Careers in Weed Science

Dilpreet Riar: Herbicide Biologist at Corteva AgriScience

Primary duties

I am an Herbicide Discovery Biologist in Corteva's R&D Crop Protection Discovery & Development group. My primary job is early-stage discovery of sustainable crop protection solutions, with a bigger purpose "to enrich the lives of those who produce and those of consume, ensuring progress for generations to come."

How did you begin working in Weed Science?

Belonging to a farming family, pursuing education in crop sciences was always top of the list for me. I gained knowledge about different aspects of crop science during my undergrad degree at Punjab Agricultural University (PAU), India, however, weeds that shared physiological and morphological similarities with crops intrigued me the most. Curiosity to understand weed management issues and find potential solutions coupled with constant urge to expand technical expertise led me to pursue M.S. in weed science from PAU, India, followed by Ph.D. in weed science from Washington State University, Pullman.

What do you love about your job?

There are three aspects of my job that I love the most. First, it is satisfying to contribute to the challenges of providing agricultural solutions that can help grow quality food for growing world population. Second, I get chance to interact and collaborate with great minds to nourish my curiosity, expand sphere of my knowledge, and innovate. Third and last but not the least, I like puzzle solving and my job is nothing less than it where a lot of different aspects of discovery engine need to align well for the invention of novel sustainable crop protection technologies.

To study weed science is to take part in ensuring the future of food, clothing, and water supply for our communities. That is pretty exciting in and of itself.

Education

B.S. 2000 Punjab University *Crop Science*
M.S. 2003 Punjab Agricultural University *Agronomy*
Ph.D. 2009 Washington State University *Crop Science*

Path to Current Role

Post Doctorate at University of Arkansas, 2010-2013 (3yr)

Research Fellow at Punjab Agricultural University, India, 2005-2006 (1.5yr)

Involvement in Professional Societies

Weed Science Society of America (WSSA)
Western Society of Weed Science (WSWS)
Southern Weed Science Society (SWSS)
International Weed Science Society (IWSS)
Indian Society of Weed Science (ISWS)

Other interests?

Motorcycle Riding

Careers in Weed Science

What is exciting about the future of weed science?

World population is growing but agricultural land and natural resources to support the agriculture are reducing. Innovative agricultural solutions to grow more food per capita land/water use are needed to support increasing food demand of growing population. Weeds are key agricultural pests contributing to major yield losses as they compete with agricultural crops for space, light, nutrients and water. As we are developing new weed control solutions and technologies, weeds are also evolving to evade those technologies, rendering them less useful. I think, weed scientists, especially new generation of weed scientists either working for academics, industry, or govt. institutions will continue to play a critical role in our fight against weeds and hunger by identifying key weed control challenges and finding novel, environment friendly sustainable solutions for higher crop yields.

Imparting wisdom

I wish I knew more about the value of networking and collaboration with peers inside and outside organization. As a student, I wish I engaged in weed science societies beyond presenting my research.

Be visible to the weed science community via participating in Weed Contests, judging presentations, or as a member of Weed Science Society committees. Networking and follow-up with your contacts is critical to get referred for a job opportunity. However, most important of all is following your passion. Getting job will not be a problem if you are passionate and giving best in your field of choice.

I did a 3yr post-doc after my PhD to expand weed management experience across different cropping systems and weed species, and to expand expertise in both basic and applied biology. My post-doc training at University of Arkansas provided me knowledge and expertise to understand the bigger picture and helped me become more effective in my current job at Corteva Agriscience (previously Dow AgroSciences). Networking did come handy as one of my friends at Dow AgroSciences encouraged me to apply for this job.

If you are interested to connect with Dilpreet

Email: dilpreet.riar@corteva.com

Linkedin: https://www.linkedin.com/in/dilpreet-riar-a731063b/