

# Maxwel Coura Oliveira

CROP/WEED SCIENTIST

Cologne, Germany

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## Summary

Experienced agronomist and crop protection scientist with a strong background in product development, portfolio lifecycle management, and digital agriculture across global markets. Over a decade of experience leading R&D initiatives, conducting field trials, and managing herbicide strategy. Recognized for high-impact publications (30+), international research leadership, and technical excellence across North & South America, and Europe.

## Professional experiences

### BASF DIGITAL FARMING

Senior Digital Agronomist · Cologne · NRW · Germany

Oct 2023 - Current

- Coordinated smart spraying research and development for the **One Smart Spray** platform in the US, enhancing precision farming capabilities.
- Built and maintained strong stakeholder relationships, fostering collaboration across global teams.
- Developing agronomic digital intelligence for **One Smart Spray** and **xarvio Field Manager**.
- Agronomic coordinator of *Expert Scouting Trip* (field monitoring) project based on modeling and remote sensing of the **xarvio AgBusiness** platform.

### MCGILL UNIVERSITY

Assistant Professor of Weed Science · Saint-Anne-de-Bellevue · QC · Canada

Dec 2022 - Sep 2023

- Tenure-track research and teaching in Weed Science.
- Led agronomic research projects on sweet corn with Groupe Bonduelle and delivered extension talks to stakeholders.

### TEEJET TECHNOLOGIES SOUTH AMERICA

Research and Training Coordinator · Sao Paulo · SP · Brazil

Nov 2021 - Oct 2022

- Developed strategies for nozzle positioning in pesticide application, and maintained relationships with stakeholders.
- Led certified training programs for pesticide applicators on auxin herbicide (e.g., 2,4-D, dicamba) application in field crops.

### WESTERN SÃO PAULO UNIVERSITY

Assistant Professor · Presidente Prudente · SP · Brazil

Fev 2020 - Fev 2021

- Taught courses and workshops on weed biology, agronomy, and programming in R.
- Conducted surveys and research on herbicide weed management and cover crop strategies in corn and soybean farming systems.

### UNIVERSITY OF WISCONSIN-MADISON

Research Associate/Data analyst, WiscWeeds Lab · Remote

Jan 2020 - Sep 2021

- Analyzed complex datasets with empirical and machine learning models, and published manuscripts in high-impact journals.
- Mentored graduate students in experimental design, writing and data visualization techniques for effectively communicating research findings.

Postdoctoral Research Associate, WiscWeeds Lab · Madison · WI · USA

Jan 2018 - Dec 2019

- Developed integrated weed management strategies for corn and soybeans in Wisconsin, USA
- Led herbicide resistance studies and field herbicide efficacy trials with chemical industry.
- Conducted research on off-target herbicide movement (e.g., 2,4-D and dicamba) that was used by EPA product registration decision.
- Delivered extension talks and outreach activities to stakeholders and growers.
- Supported students' academic growth and contributed to grant proposals and publications.

## UNIVERSITY OF NEBRASKA-LINCOLN

Graduate Research Assistant, Knezevic Lab · Concord/Lincoln · NE · USA

Jan 2014 to Dec 2017

- Conducted field (corn and soybeans), greenhouse, and laboratory research on herbicide resistance, toxicology and weed ecology.
- Designed and executed extension talks on integrated weed management and conducted herbicide efficacy trials with chemical industry.

## TIMAC AGRO BRASIL

Sales Management Trainee, Paragominas · PA · Brazil

Jan to Jun 2013

- Conducted sales prospecting and marketing campaigns to expand client base.
- Organized and delivered training sessions to enhance team performance and product knowledge.

## Education

**Ph.D. in Agronomy (Weed Science)** · University of Nebraska-Lincoln

Jan 2014 to Dec 2017

*Dissertation:* Evolution of HPPD-inhibitor herbicide resistance in a waterhemp (*Amaranthus tuberculatus* var. *rudis*) population from Nebraska, USA

*Advisor:* Dr. Stevan Knezevic | *Co-advisor:* Dr. Todd Gaines, Dr. Amit Jhala

**MSc. in Plant Science (Weed Science)** · Federal University of Jequitinhonha and Mucuri Valleys

Ago 2011 to Jul 2013

*Thesis:* Competitive ability of corn with *Commelina benghalensis* and *Richardia brasiliensis*

*Advisor:* Dr. José B Santos

**BSc. in Agronomy** · Federal University of Jequitinhonha and Mucuri Valleys

Mar 2006 to Jul 2011

*Thesis:* Composition and extraction of minerals in forage grass in a previously soil waste urban deposit area

*Advisor:* Dr. Karina G. Ribeiro

## Research qualifications and skills

- **Product Development & Strategy:** Herbicide portfolios, resistance management, application technology
- **Field Research:** Herbicide efficacy, off-target movement, dose-response, crop safety
- **Project Management:** Multi-country trial coordination, stakeholder engagement, cross-functional leadership
- **Digital Agriculture:** Precision spraying, scouting, remote sensing, digital tools (xarvio, One Smart Spray)
- **Data Analysis & Visualization:** R, Python, Quarto, GitHub, LaTeX, ANOVA, ML models

## Languages

Portuguese (native), English (fluent), Spanish (intermediate), Italian (intermediate), French (basic), German (basic)

## Selected peer-reviewed publications

- Confirmation and Control of HPPD-resistant Waterhemp (Weed Technology)
- Cover Crops, Hormones, and Herbicides: IWM Strategy (Plant Science)

- Off-Target Movement Assessment of Dicamba (Weed Technology)
- Palmer Amaranth Adaptation in Midwest Agroecosystems (Frontiers in Agronomy)

A complete list of publications is available upon request or can be accessed on Maxwell Coura Oliveira - Google Scholar

## WORKSHOPS

1. **Oliveira, MC.** *Presenter.* Weed research data analysis with R. Brazilian Weed Science Meeting, Rio Verde, GO - 2022
2. **Oliveira, MC.** *Presenter.* Data Wrangling with Dplyr. North Central Weed Science Society Annual Meetings: Using RStudio for Visualization and Analysis of Weed Science Experiments, Columbus, OH - 2019
3. **Oliveira, MC.** *Presenter.* Creating Reproducible Reports Using R Markdown. North Central Weed Science Society Annual Meetings: Using RStudio for Visualization and Analysis of Weed Science Experiments, Columbus, OH - 2019

## Certification

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| 1. Teaching and tidyverse instructor certification<br>Issue by Rstudio          | February 2021 |
| 2. Pesticide applicator license<br>Issue by Wisconsin Department of Agriculture | March 2018    |

## Selected grants, scholarships and awards

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| 1. North Central Weed Science Society Meeting, Saint Louis · MO · USA<br>1st Place Outstanding Poster Presentation (Herbicide Resistance section)        | Dec 2017 |
| 2. North Central Weed Science Society Weed Contest, Ames · IA · USA<br>1st Place Graduate Team and 1st Place Overall Individual Herbicide ID             | Jul 2017 |
| 3. Weed Science Society of America Meeting, San Juan · PR<br>1st Place Outstanding Poster Presentation (Weed Biology section)                            | Feb 2015 |
| 4. LASPAU-administered Ph.D. Fulbright scholarship<br>Science without Borders Brazilian Program – Ph.D at the University of Nebraska-Lincoln (\$130,000) | Sep 2013 |