

ASSOCIATE RESEARCHER - WEED SCIENTIST

University of Wisconsin-Madison

□ (+55) 18-99690-1070 | **maxwelco@gmail.com** | **https://maxweeds.rbind.io/**

Syngenta Crop Protection

April 5, 2021

7145 58TH AVE VERO BEACH, FL 32967, UNITED STATES

RD Scientist - Weed Scientist (18027458) with Syngenta in Vero Beach

Dear Sir/Madam

About Me_

I am a Research associate of the University of Wisconsin-Madison. My primary research interests are weed management, weed ecology and weed resistance, and data analysis. I am happy to find your vacancy on the Syngenta's website which perfectly matches my qualification and experience.

Background₋

My academic and professional qualification has been considerably acquired by studying and working in Brazil and in the United States (US). In particular, I obtained a Bachelor (BSc) and Master (MSc) degrees in Brazil, and a PhD in the US. Prior to my BSc graduation, I have spent 12 months on job training through The Ohio Program in the US. After my MSc degree, I was hired to work with specialized fertilizer sales in the Amazonian region of Brazil. My role was sales management trainee in the French company TIMAC Agro. I was being prepared to manage a team of fertilizer sales. I worked closely with the company marketing, regional manager, and palm oil/corn/soybean growers. During that time, I quickly realized that research rather than sales, was the path that I wanted to follow in my career.

In 2014 I joined the University of Nebraska-Lincoln to pursuit a PhD in Weed Science. I have worked on several multidisciplinary projects on weed research in the field, laboratory, and greenhouses in corn and soybean under supervision of Dr. Stevan Knezevic, Dr. Todd Gaines, Dr. Amit Jhala, and Dr. Franck Dayan. During my PhD in Nebraska, I have worked closely to Syngenta products on herbicide efficacy trials. Also, I was investigating an *Amaranthus tuberculatus* population that evolved resistance to HPPD-inhibiting herbicides, including mesotrione, tembotrione and topramezone. The highlight of my PhD program was a collaborative project with Colorado State University that resulted in a publication showing the capacity of cytochrome P450 inhibitors to reverse HPPD-inhibiting herbicide resistance in an *A. tuberculatus* population from Nebraska, and the HPPD-resistance transfer between waterhemp and Palmer amaranth accessions from Nebraska.

In January 2018, I joined Dr. Rodrigo Werle to start a research/extension program at the University of Wisconsin-Madison. My role was as a Postdoctoral Research Associate in Weed Science and in 2020 I transitioned to Associate Researcher working remotely from Brazil. In my current position, my objective is to assist the Werle lab to conduct innovative and collaborative research and extension programming to increase profitability, productivity, and sustainability of corn, soybean, and small grains in Wisconsin. As part of my role, I am mentoring graduate students and training the Badger Weeds Team, which took 2nd place in the 2018 North Central Weed Science Weeds Contest. I oversee the graduate students' projects, and I was responsible for three projects, including investigating PPO and glyphosate resistance in Palmer amaranth, the ecological adaptation of Palmer amaranth to the upper Midwest and off-target movement of dicamba in multiple states. In 2020 I had also the opportunity to work as an Assistant Professor of Weed Science at Western São Paulo University. I taught Integrated Weed Management and Programming in R to graduate and undergraduate levels. As part of my role I mentored undergraduate and graduate students.

Last but not least, I became an avid user of the statistical programming language R. I use R to optimize research through GitHub, data analysis, reports and others. For example, I have led the field research in Wisconsin and I was responsible for analyzing a complex data set from the published manuscript "Off-target movement assessment of dicamba in North America". In addition, I was an instructor of a R workshop that I helped to organized for the 2019 North Central Weed Science Society Meeting (NCWSS). In the R workshop I taught to NCWSS members about data manipulation, herbicide dose-response analysis, and using R markdown as a research tool. I am also a founder and the editor of Open Weed Science, a community in which students and professionals are invited to share their skills in data analysis. The goal of Open Weed Science is to increase reproducible coding in weed research. In February 2021, I got the Rstudio certification on tidyverse, which is an excellent tool that I use for exploratory data analysis on trial data. Meanwhile, I am developing my skills to become better qualified scientist to obtain a top weed science position.

Industry goal ____

My goal is to be part of a high-ranked research team. It has strongly motivated me to gain specialized knowledge in Brazil and in the US. On the other hand, I really want to join a team to promote high quality research at a leading science-based agtech company in the world. Working as a Weed Scientist at the Syngenta Crop Protection, will be definitely an excellent opportunity for me to turn my goal into action.

With a strong background in weed research, computer programming and team work, I would be confident to fulfill your requirements.

I am looking forward to your positive reply.

Sincerely,

Maxwel CouraOliveira