

Curriculum Vitae

Daniela T. Pezzini



PhD Candidate
Department of Entomology and Plant Pathology
AgBioFEWS Fellow
North Carolina State University

919-591-5797
dtpezzin@ncsu.edu

Background information

Educational background

Doctoral degree in Entomology, North Carolina State University, NC, United States.

07/2019 – current

Thesis: “Impact of Maize Blended and Structure refuge on *Helicoverpa zea* (Noctuidae: Lepidoptera) Resistance to Bt Toxins.”

Master’s degree in Entomology, University of Minnesota, MN, United States.

Completed: September 2018.

GPA: 3.64.

Thesis: “Community Characterization and Development of a Sequential Sampling Plan for Stink Bugs (Hemiptera: Pentatomidae) in Soybean in the North Central Region of the U.S.”

Bachelor’s degree in Agronomy, Federal University of Santa Maria, RS, Brazil.

Completed: September 2015

GPA: 7.5 of 10.

Senior thesis: “The use of F₂ screen methodology to detect insecticide resistance on the neotropical stink bug, *Euschistus heros* (Hemiptera: Pentatomidae).”

Experience

AgBioFEWS Interdisciplinary NSF Research Trainship – North Carolina State University, NC, United States.

Graduate interdisciplinary research training to examine the science, policy and public engagement aspects and impacts of Agricultural Biotechnology on Food, Energy and Water Systems.

Experience examining the complexities of agriculture by talking to a variety of NC farmers, environmental and financial agencies, collaboration on an interdisciplinary cohort project and incorporation of AgBioFEWS into thesis.

- 09/2019 – today.

Research Assistantship at Entomology – North Carolina State University, NC, United States.

Experience with field and laboratory studies with *Helicoverpa zea*, field experiments on soybean, corn and cotton, understanding of insect resistance management to insecticidal plants.

- Dr. Dominic Reisig
- 07/2019 – today.

Field Agronomist at Corteva Agriscience – Santa Bárbara do Sul, RS, Brazil.

Conducted field experiments to test the field efficacy of commonly used insecticides on the control of caterpillars and stink bugs in soybean in the northwestern region of Rio Grande do Sul. Experience organizing field days, sampling, insecticide application with CO₂ spray bar and data summarizing.

- Cindy Chaves
- 02/2019 – 05/2019

Research Assistantship at Entomology – University of Minnesota, MN, United States.

Experience with field and laboratory studies with stink bugs and the soybean aphid, field experiments on soybean, intensive learning of integrated pest management practices, ArcGIS and RVSP software, statistical analysis in R and coordination of a multistate project.

- Dr. Robert Koch
- 09/2015 – 09/2018

Monsanto Graduate Student Mentor Program (MGSMP)

Match students and mentors to give students more insight on the operational functions and people within Monsanto and enhance students' career development.

- Wally Bates
- 09/2017 – 09/2018

Internship at Entomology Laboratory – University of Minnesota, MN, United States.

Experience at Dr. Robert Koch laboratory with insect identification, field experiments and laboratory experiments with insecticides, soybean aphid and its natural enemies.

- Dr. Robert Koch
- 06/2014 – 12/2014

Internship at a Research Organization – Instituto Phytus, Itaara, RS, Brazil.

Experience in field experiments with sampling, insect injury evaluation, insect identification and pest management in soybean, corn and wheat. Experience with disease evaluation, rain fall simulation, weed pest management and fungicide application.

- Projects: “Applied F₂ screen methodology techniques to detect resistance on stink bugs” and “Enzymatic expression of soybean induced by drought stress”.
- Dr. Ricardo Balardin
- 08/2013 – 08/2015

Internship at American Institute of Chemical Engineers (AIChE) – Alexandria, Egypt.

Leadership development and cross-cultural global experience.

- Association Internationale des Étudiants en Sciences Économiques et Commerciales (AIESEC)
- 08/2013 – 09/2013

Internship at seed analysis laboratory – 3 Tentos Agroindustry, Santa Bárbara do Sul, Brazil.

Experience in seed germination test, tetrazolium chloride test, humidity and 1000-seed weight of agricultural seed crops.

- Andrea de Lima
- 01/2013 – 03/2013

Awards and honor

Entomological Society of America (ESA) Award

- *Larry Larson Graduate Student Award for Leadership in Applied Entomology* – award recognizes Dr. Larry Larson's role as a leader and pioneer in insect management and carries that legacy to the next generation of leaders in applied entomology.

ESA Plant-Insect Ecosystems (P-IE) Section

- *Plant-Insect Ecosystems (P-IE) Master's Student Achievement in Entomology Award* – Entomological Society of America (ESA) – Award recognized a master's student who has demonstrated creativity and significant achievements through research, teaching and/or outreach in entomology. (2017)

Fellowships

- *Lugger-Radcliffe Fellowship* - Department of Entomology award in recognition of outstanding academic and professional accomplishments. (2018)
- *Hueg-Harrison Fellowship* – University of Minnesota College of Food, Agricultural and Natural Resource Sciences (CFANS) in recognition of student excellent academic record and the mentoring relationship that has been forged between the student and the advisor. (2017)
- *Allan Peterson Graduate School Fellowship for Masters Students* – Department of Entomology award in recognition of outstanding academic and professional accomplishments. (2017)

Student competitions

- *1st Place Poster Student Competition* – 73rd Meeting of the North Central Branch of the Entomological Society of America, Madison, WI. (2018)
- *2nd Place, Field crops – Student 10-minute Paper Competition* – National Entomological Society of America meeting, Denver, CO. (2017)
- *2nd Place, M.S. Student 10-minute Paper Competition* – 72nd Annual Meeting of the North Central Branch of the Entomological Society of America, Indiana, IN. (2017)

Travel grants

- Council of Graduate Students (COGS) Travel Conference Grant – Grant intended for travel to present original work in a conference. (2017)
- Chiang Travel Grant for Graduate Students in Entomology – Department of Entomology grant for students giving oral or poster presentation at a national or international meeting. (2017)
- NCB ESA Travel Grant Award – 72nd Annual Meeting of the North Central Branch of the Entomological Society of America. Indianapolis, IN, United States. (2017)

Research

Refereed Journal Publications

- Pezzini, D.T.**, C.D. DiFonzo, D.L. Finke, T.E. Hunt, J.J. Knodel, C.H. Krupke, B. McCornack, A.P. Michel, A.J. Varenhorst, R.J. Wright and R.L. Koch. 2018. Community composition, abundance and temporal dynamics of stink bugs (Hemiptera: Pentatomidae) in soybean in the North Central Region of the U.S. *Journal of Economic Entomology*: toz099.
- Pezzini, D.T.**, C.D. DiFonzo, D.L. Finke, T.E. Hunt, J.J. Knodel, C.H. Krupke, B. McCornack, A.P. Michel, R.D. Moon, C.R. Philips, A.J. Varenhorst, R.J. Wright and R.L. Koch. 2018. Spatial patterns and sequential sampling plans for stink bugs (Hemiptera: Pentatomidae) in soybean in the North Central Region of the U.S. *Journal of Economic Entomology*: toz100.
- Pezzini, D.T.**, E.C. Santacruz, and R.L. Koch. 2018. Predation and parasitism of *Halyomorpha halys* (Hemiptera: Pentatomidae) eggs in Minnesota. *Environmental Entomology* 47: 812–821.
- Pezzini, D.T.**, M. Haag, J. Walker, and R.L. Koch. 2018. Pentatomidae (Hemiptera: Heteroptera: Pentatomidae) captured on purple prism traps deployed for detection of emerald ash borer (*Agrilus planipennis*) (Coleoptera: Buprestidae) in Minnesota. *The Great Lakes Entomologist* 51: 10–17.
- Koch, R.L., **D.T. Pezzini**, A.P. Michel and T.E. Hunt. 2017. Identification, Biology, Impacts, and Management of Stink Bugs (Hemiptera: Heteroptera: Pentatomidae) of Soybean and Corn in the Midwestern United States. *Journal of Integrated Pest Management* 8(1): 11; 1 - 4.
- Stefanello, M.T., R.S. Balardin, S.G. Minuzzi, D. Dalla Favera, L.N. Marques, **D.T. Pezzini** and A. Ebone. 2016. Effect of the interaction between fungicide application time and rainfall simulation interval on Asian Soybean Rust control effectiveness. *Semina: Ciências Agrárias*, 37(6): 3881 - 3892.
- Pezzini, D.T.** and R.L. Koch. 2015. Compatibility of flonicamid and a formulated mixture of pyrethrins and azadirachtin with predators for soybean aphid (Hemiptera: Aphididae) management. *Biocontrol Science and Technology*. *Biocontrol Science and Technology*, 25(9): 1024 - 1035.
- Marques, L.N., R.S. Balardin, M.T. Stefanello, **D.T. Pezzini**, C. Gulart, J.P. Ramos and J.G. Farias. 2015. Physiological, biochemical and nutritional parameters of wheat treated with fungicide and foliar fertilizer. *Semina: Ciências Agrárias*, 37(3): 1243 - 1254.

Extension publications

- Koch, R.L. and **D.T. Pezzini**. 2016. Brown marmorated stink bug detected in Minnesota soybean. Minnesota Crop News, University of Minnesota Extension. August 25, 2016. (<http://blog-crop-news.extension.umn.edu/2016/08/brown-marmorated-stink-bug-detected-in.html>)

Research Talks and Posters Presented

- Araújo, T.A. de, **D.T. Pezzini**, R.S. Ramos, M.C. Picanço, C.S. Bastos, T.E. Hunt, and W.D. Hutchison. Enumerative and binomial sequential sampling plans for *Frankliniella schultzei* (Thysanoptera: Thripidae) on tomato. Poster presentation in: XXVII Congresso Brasileiro de Entomologia and X Congresso Latino-Americano de Entomologia. Gramado, RS, Brazil.
- Pezzini, D.T.**, Santacruz, E.N, and R.L. Koch. 2018. Parasitism and predation of *Halyomorpha halys* (Hemiptera: Pentatomidae) sentinel egg masses in Minnesota. Poster presentation in: 73rd Annual Meeting of the North Central Branch of the Entomological Society of America. Madison, WI, United States.
- Pezzini, D.T.**, D. Finke, T. Hunt, J. Knodel, C.H. Krupke, B. McCornack, A. Michel, C. Philips, A. Varenhorst, R. Wright and R. Koch. 2017. Influence of field and landscape factors on stink bug (Hemiptera: Pentatomidae) community in North Central soybean. Oral presentation in: 2017 Entomological Society of America Annual Meeting. Denver, CO, United States.
- Pezzini, D.T.**, D. Finke, T. Hunt, J. Knodel, C.H. Krupke, B. McCornack, A. Michel, C. Philips, A. Varenhorst, R. Wright and R. Koch. 2017. Spatial pattern and sequential sampling plan for stink bugs (Hemiptera: Pentatomidae) for soybean in the north central U.S. Oral presentation in: 72nd Annual Meeting of the North Central Branch of the Entomological Society of America. Indianapolis, IN, United States.
- Cagliari, D., I.F.D. da Costa, J.R. Farias, **D.T. Pezzini**, and J. Dahmer. 2017. Spectrum of action of *Nomuraea rileyi* (Farlow) in caterpillars of soybean. Proceedings of the International Salon of Teaching, Research and Extension, Alegre, RS, Brazil.
- Pezzini, D.T.** and R. Koch. 2016. Preliminary assessment of a sampling plan for stink bugs in Minnesota soybean. Poster presentation in: 71st Annual Meeting of the North Central Branch of the Entomological Society of America. Cleveland, OH, United States.
- Marques, L. N.; R. Balardin, M. T. Stefanello, **D.T. Pezzini** and J.P. Ramos. 2015. Effect of nitrogen application on soybean yield parameter at seed development growth stage. Poster presentation in: VII Congresso Brasileiro de Soja. Florianópolis, SC, Brazil.
- Perlin, A.V., **D.T. Pezzini**, S. Uhde and M.B. Luz. 2015. Diagnosis of stink bug injury in soybean seeds by tetrazolium test. Poster presentation in: VII Congresso Brasileiro de Soja. Florianópolis, SC, Brazil.
- Pezzini, D.T.**, A.V. Perlin, D. Cagliari, J.A.S Franca, J. Dahmer, L.N. Marques, J. Farias. 2015. Chlorantraniliprole biological activity period on soybean leaves on field and their effect on *Anticarsia gemmatilis* and *Helicoverpa armigera* (Lepdoptera: Noctuidae). Poster presentation in: VII Congresso Brasileiro de Soja. Florianópolis, SC, Brazil.

- Stefanello, M, R. Marques, **D.T. Pezzini** and R. Balardin. 2015. Residual activity of proticonazol + thirifloxistrobin in soybean plants with different hydric levels. Poster presentation in: VII Congresso Brasileiro de Soja. Florianópolis, SC, Brazil.
- Duarte, I.S. and **D.T. Pezzini**. 2014. Effect of fusarium head blight on deoxynivalenol levels in wheat and its interaction with fungicide application. Poster presentation in: XVIII SEPE: Simpósio de Ensino, Pesquisa e Extensão. Santa Maria, RS, Brazil.
- Zuhl, J., **D.T. Pezzini**, L.N. Marques, J.G. Farias, D.T. Schreiner and R. Balardin. 2014. Effect of foliar fertilizer on physiological parameters of soybean in drought conditions. Poster presentation in: XVIII SEPE: Simpósio de Ensino, Pesquisa e Extensão. Santa Maria, RS, Brazil.
- Pezzini, D.T.**, N. Tormen, J. Uebel, A. Camargo, D. Patias, R. Balardin. 2013. Efficiency of fungicides on the control of the target spot disease on soybean. Poster presentation in: 46º Congresso Brasileiro de Fitopatologia. Ouro Preto, MG, Brazil.

Invited talks

- Pezzini, D.T.**, C. Difonzo, D. Finke, T. Hunt, J. Knodel, C.H. Krupke, B. McCornack, A. Michel, C. Philips, A. Varenhorst, R. Wright and R. Koch. 2017. Emerging stink bugs (Hemiptera: Pentatomidae) on soybean—where are they and what do they like to eat? In: “*Shifting Pest Complexes: Management and Challenges in Soybean*” Symposium at the 73rd Annual Meeting of the North Central Branch of the Entomological Society of America. Madison, WI, United States.

Service

Teaching

- Teaching Assistant of ENT 4015: Ornamentals and Turf Entomology at the Department of Entomology, University of Minnesota. (01/2018 – 05/2018)

Student group organizations

- Vice-president of graduate student organization – Department of Entomology. (05/2017 – 08/2018)
- Secretary of graduate student organization – Department of Entomology. (09/2016 – 05/2017)
- Seminar representative of graduate student organization – Department of Entomology. (09/2015 – 08/2016)
- President of the class at Federal University of Santa Maria. (09/2010 – 09/2015)

Outreach

- Food production and security – Minnesota Youth Institute (05/2018)
- Beneficial and pest insects – Ramsey County Master Gardeners (01/2018)

- Insect damage signs and symptoms – Ramsey County Master Gardeners (08/2017)
- Insects’ role on human lives - Autism Spectrum Disorder students of West Metro Learning Connections (WMLC) (06/2017)
- Insects of Minnesota and habitats – Minnesota Girl Scouts of Mahtomedi, Minnesota (09/2016)
- Insect biology and reproduction – South High School, Minneapolis, Minnesota (07/2016)
- Minnesota State Fair: Entomology Outreach Booth (08/2014, /2016 and /2017)

Professional Societies

- North Carolina Entomological Society: Member since 2019.
- Entomological Society of America: Member since 2015.