tor registration
with confidence.



**Dr. Deborah Henderson**: It has been a career-long goal of mine to reduce the use of chemical products in agriculture. The other side of that coin, however, is that alternatives must be available. At the Institute for Sustainable Horticulture, one of our mantras is to put more biological products into the hands of the end users. We hope this series does just that.

9. What message would you like to share with potential readers about why they should read this?

**Dr. Deborah Henderson**: Through *Regulatory Pulse*, I hope to help companies developing novel biological solutions for sustainability better understand and not be intimidated by the regulatory process. By featuring interviews with experts and professionals within the regulatory ecosystem, the series aims to connect readers with the people and institutions that can guide them in building robust data packages and successfully bringing their products to market.

# Key Takeaways

- \* Stay informed about bioproduct regulations and gain timely insights into evolving Canadian and global regulatory frameworks for microbial bioproducts.
- \* Learn from experts and access exclusive interviews with regulators, industry leaders, and researchers sharing real-world experiences.
- \* Get step-by-step strategies, case studies, and best practices for navigating product registration successfully.
- Understand not just the Canadian context but also international harmonization efforts like the OECD framework.

### Resources

https://www.kpu.ca/ish/publications

**Next Issue** 

Stay tuned for the next issue of The Regulatory Pulse on

Pre submission consultation

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