

Andres Dejesus Sanabria-Velazquez

Email: adsanabr@ncsu.edu

Web Profiles:

NCSU: <https://cals.ncsu.edu/entomology-and-plant-pathology/people/adsanabr>

OSU: <https://plantpath.osu.edu/our-people/andr%C3%A9s-dejes%C3%BAs-sanabria-vel%C3%A1zquez>

Google scholar: <https://scholar.google.com/citations?user=a01IxI4AAAAJ&hl=en>

Education

2018 -2021 Ph.D. in Plant Pathology, North Carolina State University, NC, USA.

2016-2018 M. Sc. in Plant Pathology, The Ohio State University, OH, USA. Completed

2009-2014 BS in Agronomy, National University of Asuncion, Paraguay. Completed

Research and Work Experience

- **2021 -Currently** North Carolina State University, Raleigh, NC
Postdoctoral Researcher. Time per week: 40 hours
Department of Entomology and Plant Pathology- Adhikari/Louws' Lab
Topic: Management of Verticillium Wilt of Tomato
- **2018 -2021** North Carolina State University, Raleigh, NC
Graduate Research Assistant. Time per week: 20 hours
Department of Entomology and Plant Pathology- H. David Shew's Lab
Topic: Alternative Management of Stevia Diseases
- **2016 – 2018** The Ohio State University, Wooster, OH
Fulbright Fellow. Time per week: 20 hours
Department of Plant Pathology- Sally A. Miller's Lab
Topic: Effects of Anaerobic Soil Disinfestation on *Sclerotinia* spp.
- **2013 – 2016** Paraguayan Institute of Agricultural Technology - IPTA
Researcher. Time per week: 40 hours
Researcher Department of Phytopathology
Topic: Epidemiology of Stevia Diseases
- **2012 – 2013** College of Agricultural Sciences – National University of Asuncion.
Research Assistant. Time per week: 20 hours
Topic: Biological control of *Rosellinia* sp. with isolates of *Trichoderma* spp.

Publications on soilborne pathogen management

Khadka, R. B., Sanabria-Velazquez, A. D., Cardina, J. and Miller S.A. 2022. Evaluation of Anaerobic Soil Disinfestation for Environmentally Sustainable Weed Management. *Agronomy*, **12**: 3147. <https://doi.org/10.3390/agronomy12123147>

Sanabria-Velazquez, A.D., Cubilla, A.; Flores-Giubi, M.E., Barua, J.E. Romero-Rodríguez, MC, Thiessen, LD and Shew, H.D. 2022. First Report of Charcoal Rot Caused by *Macrophomina euphorbiicola* in Stevia Production Fields in Paraguay. **Plant Disease (in press)**.
<https://doi.org/10.1094/PDIS-06-21-1279-PDN>

Fernández-Gamarra, M., Mohan-Kohli, M., Scholz-Drodowski, R., Vargas, M.J., Agüero, R., Riveros, M., **Sanabria-Velázquez, A.** and Maldonado, G.E., 2022. Field screening of Paraguayan soybean germplasm for resistance to charcoal rot. *Agriscientia*, 39(2), pp.75-83.
<https://doi.org/10.31047/1668.298x.v39.n2.36896>

Enciso-Maldonado, G.A.; Lozoya-Saldaña, H.; Colinas-Leon, M.T.; Cuevas-Sanchez, J.A.; **Sanabria-Velázquez A.D.**; Bamberg, J. and Raman, K.V. 2022. Assessment of wild Solanum species for resistance to *Phytophthora infestans* (Mont.) de Bary in the Toluca Valley, Mexico. **American Journal of Potato Research**, 99, 25–39. <https://doi.org/10.1007/s12230-021-09856-x>

Lopez-Nicora, H., Enciso-Maldonado, G.A., Caballero-Mairesse, G.G., **Sanabria-Velázquez, A.D.**, Armandans-Rojas, A.J., Soilán-Duarte, L.C., Grabowski-Ocampos, C.J., Resquin-Romero, G.A., Colmán, A.A., Pedrozo-Fleitas, L.M. and Valiente-Raidán, H.N., 2022. Distribution and abundance of nematodes in horticultural production in Paraguay. **Plant Health Progress (in press)**. <https://doi.org/10.1094/PHP-01-22-0001-S>

Sanabria-Velazquez, A.D., Testen, A.L., Khadka, R., Liu, Z., Xu, F. and Miller, S.A., 2020. Anaerobic soil disinfestation reduces viability of *Sclerotinia sclerotiorum* and *S. minor* sclerotia and root-knot nematodes in muck soils. **Phytopathology**, 110:4, 795-804.
<https://doi.org/10.1094/PHYTO-10-19-0386-R>

Sanabria-Velázquez, A.D. 2020. Evaluation of Paraguayan native strains of *Trichoderma* spp. for the control of *Colletotrichum* spp. causal agent of strawberry anthracnose. **Investigación Agraria**, 22(1), pp.53-62. <https://doi.org/10.18004/investig.agrar.2020.junio.53-62>

Sanabria-Velazquez, A.D., Testen, AL., Enciso, G.A., Soilan, L.C. and Miller, S.A. 2019. Effects of anaerobic soil disinfestation on *Sclerotinia sclerotiorum* in Paraguay. **Plant Health Progr.** 20 (1), 50-60. <https://doi.org/10.1094/PHP-12-18-0082-RS>

Sanabria Velazquez, A.D. and Grabowski Ocampos, C.J. 2016. Biological control of *Rosellinia* sp. causing of the sudden death of the macadamia (*Macadamia integrifolia*) with isolates of *Trichoderma* spp. **Investigación Agraria**, 18(2), 77-86. <https://dx.doi.org/10.18004/Andres D. Sanabria->

Other publications

Sanabria-Velazquez, A.D., Enciso-Maldonado, G.A., Maidana-Ojeda, M., Díaz-Nájera, J.F., Thiessen, L. and Shew, H.D., 2022. Validation of standard area diagrams to estimate the severity of Septoria Leaf Spot on stevia in Paraguay, Mexico, and the USA. **Plant Disease (in press)**.
<https://doi.org/10.1094/PDIS-07-22-1609-RE>

Enciso-Maldonado, G.A., Núñez-Ramírez, R.A., Montoya-García, C.O., Schlickmann-Tank, J.A., Maidana-Ojeda, M., Mendoza-Duarte, M.J., Aguilar-Cubilla, E.D. and **Sanabria-Velázquez, A.D.**, 2022. Efecto de la época de siembra y diferentes programas aplicación de fungicidas sobre la severidad de la roya asiática de la soja. *Investigaciones y Estudios-UNA*, 13(2), pp.37-48. <https://doi.org/10.47133/IEUNA22204b>

Maldonado, G.A.E., **Sanabria-Velázquez, A.D.**, Tank, J.A.S. and Ojeda, M.M., 2021. Una carrera contra la pérdida de la eficacia de fungicidas: 20 años de manejo de la roya asiática de la soja en Paraguay. *Investigaciones y Estudios-UNA*, 12(2), pp.59-61. <https://doi.org/10.47133/IEUNA2126b>

Enciso-Maldonado, G., **Sanabria-Velázquez, A. D.**, Fernández-Riquelme, F., Díaz-Nájera, J., Fernández-Salinas, P., & Lugo-Pereira, W. 2021. Soybean yield components at different densities and planting seasons in Paraguay. *Agronomía Colombiana*, **39(1)**, 12-21. <https://doi.org/10.15446/agron.colomb.v39n1.88979>

Enciso-Maldonado, G.A., Morales-Vázquez, B., **Sanabria-Velázquez, A.D.**, Díaz-Nájera, J.F., Zapata-Maldonado, C.I. and Fuentes-Aragón, D., 2020. First report of powdery mildew caused by *Golovinomyces ambrosiae* on *Cosmos atrosanguineus* (Hook.) Voss. *Journal of Plant Pathology*, **102(4)**, pp.1345-1346.

Awards and Grants (total awarded \$120, 700)

2023 Southern SARE On-Farm Research Grant Proposal (\$30,000).

2023 Southern Region Small Fruit Consortium (\$10,000).

2021 Storkan-Hanes-McCaslin Graduate Research on Soil-Borne Disease Award (\$10,000).

2021 1st Place Research Competition Southern Division American Phytopathological Society Meeting (\$500).

2020 Student Travel Award. American Phytopathological Society (\$500).

2019 Office of International Programs (OIP) Global Experience Award. (\$2,000)

2018 Raymond G. Grogan Student Travel Award. American Phytopathological Society (\$500).

2018 Second Place Poster Competition at the OARDC Conference. Effects of Anaerobic Soil Disinfestation. Category: MSc. Advisor: Sally A. Miller (\$500).

2018 Plant Pathology Graduate Student Association of the Ohio State University Travel Award (\$500).

2017 The OARDC Research Enhancement Competitive Grants. The Ohio State University (\$5,000).

2017 Fulbright Climatic Impacts on Our Future Enrichment Seminar Travel Award, Fulbright - Institute of International Education (\$1,200).

2016 H.A.J. Hoitink Graduate Education Scholarship. Department of Plant Pathology. The Ohio State University ((\$10,000).

2016 Fulbright IIE Scholarship. U.S. Department of State's Bureau of Education and Cultural Affairs (\$80,000).

Presentations

2021 Exploring alternative management of plant pathogens of stevia in North Carolina, Mexico, and Paraguay. In Special Session: Plant Pathologists of the Future. 2021 American Phytopathological Society Annual Meeting.

2020 The origin of the problem: Phylogeographic analysis of *Septoria steviae*, causal agent of Septoria leaf spot of stevia. American Phytopathological Society Annual Meeting.

2020 APS-OIP Global Experience Award: Get funded for your globally collaborative ideas. In Special Session. American Phytopathological Society.

2019 Stevia, in the quest of sweetness... Plant diseases appear! Identifying priority diseases limiting stevia production in Paraguay. Stevia diseases workshop. Asuncion, Paraguay.

2018 Effects of anaerobic soil disinfestation on *Sclerotinia sclerotiorum* and *S. minor* in Ohio muck soil. In: International Congress of Plant Pathology. Boston, MA.

2017 Antagonistic potential of biocontrol bacteria against *Sclerotinia sclerotiorum* causing lettuce drop. American Phytopathological Society Annual Meeting. San Antonio, TX.

2017 Differential antibiosis of hydrolytic enzymes and metabolites by Paraguayan isolates of *Trichoderma* spp. against *Macrophomina phaseolina*. In Special Session. Pathogens that produce sclerotia. American Phytopathological Society Annual Meeting. San Antonio, TX.

Teaching Experience

Spring 2022-2023 Environmental Microbiology. Guest Lecturer. Zamorano. Honduras. Escuela Agrícola Panamericana, Zamorano. Honduras.

Fall 2021 Principles in Plant Pathology. Lab and Lecture Teaching Assistant. NCSU. USA.

Spring 2021 Epidemiology and Plant Disease Control. Lecture Teaching Assistant. NCSU. USA.

Summer 2021 Diagnosis of Plant Diseases. Guest Lecturer. Universidad Nacional de Itapua. Paraguay.

Spring 2013 Nematology. Lab Teaching Assistant. Universidad Nacional de Asuncion. Paraguay.

Spring 2013 Statistical Methods. Lab Teaching Assistant. Universidad Nacional de Asuncion. Paraguay.

Undergraduate Advisees

2016 Hassan Karim Bittar Vega. Alternative Management of *Sclerotium rolfsii* Sacc. in *Stevia rebaudiana* Bertoni in greenhouse. Universidad Nacional de Asuncion. Paraguay.

2015 Rubén Darío Porro. *In vitro* evaluation of native isolates of *Trichoderma* spp. in the control of *Fusarium oxysporum*. Universidad Nacional de Asuncion. Paraguay.

2015 Dahye Jin. Effect of plant extracts on *Sclerotium rolfsii* causal agent of stem rot in *Stevia rebaudiana*. Paraguayan Institute of Agricultural Technology. Paraguay.

2015 Soojung Hur. *In vitro* chemical control of *Sclerotium rolfsii* causative agent of *Stevia rebaudiana*. Paraguayan Institute of Agricultural Technology. Paraguay.

Professional Activities

2017-2023 American Phytopathological Society Southern Division. Member

2019-2023 American Phytopathological Society. Office of International Programs. Volunteer.

2018-2019 NCSU Plant Pathology Graduate Student Association. Vice-President.

20120-2021 NCSU Plant Pathology Graduate Student Association. President.

References

Dr. Frank Louws.

Position: Posdoctoral Advisor.

Department Head and Professor, Horticultural Science. North Carolina State University.

2721 Founders Dr. (Kilgore Hall, Campus Box 7609) NC State University Raleigh, NC 27695-7609

Phone: +1 919 623 9404

email: fjlouws@ncsu.edu

Dr. Tika Adhikari.

Position: Posdoctoral Advisor.

Adjunct Professor. Department of Entomology and Plant Pathology. North Carolina State University.

1575 Varsity Drive. Varsity Research Building, Module 6. Raleigh, NC 27695, USA.

Phone: +1 919 454 9082

email: tbadhika@ncsu.edu

Dr. H. David Shew.

Position: Ph.D. Advisor.

Philip Morris Professor. Emeritus Ecology and epidemiology of soilborne fungal.

N.C. State University. Department of Entomology and Plant Pathology.

Phone: 919-515-6811

email: david_shew@ncsu.edu; shew@ncsu.edu

Dr. Sally A. Miller

Position: M.Sc. Advisor.

Distinguished Professor of Food, Agricultural, and Environmental Sciences in Plant Pathology.

The Ohio State University. Department of Plant Pathology.

Phone: +1 330 263 3678 Office | +1 330 466 5249 Mobile

email: miller.769@osu.edu