Maxwel Coura Oliveira, PhD

Postdoctoral Research Associate, University of Wisconsin-Madison 1575 Linden Drive · Department of Agronomy · Madison, Wisconsin, USA 53706

EDUCATION

• *University of Nebraska-Lincoln*, Ph.D. Agronomy (Weed Science)

December 2017

• Federal University of Jequitinhonha and Mucuri Valleys, MSc. Weed Science

July 2013

• Federal University of Jequitinhonha and Mucuri Valleys, BSc. Agronomy

July 2011

PROFESSIONAL EXPERIENCE

- Professor, University of Western Sao Paulo · Presidente Prudente · SP · Brazil February 2020 Goal: conduct innovative and collaborative research and teaching on biology, ecology and management of troublesome weeds in Western Sao Paulo.
- Postdoctoral Research Associate, WiscWeeds Lab · University of Wisconsin-Madison · Madison · WI · USA January 2018

Goal: conduct innovative and collaborative research and extension programming on biology, ecology and management of troublesome weeds in corn, soybeans and industrial hemp under Dr. Rodrigo Werle's supervision

- Graduate Research Assistant, Knezevic Lab University of Nebraska-Lincoln, Lincoln · NE · USA January, 2014 to December 2017
- Goal: Doctoral research in Weed Biology and Ecology, Integrated Weed Management, Herbicide Resistance Evolution and Management, and Herbicide efficacy trials under Dr. Stevan Knezevic's supervision
- Sales Management Trainee, TIMAC Agro · Paragominas · PA · Brazil Goal: Trained to be a supervisor of fertilizers sales team, talent acquisition, and marketing
- Graduate Research Assistant, Federal University of Jequitinhonha and Mucuri Valleys · Diamantina · MG · Brazil July 2011 to December 2012 Goal: Masters research in weed Biology, competition, and integrated weed management under Dr. José Barbosa dos Santos' supervision
- *Undergraduate Senior Trainee*, The Ohio Program · OH · USA April 2010 to March 2011 Goal: farm hand in a vegetable farm in Michigan (USA) and greenhouse assistant in a hydroponic tomato greenhouse in New York, USA.
- *Undergraduate Junior Trainee*, Pulveriza Fertilizers · Matipó · MG · Brazil July 2009 Goal: work in a industry of foliar fertilizers for corn, vegetables and coffee trees
- *Coordinator*, CREA Jr · Diamantina · MG · Brazil January to December 2009 Goal: leading the club for mentoring students, connecting students to professional engineers, organizing seminars, prospective of new members
- Undergraduate Intern, EMATER MG · Santana do Paraíso · MG · Brazil July 2008 Goal: extension work with small vegetables growers

TEACHING EXPERIENCE

• University of Wisconsin-Madison, Weeds Contest Prep Course Spring 2018

• University of Nebraska-Lincoln, Invasive Plants Lab Spring 2016/2017

• Federal University of Jequitinhonha and Mucuri Valleys, Weed Manag Lab Spring 2011

• Federal University of Jequitinhonha and Mucuri Valleys, Crop Improv Lab Spring/Fall 2009

VISITOR SCHOLAR

ullet University of Illinois Urbana-Champaign \cdot IL \cdot USA September 2017 Laboratory research on PPO resistance mechanism in Amaranthus palmeri from Nebraska under Dr. Pat Tranel's supervision

ullet Colorado State University-Fort Collins \cdot CO \cdot USA May 2017 Laboratory research on HPPD resistance mechanism in Amaranthus tuberculatus from Nebraska under Dr. Todd Gaines' supervision

• Colorado State University–Fort Collins · CO · USA September 2016 Laboratory research on herbicide physiology in Amaranthus tuberculatus from Nebraska under Dr. Franck Dayan's supervision

• Federal University of Viçosa-Viçosa · MG · Brazil August 2012 to December 2012 Field, laboratory, and greenhouse research with fate of herbicide in the soil, and integrated weed management under Dr. Antonio Alberto Silva's supervision

ACADEMIC HONORS AND AWARDS

• North Central Weed Science Society Meeting, Saint louis · MO · USA

1st Place Outstanding Poster Presentation (Herbicide Resistance section)

• North Central Weed Science Society Weed Contest, Ames · IA · USA

July 2017

1st Place Graduate Team and 1st Place Overall Individual Herbicide ID

• *University of Nebraska-Lincoln*, Lincoln · NE · USA March 2017 Travel Grant (\$400) to attend the 2017 Global Herbicide Resistant Conference

• North Central Weed Science Society Weed Contest, West Laffayete · USA

July 2016

3rd Place Graduate Team

• Weed Science Society of America Meeting, San Juan · PR February 2015

1st Place Outstanding Poster Presentation (Weed Biology section)

• Western Weed Science Society Weed Contest, Columbus · OH · USA

July 2015

3rd Place Graduate Team and 3rd Place Overall Individual Graduate

• *Mayrink Vieira High School Science Fair*, Ipatinga · MG · BRA September 2002 Outstanding team project "Batteries and electrolysis"

• Mayrink Vieira High School Science Fair, Ipatinga · MG · BRA September 2001 Outstanding team project "Cell organelles"

PROFESSIONAL SOCIETY MEMBERSHIPS

- Weed Science Society of America
- North Central Weed Science Society

PUBLICATIONS

- 1. Oliveira MC, da Silva AL, Ulguim AR, and Werle R (2020) Assessment of weed management strategies and challenges in Brazilian cropping systems. *Weed Technology in press* doi: 10.1017/wet.2020.96
- 2. Striegel S, **Oliveira MC**, Arneson N, Conley SP, Stoltenberg DE, and Werle R (2020) Spray solution pH and soybean injury as influenced by synthetic auxin formulation and spray additives. *Weed Technology in press*. doi: 10.1017/wet.2020.89
- 3. **Oliveira MC**, Giacomini D, Arsenijevic N, Vieira G, Tranel P, and Werle R. Distribution and validation of genotypic and phenotypic glyphosate and PPO-inhibitor resistance in Palmer amaranth (*Amaranthus palmeri*) from southwestern Nebraska. *Weed Technology. In press.* doi: 10.1017/wet.2020.74
- 4. Oliveira MC, Osipitan OA, Begcy K, and Werle R (2020) Cover crops, hormones and herbicides: priming an integrated weed management Strategy. *Plant Science* 301:110550 doi: 10.1016/j.plantsci.2020.110550
- 5. Soltani S, **Oliveira MC**, Alves GS, Werle R, Norsworthy JK, Sprague CL, Young BG, Reynolds DB, Brown A, and Sikkema PH (2020) Off-Target Movement Assessment of Dicamba in North America. *Weed Technology* 34:318-330. doi: 10.1017/wet.2020.17
- Oliveira MC, Butts L, and Werle R (2019) Survey of cover crop management in Nebraska. 9:1-14 Agriculture, invited submission for special issue entitled: "Cover Crops". doi: 10.3390/agriculture9060124
- 7. Knezevic SZ, Pavlovic P, Barnes ER, Beiermann C, **Oliveira MC**, Lawrence N, Scott JE, and Jhala AJ (2019) Critical Time for Weed Removal in Glyphosate-Resistant Soybean as Influenced by Preemergence Herbicides. 33:393-399. *Weed Technology*. doi: 10.1017/wet.2019.18
- 8. Ferreira EA, Paiva MCG, Pereira GAM, **Oliveira MC**, Silva, EB (2019) Fitossociologia de plantas daninhas na cultura do milho submetida à aplicação de doses de nitrogênio, *Journal of Neotropical Agriculture*, 6:100-107 (in Portuguese with English abstract). doi: 10.32404/rean.v6i2.2710
- 9. Werle R, **Oliveira MC**, Jhala AJ, Klein R, Proctor CA, and Rees J (2018) Survey of Nebraska farmers' adoption of dicamba-tolerant soybean technology and off-target movement. *Weed Technology*, 32:754–761. doi: 10.1017/wet.2018.62
- 10. **Oliveira MC**, Gaines TA, Patterson EP, Jhala AJ, Irmak S, Amundsen K, and Knezevic SZ (2018) Interspecific and intraspecific transfer of metabolism based mesotrione resistance transfer in dioecious weedy *Amaranthus*. *Plant Journal*. 96:1051–1063. doi: 10.1111/tpj.14089
- 11. Knezevic SZ, Ospitan AO, **Oliveira MC**, and Scott JE (2018) *Lythrum salicaria* (purple loosestrife) control with herbicides: multiyear applications. *Invasive Plant Science and Management*. 11:143–154. doi: 10.1017/inp.2018.17

- 12. **Oliveira MC**, Pereira GAM, Ferreira EA, Barbosa JB, Knezevic SZ, and Werle R (2018) Additive design: the concept and data analysis. *Weed Research*, 58:338–347. doi: 10.1111/wre.12317
- 13. **Oliveira MC**, Gaines TA, Jhala AJ, and Knezevic SZ (2018) Inheritance of mesotrione resistance in an (*Amaranthus tuberculatus*) (var. *rudis*) population from Nebraska, USA. *Frontiers in Plant Science*, 9:60. doi: 10.3389/fpls.2018.00060
- 14. Miller JJ, Schepers JS, Shapiro CA, Arnenson NJ, Eskridge KM, **Oliveira MC**, and Giesler LJ (2018) Characterizing soybean vigor and productivity using multiple crop canopy sensor readings. *Field Crops Research*, 216:22–31. doi: 10.1016/j.fcr.2017.11.006
- 15. **Oliveira MC**, Gaines TA, Dayan FE, Patterson EL, Jhala AJ, and Knezevic SZ (2018) Reversing resistance to tembotrione in an *Amaranthus tuberculatus* (syn. *rudis*) population from Nebraska, USA with cytochrome P450 inhibitors. *Pest Management Science*, 74:2296–2305. (Invited publication) doi: 10.1002/ps.4697
- 16. **Oliveira MC**, Feist D, Eskelsen S, Scott JE, and Knezevic SZ (2017) Weed control in soybean with preemergence and postemergence-applied herbicides. *Crop, Forage, and Turfgrass Management*, 3:1–7
- 17. **Oliveira MC**, Jhala A, Gaines T, Irmak S, Amundsen K, Scott JE, and Knezevic SZ (2017) Confirmation and Control of HPPD-inhibiting Herbicide-Resistant Waterhemp (*Amaranthus tuberculatus*) in Nebraska. *Weed Technology*, 31:67–79. doi: 10.1017/wet.2016.4
- 18. Butts TR, Miller JJ, Pruitt JD, Vieira BC, **Oliveira MC**, Ramirez II S, and Lindquist JL (2017) Light quality effect on corn growth as influenced by weed species and nitrogen rate. *Journal of Agricultural Science*, 9:15–27. doi: 10.5539/jas.v9n1p15
- 19. Braga RR, Santos JB, Zanuncio JC, Bibiano CS, Ferreira EA, **Oliveira MC**, Silva DV, and Serrão JE (2016) Effect of growing *Brachiaria brizantha* on phytoremediation of picloram under different pH environments. *Ecological Engineering*, 94:102–106. doi: 10.1016/j.ecoleng.2016.05.050
- 20. Magalhães JES, Ferreira EA, **Oliveira MC**, Pereira GAM, Silva DV, and Santos JB (2016) Effect of plant-biostimulant on cassava initial growth. *Ceres*, 63:208–213 doi: 10.1590/0034-737X201663020012
- 21. Silva DV, Ferreira, **Oliveira MC**, Pereira GAM, Braga RR, Santos JB, Aspiazú I, and Souza MF (2016) Productivity of cassava and other crops in an intercropping system. *Ciencia e Investigación Agraria*, 43:159–166. doi: 10.4067/S0718-16202016000100015
- 22. Pereira GAM, **Oliveira MC**, Braga RR, Silva DV, Oliveira AJM, Fernandes JSC, and Andrade Junior VC (2015) Growth of carrot cultivars in different environments. *Comunicata Scientiae*, 6:317–325. (in Portuguese with English abstract)
- 23. Santos RC, Ferreira EA, Santos JB, **Oliveira MC**, Silva DV, Pereira GAM, Galon L, Aspiazú I, and Mattos NP (2015) Phytosociological characterization of weed species as affected by soil management. *Australian Journal of Crop Science*, 9:112–119
- 24. Pereira GAM, **Oliveira MC**, Oliveira, AJM, Fernandes JSC, Andrade Junior VC, Silva DV, and Ferreira EA (2015) Performance of carrot genotypes at two Jequitinhonha Valley sites. *Semina: Ciências Agrárias*, 36:4059-4070. doi: 10.5433/1679-0359.2015v36n6Supl2p4059

- 25. Ferreira EA, Silva DV, Braga RR, **Oliveira MC**, Pereira GAM, Santos JB, and Sediyama T (2014) Initial growth of cassava in intercropping system. *Scientia Agraria Paranaensis*, 13:219-226
- 26. Franco MHR, Nery MC, França AC, **Oliveira MC**, Franco GCN, and Lemos VT (2013) Production and physiological quality of bean seeds after application diquat. *Semina: Ciências Agrárias*, 34:1707-1714 (in Portuguese with English abstract). doi: 10.5433/1679-0359.2013V34n4p1707
- 27. Pereira GAM, Lemos VT, Santos JB, Ferreira EA, Silva DV, **Oliveira MC**, and Menezes CWG (2012) Growth of cassava and weed in response to phosphate fertilizer. *Ceres*, 59:716-722 (in Portuguese with English abstract). doi: 10.1590/S0034-737X2012000500019
- 28. Miranda VS, Ribeiro KG, Silva AC, Pereira RC, Pereira OG, Torrado PV, Fernandes JSC, and **Oliveira MC** (2012) Rehabilitation with forage grasses of an area degraded by urban solid waste deposits. *Brazilian Journal of Animal Science*, 41:18-23. doi: 10.1590/S1516-35982012000100003

INVITED PRESENTATIONS

- *Valoriza Agronegocios*, Patos de Minas · MG · Brazil January 2019 Lecture: "Treinamento resistência, dicamba, identificação de plantas daninhas e herbicidas" (In Portuguese)
- II IMAST, Dracena · SP · Brazil September 2018 Lecture: "Da resistência ao dicamba: o desafio no manejo de plantas daninhas nos EUA" (In Portuguese)
- JF Crow Institute for the Study of Evolution, Madison · WI · USA September 2018 Lecture: Evolution of 4-hydroxyphepylpiruvate dioxygenase inhibitor herbicide resistance in Amaranthus tuberculatus

EXTENSION PRESENTATIONS

- Waterhemp Resistance Evolution and Status. Waterhemp worshop, Chippewa Falls, Bangor, Janesville, Appleton, WI, USA, March 2019
- Weed control in corn with different PRE-applied herbicides and carrier volumes. Wisconsin Cropping Systems Weed Science Field Day, Arlington, WI, USA, July 2018
- Integrated weed management strategies in cassava fields. Field day of cassava: specificities and practices, Diamantina, MG, Brazil, October 2011

EVENTS ORGANIZATIONS

- Wisconsin Weed Science Field Day, Arlington and Lancaster · WI · USA July 2018
- Flaming Weed Control Workshop, Concord · NE · USA August 2014/15/16/17
- Field day of cassava: specificities and practices, Diamantina, MG, Brazil October 2011
- II Seminar of Forage and Rangeland Sciences, Diamantina · MG · Brazil March 2009
- I Seminar of Engineers, Diamantina · MG · Brazil September 2009

PROFESSIONAL MEETING PRESENTATION AND ABSTRACTS

- Werle R, DeWerff R, Striegel S, Arsenijevic N, Ribeiro VHV, **Oliveira MC** (2019) Systems Approach to Weed Management in Corn in Wisconsin. Proceeding of the Weed Science Society of America Annual Meetings, New Orleans, LA
- Oliveira MC, Jhala A, Proctor C, Mitchell P, Werle R (2019) Survey of 2017 and 2018 dicamba use in Nebraska and Wisconsin soybean production systems. Proceeding of the Weed Science Society of America Annual Meetings, New Orleans, LA
- Oliveira MC, Bernards M, Jhala A, Proctor C, Stepanovic S, Werle R (2019) Adaptation of Palmer Amaranth to the Upper Midwest. Proceeding of the Weed Science Society of America Annual Meetings, New Orleans, LA
- Oliveira MC, Lencina A, Ulguim A, Werle R (2019) A cropping-system weed science survey of Brazil, a breadbasket country in the tropics. Proceeding of the Weed Science Society of America Annual Meetings, New Orleans, LA
- Oliveira MC, Giacomini D, Tranel D, Vieira GS, Arsenijevic N, Werle R (2018) Molecular and greenhouse validation of field-evolved resistance to glyphosate and PPO-inhibitors in Palmer amaranth. Proceeding of the North Central Weed Science Society Annual Meetings, Milwaukee, WI
- Butts TR, **Oliveira MC**, Arsenijevic MC, Conley S, Werle R (2018) Tolerance of midwest soybean cultivars to preemergent applications of metribuzin and sulfentrazone (2018). Proceeding of the North Central Weed Science Society Annual Meetings, Milwaukee, WI
- Liu L, **Oliveira MC**, Werle R (2018) Wisconsin cropping systems weed science survey where are we at? Proceeding of the North Central Weed Science Society Annual Meetings, Milwaukee, WI
- Renz R, Striegel S, DeWerff R, Arsenijevic N, Ribeiro VHV, **Oliveira MC**, Luck B, Werle R (2018) Impact of carrier volume rate on PRE-emergence herbicide efficacy in Wisconsin cropping systems. Proceeding of the North Central Weed Science Society Annual Meetings, Milwaukee, WI
- Ribeiro VHV, **Oliveira MC**, Smith D, Santos JB, Werle R (2018) Spectrum of Weed Species Controlled by Various PRE- Emergence Soybean Herbicides in Wisconsin. Proceeding of the North Central Weed Science Society Annual Meetings, Milwaukee, WI
- Arsenijevic N, Striegel S, Ribeiro VHV, **Oliveira MC**, Werle R (2018) Screening of soybean variety tolerance to PRE-emergence herbicides sulfentrazone (PPO) and metribuzin (PSII). Proceeding of the North Central Weed Science Society Annual Meetings, Milwaukee, WI
- Oliveira MC, Patterson E, Gaines TA, Knezevic SZ (2017) A qualitative assay for detecting Palmer amaranth and its hybrids amongst pigweed species. Proceeding of the North Central Weed Science Society Annual Meetings, Saint Louis, MO
- Oliveira MC, Gaines TA, Knezevic SZ (2017) Inheritance of mesotrione resistance in a waterhemp population from Nebraska. Proceeding of the North Central Weed Science Society Annual Meetings, Saint Louis, MO
- Vieira G, Oliveira MC, Giacomini D, Arsenijevic N, Tranel P, Werle R (2017) Molecular screening of PPO and glyphosate resistance in Palmer amaranth populations from Nebraska. Proceeding of the North Central Weed Science Society Annual Meetings, Saint Louis, MO

- Miller JJ, Schepers JS, Giesler LJ, Shapiro CA, Oliveira MC, Arnenson NJ (2016) Characterizing soybean vigor and productivity using multiple crop canopy sensor readings. Proceeding of the American Society of Agronomy Annual Meetings, Phoenix, AZ
- Oliveira MC, Dayan FE, Gaines TA, Knezevic SZ (2016) Investigations into target-site and nontarget site resistance mechanisms in HPPD resistant waterhemp from Nebraska. Proceeding of the North Central Weed Science Society Annual Meetings, Des Moines, IA
- Oliveira MC, Scott JE, Knezevic SZ (2016) Critical time for weed removal in soybeans is influenced by soil applied herbicides. Proceeding of the North Central Weed Science Society Annual Meetings, Des Moines, IA
- Knezevic SZ, Oliveira MC, Scott JE (2016) Simulated drift of dicamba on potentially sensitive crops. Proceeding of the North Central Weed Science Society Annual Meetings, Des Moines, IA
- Oliveira MC, cott JE, Jhala AJ, Gaines T, Knezevic SZ (2016) Herbicide Programs to control HPPD-resistant Common Waterhemp in Nebraska. Proceeding of the Weed Science Society of America Annual Meetings, San Juan, PR
- Oliveira MC, Gaines T, Jhala A, Knezevic SZ (2016) Pollen-mediated resistance transfer from HPPD-resistance waterhemp to susceptible Palmer amaranth in Nebraska. Proceeding of the Weed Science Society of America Annual Meetings, San Juan, PR
- Oliveira MC, Oliveira e Freitas IF, Scott JE, Knezevic SZ (2015) Soybean yields and critical time for weed removal as influenced by soil applied herbicides. Proceeding of the North Central Weed Science Society Annual Meetings, Indianapolis, IN
- Oliveira MC, Gaines T, Jhala A, Knezevic SZ (2015) HPPD-resistance in waterhemp from Nebraska: Evidence for multiple genes enhancing metabolism. Proceeding of the North Central Weed Science Society Annual Meetings, Indianapolis, IN
- Oliveira MC, Gaines T, Knezevic SZ (2014) HPPD Resistance in Nebraska's Waterhemp: Enhance Metabolism of Target Site Mutation. Proceeding of the North Central Weed Science Society Annual Meetings, Minneapolis, MN
- Oliveira MC, Gaines T, Knezevic SZ (2014) Herbicide Options to Control HPPD resistant waterhemp in Nebraska. Proceeding of the North Central Weed Science Society Annual Meetings, Minneapolis, MN
- Oliveira MC, Scott JE, Franssen AS, Shivrain VK, Knezevic SZ (2014) Confirmation of HPPD Resistant Common Waterhemp in Nebraska. Proceeding of the North Central Weed Science Society Annual Meetings, Minneapolis, MN
- Knezevic SZ, Jhala AJ, Kruger GR, Sandell LD, **Oliveira MC**, Golus JA, Scott J (2014) Volunteer Roundup Ready Soybean Control in Roundup Ready Corn. Proceeding of the North Central Weed Science Society of America Annual Meetings, Minneapolis, MN
- 30+ abstracts in Brazilian Professional meetings from 2008 to 2013

GRANTS

• UW-Madison Division of Extension and UW-Madison CALS March 2019 Adaptation of Industrial Hemp (*Cannabis sativa*) to Agronomic practices in Wisconsin Funded: \$35,000 Wisconsin Corn Promotion Board

January 2019

Title: Challenging the Weed Management Challenges in Wisconsin Corn Production Funded: \$30,000

• North Central Soybean Research Program

August 2018

Title: Adaptation and Management of Glyphosate-Resistant Pigweed Species in the Northern Midwest US Soybean Production Systems
Submitted but not funded

• CAPES Foundation

September 2013

Title: Evolution of HPPD-resistant waterhemp (*Amaranthus tuberculatus*) in Nebraska Funded my Ph.D at the University of Nebraska-Lincoln (\$130,000)

TECHNICAL BULETINS AND EXTENSION ARTICLES

- 1. Alves DP, Reis MR, Pereira GAM, Silva MMJ, Nascimento MA, and **Oliveira** MC (2020) Injúrias causadas por residual de herbicidas na cultura do alho. *Universidade Federal de Viçosa* Link
- 2. Gomes CA, Reis MR, Silva MMJ, Pereira GAM, and **Oliveira** MC (2020) Injúrias causadas por residual de herbicidas na cultura da cebola. *Universidade Federal de Viçosa* Link
- 3. **Oliveira MC**, Pereira GAM, Takano H, Nunes AL, and Reis MR (2020) Classificação dos herbicidas no Brasil. *maxweeds* Link
- 4. Arneson NJ, Smith DH, DeWerff R, **Oliveira MC, and** Rodrigo Werle (2019) Residual control of waterhemp with pre-emergence herbicides in soybean. *WiscWeeds* Link
- 5. Smith DH, Broeske M, Patton J, Shelley K, Arriaga F, Jensen B, **Oliveira MC**, Briski B, Bubolz B, Rushmann R, Johnson H, Schriefer G, and Sorge M (2019) Cover Crops 101. University of Wisconsin-Madison Link
- 6. **Oliveira MC** and Werle R (2018) Herbicide site of action key for crop injury symptoms. *WiscWeeds* Link: EN and PT.

PROGRAMMING

- R e Rstudio
- GitHub
- LaTeX e Markdown
- Agricultural Research Management (ARM)
- Statistical Analysis Software (SAS)

PERSONAL PROJECTS

- Founder of Open Weed Science Community: https://www.openweedsci.org A website with tutorial for codes of data analysis and data visualization commonly published in manuscripts of weed research and related areas
- Blog: https://maxweeds.rbind.io My blog developed with Hugo, blogdown, Rstudio, and GitHub

LANGUAGUES

- Portuguese (Native speaker proficiency)
- English (Bilingual proficiency)
- Spanish (Intermediate working proficiency)