



The industry needs some long-term solutions for integrated weed management.

- Dr. Dilshan Benaragama, Crop Protection Chair (Weed Management), University of Manitoba



Made-in-Manitoba

New research chair filling weed management gap in the province

Manitoba farmers face some unique challenges when it comes to weed management, and four agricultural commodity groups have joined forces to support more research-based weed management solutions by funding a new research chair at the University of Manitoba.



Dr. Dilshan Benaragama

Dr. Dilshan Benaragama joined the University of Manitoba in May 2022 as the new Crop Protection Chair (Weed Management). It's a five-year position funded jointly by WGRF, Manitoba Crop Alliance, Manitoba Canola Growers Association and Manitoba Pulse & Soybean Growers.

"I'm excited to be in this new position that will help fill the gap in weed research capacity in the province, and ultimately provide producers with new tools to effectively and sustainably manage weeds," says Benaragama, who is also an Assistant Professor in the Department of Plant Science in the Faculty of Agricultural and Food Sciences.

Benaragama comes to the University of Manitoba after serving as a senior lecturer in plant science at the University of Rajarata in Sri Lanka, and as a postdoctoral fellow at the University of Saskatchewan, where he completed his PhD.

The new research chair was established to strengthen integrated weed management through research, teaching and extension.

Big picture view

With an overall goal to enhance weed management research in Manitoba, Benaragama will develop a research program with two approaches – fundamental and applied research. "As a scientist, I first want to take a broad view of the situation by understanding how weeds adapt to different weed management practices and cropping systems," he says.

That big picture begins with assessing the problems Manitoba growers are facing when it comes to weed control, and what research needs to happen to move towards some new solutions.

"I want to understand the root causes of some of the weed challenges and look at how we can develop effective management strategies that are also sustainable. I want to keep the work broad and focused on the overall issue of weed management, as opposed to focusing on managing individual weeds in certain crops." This broader understanding of weeds can help devise specific weed solutions as well.



Photo credit: University of Manitoba

Practical on-farm application

From there, he'll focus on ways to share the knowledge and information for practical, on-farm applications – from how to use herbicides more effectively, how to make informed decisions on weed management in their own farms, and how to apply integrated weed management tools with a precision approach. "We will look at how to use different remote sensing tools, first to make more informed decisions and then implement to manage weeds, particularly herbicide-resistant weeds that are the main concern among farmers right now," he says.

Moving the needle on effective weed management strategies is a big ask. But Benaragama isn't under any illusions that five years will completely change the face of weed management in Manitoba. "The industry needs some long-term solutions for weed management. I know we can't solve all these issues in the short term, but this position will lay the foundation for the development of the research capacity of the province, particularly in the direction of precision weed management. I am going to do my best to come up with new strategies to help producers," says Benaragama.

The new University of Manitoba Crop Protection Chair (Weed Management) is jointly funded by

