CV: Camilo Humberto Parada Rojas

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EDUCATION

2017 – present Ph.D. candidate in Plant Pathology. Department of Entomology and Plant Pathology, North Carolina State University
Raleigh, North Carolina, United States
Committee: Drs. Lina M. Quesada-Ocampo, Eric Davis, Hamid Ashrafi, and Peter Balint-Kurti

2015 – 2017 M.S. in Plant Pathology. Department of Entomology and Plant Pathology, North Carolina State University
Raleigh, North Carolina, United States
Thesis title: "Novel Microsatellite Markers for the Analysis of *Phytophthora capsici* Populations and Host Resistance for Management of Phytophthora Blight of Pepper"

2009 – 2014 B.S. in Biotechnological Engineering. Francisco de Paula Santander University (UFPS)
Cucuta, Norte de Santander, Colombia

RESEARCH PUBLICATIONS

6. **Parada-Rojas C. H.** and Quesada-Ocampo L. M. (2022) *Phytophthora capsici* populations are structured by geography, host, and fluopicolide sensitivity. Phytopathology: https://doi.org/10.1094/PHYTO-09-21-0403-R
5. **Parada-Rojas C. H.,** Granke L. L., Naegele R. P., Hansen Z., Hausbeck M. K., Kousik S., McGrath M. T., Smart C., and Quesada-Ocampo L. M. (2021) A diagnostic guide of *Phytophthora capsici* infecting vegetable crops. Plant Health Progress: *in press*. *Invited paper for Managing Stubborn Oomycetes Special Issue Plant Health Progress 22: 404-414
4. **Parada Rojas, C. H.**, Pecota, K., Almeyda, C., Yencho, G. C., & Quesada-Ocampo, L. (2021) Sweetpotato root development influences susceptibility to black rot caused by the fungal pathogen *Ceratocystis fimbriata*. Phytopathology 111: 1660-1669
3. **Parada-Rojas C. H.** and Quesada-Ocampo L. M. (2019) Characterizing sources of resistance to Phytophthora blight of pepper caused by *Phytophthora capsici* in North Carolina. Plant Health Progress 20: 112-119
2. **Parada-Rojas C. H.** and Quesada-Ocampo L. M. (2018) Analysis of microsatellites from transcriptome sequences of *Phytophthora capsici* and applications for population studies. Scientific Reports 8: 5194
1. Kousik C., **Parada C.**, and Quesada-Ocampo L. M. (2015) First report of Phytophthora fruit rot on bitter gourd (*Mormodica charantia*) and sponge gourd (*Luffa cylindrica*) caused by *Phytophthora capsici.* Plant Health Progress 16: 93-94

EXTENSION PUBLICATIONS

12. **Parada-Rojas C. H.** and Quesada-Ocampo L. M. (2021) How to identify and manage sweetpotato scurf caused by *Monilochaetes infuscans*. Extension Plant Pathology Portal.
11. **Parada-Rojas C. H.** and Quesada-Ocampo L. M. (2021) Section 18 label renewal approved for use of Mertect (thiabendazole) for control of sweetpotato black rot postharvest in domestic markets. Extension Plant Pathology Portal.
10. Adams M. L., **Parada-Rojas C. H.**, Collins H., and Quesada-Ocampo L. M. (2019) Evaluation of fungicides for control of Phytophthora blight of pepper, Clayton 2018. Plant Disease Management Reports 13: V064.
9. Adams M. L., **Parada-Rojas C. H.**, Collins H., and Quesada-Ocampo L. M. (2018) Evaluation of fungicides for control of Phytophthora blight on pepper, Clayton 2017. Plant Disease Management Reports 12: V117.

8. Adams M. L., **Parada-Rojas C. H.**, and Quesada-Ocampo L. M. (2017) Evaluation of fungicides for control of Phytophthora blight of pepper, Jackson Springs 2016. Plant Disease Management Reports 11: V095.
7. Adams M. L., **Parada-Rojas C. H.**, and Quesada-Ocampo L. M. (2017) Evaluation of fungicides for control of Phytophthora fruit rot of watermelon, Kinston 2016. Plant Disease Management Reports 11: V111.
6. **Parada-Rojas C. H.** and Quesada-Ocampo L. M. (2017) Evaluation of pepper cultivars for Phytophthora blight resistance, Jackson Springs 2016**.** Plant Disease Management Reports: V033.
5. **Parada-Rojas C. H.** and Quesada-Ocampo L. M. (2017) Evaluation of pepper cultivars for Phytophthora blight resistance, Jackson Springs 2015. Plant Disease Management Reports: V034.
4. **Parada-Rojas C. H.** and Quesada-Ocampo L. M. (2017) Evaluation of fungicides for control of Phytophthora blight of pepper, Jackson Springs 2016. Plant Disease Management Reports: V095.
3. Quesada-Ocampo L. M. and **Parada-Rojas C. H.** (2015) Phytophthora blight of peppers. Vegetable Pathology Factsheets. NC State Extension Publications. URL: http://content.ces.ncsu.edu/phytophthora-blight-of-peppers
2. Adams M. L., **Parada Rojas C. H.**, and Quesada-Ocampo L. M. (2015) Evaluation of fungicides for control of downy mildew on cucumber, Kinston 2014. Plant Disease Management Reports 9: V081.
1. Adams M. L, **Parada-Rojas C. H.**, and Quesada-Ocampo L. M. (2015) Evaluation of fungicides for control of downy mildew on cucumber, Kinston II 2014. Plant Disease Management Reports 9: V085.

BOOK CHAPTERS

3. Salcedo A., **Parada-Rojas C. H**., Guerrero R., Stahr M., D'Arcangelo K.N., McGregor C., Kousik C., Wehner T., and Quesada-Ocampo L. M. (2022) The NLR family of disease resistance genes in cultivated watermelon and other cucurbits: opportunities and challenges. Chapter 3. In: The Watermelon Genome. Editors: Dutta S. K. and Reddy U. Springer. *In Press*
2. **Parada-Rojas C. H.**, Quesada-Ocampo L. M. (2021) Uncovering the NLR family of disease resistance genes in cultivated sweetpotato and wild relatives. Chapter 3. In: Postharvest Pathology: Next Generation Solutions to Reducing Losses and Enhancing Safety. Springer.
1. **Parada-Rojas C. H.**, Quesada-Ocampo L. M., and Hausbeck M. K. (2021) Diseases of cucurbits: Phytophthora blight. In: Handbook of Vegetable and Herb Diseases. Editors: Elmer W., McGrath M. T., and McGovern R. Springer.

AWARDS (Total awarded $207,650)

2021 The Storkan/Hanes/McCaslin Research Foundation Grant Award ($10,000)

2020 APS student travel award to support attendance at the APS Annual Meeting: Plant Health 2020

2018-21 Foundation for Food and Agriculture Research Fellowship Program ($195,000)

2018 Graduate student oral presentation contest in the National Sweetpotato Collaborators Group annual meeting ($150)

2017 Travel award to attend the Oomycete Molecular Genetics Network Annual Meeting, Asilomar, CA ($1,400)

2016 Stephen A. Johnston Student Travel Award from APS Foundation Board ($500)

2015 Travel award to attend the Summer Bioinformatics Training Workshop, Blacksburg, VA ($600)

POSTERS & PRESENTATIONS

2022 **Parada-Rojas C. H.**, Pecota K., Almeyda C., Yencho G. C., Childs K., and Quesada-Ocampo L. M. Advancing our knowledge of sweetpotato resistance: one NLRome at a time. American Phytopathological Society - Caribbean Division, San Juan, PR, March (Invited Oral Presentation)

Parada-Rojas C. H., Pecota K., Almeyda C., Yencho G. C., Childs K., and Quesada-Ocampo L. M. Advancing our knowledge of sweetpotato disease resistance: one NLRome at a time. NC State University Graduate Symposium, Raleigh, NC. (Invited Poster)

Parada-Rojas C. H., Stahr M., Childs K., and Quesada-Ocampo L. M. Revealing the effector repertoire of the sweetpotato black rot fungal pathogen *Ceratocystis fimbriata.* 31st Fungal Genetics Conference, Asilomar, Pacific Grove, CA (Poster)

Parada-Rojas C. H., Jansson A., Pecota K., Almeyda C., Yencho G. C., Childs K., and Quesada-Ocampo L. M. Advancing our Knowledge of Sweetpotato Resistance: From X-ray Computed Tomography Phenotyping to the NLRome. Georgia Association of Plant Pathologist Meeting. Savannah, GA. (Invited Oral Presentation)

2021 **Parada Rojas C. H.**, Pecota, K., Almeyda, C., Yencho, G. C., Quesada-Ocampo L.M. Size matters! Smaller sweetpotato roots are more susceptible to black rot. Sweetpotato field day. Clinton, NC, October 2021. (Poster)

Salcedo, A., **Parada-Rojas C. H.**, Purayannur S.,Quesada-Ocampo L. M. Accelerating Resistance Breeding in Cucurbits. CucCAP2 meeting, Virtual Meeting, October 2021 (Oral Presentation)

Parada-Rojas C. H. and Quesada-Ocampo L. M. Exposing the catalog of NLR genes in cultivated hexaploid sweetpotato. International Society for Molecular Plant-Microbe Interactions Congress eSymposia series. 2021 (Poster)

Samson D., Collins H., Adams M., **Parada-Rojas C. H.**, Quesada-Ocampo L.M. First Report of Alternaria Leaf Blight on Purple Carrots in North Carolina. Summer Undergraduate Research Symposium. August 2021. (Poster)

Parada-Rojas C. H. and Quesada-Ocampo L. M. Revealing the NLRome of cultivated hexaploid sweetpotato. American Phytopathological Society Annual Meeting, Plant Health 2021, Memphis, TN. (Poster)

Stahr, M. N., **Parada-Rojas C. H.**, Childs K., and Quesada-Ocampo, L. M. Development of a species-specific diagnostic assay for *Ceratocystis fimbriata* using a high-quality genome assembly and comparative genomic analysis. American Phytopathological Society Annual Meeting, Plant Health 2021, Memphis, TN, August 2021. (Poster)

Parada-Rojas C. H., Jansson A., Pecota K., Yencho G.C., Quesada-Ocampo L. M. No trespassing! Barrier zone in the sweetpotato storage root prevents expansion of *Ceratocystis fimbriata* infections. Annual Southern Division American Phytopathological Society Meeting, Virtual Meeting. (Oral presentation)

Parada-Rojas C. H., Jansson A., C. Almeyda, Pecota K., Yencho G.C., Quesada-Ocampo L. M. Advancing our Knowledge of Sweetpotato Resistance: From X-ray Computed Tomography Phenotyping to the NLRome. NC State Plant Pathology Graduate Student Symposium. Raleigh, NC. (Oral presentation)

Parada-Rojas C. H., Pecota K., Yencho C., and Quesada-Ocampo, L. M. Sweetpotato development influences susceptibility to black rot. Organic Commodities and Livestock Conference. Virtual meeting, March 2021 (Oral presentation)

2020 **Parada Rojas C. H.,** Pecota K., Yencho G.C., and Quesada-Ocampo L. M. Cytological changes in sweetpotato storage root cambium in relationship with age-related resistance to *Ceratocystis fimbriata*. Plant Health 2020, Virtual meeting. (Poster)

Parada-Rojas C. H., Pecota K., Yencho G.C., Quesada-Ocampo L. M. Black rot resistance in sweetpotato (*Ipomoea batatas*): a case of age-related resistance. Annual Meeting of the Southern Division-American Phytopathological Society, Charleston, SC. (Oral presentation)

Parada-Rojas C. H., Pecota K., Yencho G.C., Quesada-Ocampo L. M. Characterizing black rot resistance in sweetpotato (*Ipomoea batatas*) and wild relatives. National Sweetpotato Collaborators Group Annual Meeting, Nashville, TN. (Oral presentation)

Stahr M., **Parada-Rojas C. H.**, Collins H., and Quesada-Ocampo L. M. A glimpse into postharvest pathology research to strengthen sweetpotato domestic and export markets. Sweetpotato virtual field day. Raleigh, NC, November 2020. (Virtual presentation)

2019 **Parada-Rojas C. H.** and Quesada-Ocampo L. M. Characterizing the sweetpotato NLR resistome: diploid wild relatives genome survey and bait design. American Phytopathological Society Annual Meeting, Plant Health 2019, Cleveland, OH. (Oral presentation)

Parada-Rojas C. H. and Quesada-Ocampo L. M. Transcriptome analysis of cultivated and wild sweetpotato reveals differences in NB-LRR resistance gene repertoire. National Sweetpotato Collaborators Group Annual Conference, Birmingham, AL. (Oral presentation)

Adams M., Collins H., Salcedo A., Purayannur S., Standish J., D'Arcangelo K., Stahr M., **Parada-Rojas C. H.**, Wong S., and Quesada-Ocampo L. M. Small Farms Tour: disease diagnostics and management in vegetable crops. Clayton, NC. (Oral presentation)

Pinzon-Pineda E.N., **Parada-Rojas C. H.**, and Quesada-Ocampo L. M. Black rot susceptibility of sweetpotato developmental stages and virulence of pre- and post-emergent *Ceratocystis fimbriata* isolates. NC State Undergraduate Research Symposium. Raleigh, NC, August 2019. (Poster)

Parada-Rojas C. H., Adams M., Quesada-Ocampo, L. M. Update on Cultural and Chemical Control Strategies of Phytophthora Blight of Pepper. North Carolina Vegetable Growers Association Ag Expo. Wilmington, NC, December 2019 (Oral presentation)

2018 **Parada-Rojas C. H.** and Quesada-Ocampo L. M. Transcriptome analysis of cultivated and wild sweetpotato reveals differences in NB-LRR resistance gene repertoire. International Congress of Plant Pathology, Boston, MA (Oral presentation)

Parada-Rojas C. H. and Quesada-Ocampo L. M. Characterizing Sources of Resistance and Fungicides to Control Black Rot Caused by *Ceratocystis fimbriata*. National Sweetpotato Collaborators Group meeting, Wilmington, NC (Oral presentation)

Lucia C. T., **Parada-Rojas C. H.**, and Quesada-Ocampo L. M. Evaluation of commercial sweetpotato cultivars for resistance to *Ceratocystis fimbriata*. Raleigh, NC, August 2018. (Poster)

Parada-Rojas C. H., Adams M., and Quesada-Ocampo L. M. Cultural and chemical control of Phytophthora blight of pepper. 33rd Annual Southeast Vegetable and Fruit Expo. Myrtle Beach, SC, December 2018. (Oral Presentation)

Parada-Rojas C. H., and Quesada-Ocampo L. M. Transcriptome analysis of cultivated and wild sweetpotato reveals differences in NB-LRR resistance gene repertoire. PepsiCo Advanced Research, Raleigh, NC, March 2018. (Oral Presentation)

2017 **Parada-Rojas C. H.** and Quesada-Ocampo L. M. Fungicides to Control Black Rot Caused by *Ceratocystis fimbriata*. Sweetpotato field day, Clinton, NC (Oral presentation)

Parada-Rojas C. H. and Quesada-Ocampo L. M. Population Structure of the Oomycete Soilborne Pathogen *Phytophthora capsici* in North Carolina. APS Annual Meeting, San Antonio, TX (Oral presentation)

Shea Z., **Parada-Rojas C. H.**, and Quesada-Ocampo L. M. Fungicide sensitivity and population analysis of *Phytophthora capsici* in North Carolina. NC State Undergraduate Research Symposium. Raleigh, NC, August 2017. (Poster)

Parada-Rojas C. H. and Quesada-Ocampo L. M. Development of Microsatellites and Population Analyses of *Phytophthora capsici* Infecting Vegetable Crops. Oomycete Molecular Genetics Network Meeting, Asilomar, CA (Poster)

Parada-Rojas C. H., Adams M., and Quesada-Ocampo L. M. Phytophthora on pepper: cultural and chemical control options. 32nd Annual Southeast Vegetable and Fruit Expo. Myrtle Beach, SC, December 2017 (Oral presentation)

Parada-Rojas C. H., and Quesada-Ocampo L. M. Development of microsatellites and population analysis of *Phytophthora capsici* infecting vegetable crops. Watermelon Research and Development Working Group Annual Meeting, Mobile, AL, February 2017. (Oral Presentation)

2016 **Parada-Rojas C. H.** and Quesada-Ocampo L. M. Evaluation of Commercial Hot and Bell Pepper cultivars for Resistance to *Phytophthora capsici*. APS Annual Meeting, Tampa, FL. (Poster)

2015 **Parada-Rojas C. H.**, Adams M. L., Quesada-Ocampo L. M. Phytophthora on Pepper: Cultural and Chemical Control Options. South East Vegetable Expo. Myrtle Beach, SC. (Oral presentation)

Parada-Rojas C. H. and Quesada-Ocampo L. M. Development of Microsatellites from Whole-transcriptome Sequences in *Phytophthora capsici* for Population Studies. Soilborne Oomycete International Conference. Duck Key, FL. (Oral presentation)

2014 **Parada-Rojas C. H.** and Quesada-Ocampo L. M. Design and Evaluation of Microsatellites from Whole-Genome Transcript Sequences in *Phytophthora capsici*. CPS-APS Annual Meeting, Minneapolis, MN. (Poster)

PUBLIC OUTREACH & INTERVIEWS

2021 **Parada Rojas C. H.**, S cheper L., Pigg S., Eure E., and Quesada-Ocampo L. M. (2021) Phytophthora blight of pepper diagnostics. Vegetable Pathology Agent Training Video.

Parada Rojas C. H., Scheper L., Pigg S., Eure E., and Quesada-Ocampo L. M. (2021) Phytophthora blight of pepper management. Vegetable Pathology Agent Training Video.

Ford D. (2021) Ph. D. Candidate **Camilo Parada** wins prestigious award. URL: https://cals.ncsu.edu/news/ph-d-candidate-camilo-parada-wins-prestigious-award/

2019 Reeves E., **Parada-Rojas C. H.** and Becker L. Introduction to Plant Pathology with Extension Master Gardener Homeschool Gardening Program, Wake County

Becker L. and **Parada-Rojas C. H.** Zoom: Introduction to Microscopy and Plant Biomes. Forest View Elementary, Durham, NC

Adams M., Collins H., Salcedo A., Purayannur S., Standish J., D'Arcangelo K., Stahr M., **Parada-Rojas C. H.**, Wong S., and Quesada-Ocampo L. M. Agent training on disease diagnostics and management in vegetable crops. Clayton and Raleigh, NC.

2018 Quesada-Ocampo L. M, Meadows I., Shew B., Eure E., Mauney C., Butler S., Adams M., Collins H., Rahman A., Salcedo A., **Parada-Rojas C. H.**, D'Arcangelo K., Stahr M., Wong S., and Scruggs A. Agent training on disease diagnostics and management in vegetable crops. Extension Conference. Raleigh, NC.

2017 Koehler A., McCorkle K., **Parada-Rojas C. H.**, Becker, L. and Wallace E. Bugfest, NC Museum of Science, Raleigh, NC
SciTech Expo, NC Museum of Science, Raleigh, NC

2016 Koehler A., McCorkle K., **Parada-Rojas C. H.** and Wallace E. What is Plant Pathology? Hands on activities for the high school classroom. Horticulture and agroscience classes, Trinity, NC.

Koehler A., McCorkle K., **Parada-Rojas C. H.** and Wallace E. Bugfest, NC Museum of Science, Raleigh, NC

Meadows I., Mauney C., Quesada-Ocampo L. M., Shew B., Butler S., Adams M., Collins H., Rahman A., Palencia E., Scruggs A., **Parada-Rojas C. H.**, Miller N., Noel N., D'Arcangelo K. N., and Stahr M. Agent training on disease diagnostics and management in vegetable crops. Extension Conference. Raleigh, NC.

PROFESIONAL & ACADEMIC EXPERIENCES

Professional Societies

- International Society for Molecular Plant-Microbe Interactions (IS-MPMI)
- American Phytopathological Society (APS)
- American Phytopathological Society Southern Division (APS-SD)
- American Association for the Advancement of Science (AAAS)

SERVICE

2022 - present	President of the HPC - Bioinformatic Users Group
2018 - present	Graduate Student representative for departmental Honors and Awards committee
2019 - 2021	Lead and organize the Plant Pathology Student Only Seminars
2018 -2019	President of NCSU Plant Pathology Graduate Student Association
2017-2018	Graduate Student representative for the departmental Climate committee

REFERENCES:

Dr. Lina M. Quesada Ocampo (Professor, Vegetable Pathology NC State University - (919) 513 3530 – lmquesad@ncsu.edu)

Dr. Kevin Childs (Assistant Professor, Director of MSU Genomics Core - (517) 884 6926 – kchilds@msu.edu)

Dr. Liliana M. Cano (Assistant Professor, University of Florida, IRREC - (919) 703 6147 – lmcano@ufl.edu)