### AXEL O. RAMIREZ-MADERA

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## **EDUCATION AND RESEARCH**

University of Wisconsin – Madison

2011- Present: Ph.D. Plant Breeding and Plant Genetics, GPA 3.79

Dissertation: "Fine-mapping and sequencing of the zym genomic region in cucumber and its association with spontaneous tetraploidy"

University of Puerto Rico – Mayagüez

2006-09: M.S. Agronomy, GPA 4.00

Thesis: "Response of common bean (*Phaseolus vulgaris* L.) to *Rhizobium* inoculation and nitrogen fertilization"

University of Puerto Rico – Mayagüez

2002-06: **B.S. Agronomy**, GPA 3.85

2005: Summer Research: "Subcelullar localization of the SUNN protein in Medicago truncatula"

2004: Undergraduate Research: "Dairy compost application and its effect on growth of Zoysia turfgrass"

## **AWARDS AND GRANTS**

- 2013: Gabelman-Seminis Fellowship in Plant Breeding and Plant Genetics awarded to highly competitive students
- 2011: Advanced Opportunity Fellowship awarded through the Science and Medicine Graduate Research Scholars Program (SciMed GRS) strives to enhance the experiences of underrepresented graduate students in the College of Agricultural Sciences and other disciplines.
- 2009: National Wildlife Federation (NWF) Campus Ecology Fellowship Program (\$5,000) given to an undergraduate or graduate student interested in developing an environmental friendly project.
- 2008: Raúl e Isabel Gándara Scholarship.
- 2008: The Miguel and Aurora Lugo Scholarship of the Caribbean Food and Crop Society.
- 2008: The José Trías Monge Scholarship given to a graduate student to participate in a scientific symposium, national or international congress where he/she will present his/her research findings.
- 2007: Sociedad Puertorriqueña de Ciencias Agrícolas (SOPCA) (Agricultural Sciences Puerto Rican Society) Scholarship given to an outstanding graduate student in the College of Agricultural Sciences.
- 2007-Present: Agronomy Society of America, Crop Science Society of America and Soil Science Society of America.
- 2006: Premio Luis de Celis (Luis de Celis Prize) given to the student with the highest GPA in the Department of Agronomy and Soil, UPR-Mayagüez, College of Agricultural Sciences.
- 2006-Present: Gamma Sigma Delta Honor Society of Agriculture.
- 2006-Present: Golden Key International Honor Society.
- 2005-Present: Honorary Fraternity of Agriculture Alpha Zeta (AZ).
- 2005-09: Phi Kappa Phi Honor Society.
- 2004-06: Honor Student of UPR-Mayagüez, College of Agricultural Sciences, Dean's List.
- 2003-06: Honors Tuition Waiver.
- 2004: Colegio de Agrónomos de Puerto Rico (College of Agronomists of Puerto Rico) Scholarship.

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# **OUTREACH AND SERVICE EXPERIENCE**

2013-Present: SciMed GRS Outing Group. Coordinate and implement outdoors activities with the purpose
of better integrate SciMed GRS students through a connection with nature and other outdoor related
events.

- 2012-Present: SciMed GRS Mentor-Mentee Program. Mentoring first year graduate students: Julie Perng, Agricultural Economics (2012-13) and Jaime Willbur, Plant Pathology, UW-Madison (2013-Present).
- 2012-13: Nuestro Mundo Annual Science Night Volunteer, SciMed GRS Outreach Committee, UW-Madison (2012 and 2013).
- 2012-13: Coordinated a workshop designed by ALPs (Adventure Learning Programs) to help SciMed GRS students improve on communication and interpersonal skills, UW-Madison (2012 and 2013).
- 2011: Helped sorting of food for people in need with the SciMed GRS.
- 2011-Present: Wisconsin Ecology Graduate Student Representative, Representing the Department of Horticulture, UW-Madison.
- 2009-11: Diversity in Agronomy, Crops, Soils, and Environmental Sciences Committee (former Minorities in Agronomy, ACS528 Committee) Student Representative.
- 2010-11: NWF Young Professionals' Advisory Group.
- 2006-07: Alpha Zeta Treasurer in Puerto Rico chapter.
- 2005-06: Alpha Zeta Chancellor in Puerto Rico chapter.
- 2004: CACHE Student and Professor Exchange Program in Santiago de Los Caballeros, Dominican Republic.
- 2004-06: Coordinator of the Juvenile Pastoral in Lares, Puerto Rico.
- 2003-04: College of Agricultural Sciences Student Council Board Member.
- 2003 (summer): Had a missionary experience in La Paz, El Salvador living with the poor while sharing the cultural religious aspects of life.
- 2001 (summer): Had a voluntary experience in Santo Domingo, Dominican Republic delivering educational and leadership workshops to the youth.

# **TEACHING EXPERIENCE**

- 2008-09: Taught the laboratory sessions of Biometry (AGRO 5005), Advanced Biometry (AGRO 6600), and Mentor of the Biometry Laboratory, UPR-Mayagüez.
- 2007-08: Taught the laboratory sessions of Biometry (AGRO 5005), Advanced Biometry (AGRO 6600), and Mentor of the Biometry Laboratory, UPR-Mayagüez.
- 2006-07: Taught the laboratory sessions on Physiological Principles of Crop Production (CFIT 4005), UPR-Mayagüez.

## RESEARCH AND WORKING EXPERIENCE

- 2009-11: Pest Control and Irrigation Manager at Dow AgroSciences/Mycogen Seeds PR, Santa Isabel, PR.
- Managed personnel for controlling pests and fertigation in corn, soybean and sunflower plantings.
- 2007 (summer): UPR bean breeding program at UPR-Mayagüez Campus and the Isabela Substation, PR.
- Worked on inoculations of common bean (*Phaseolus vulgaris* L.) with Bean Common Mosaic Virus in the
  greenhouse, extraction of common bean DNA in the laboratory. Field work included the preparation of
  field books, marking the field, planting and inoculating bean with Rhizobium.
- 2006 (summer): USDA/ARS bean genetics laboratory at the Tropical Agriculture Research Station, Mayagüez, PR.
- Worked on inoculations of bean with bacterial blight (caused by Xanthomonas campestris) in the
  greenhouse, marker-assisted selection for disease resistance in the laboratory using SCAR markers. Field
  work mostly involved advancing populations for genetic analysis and maintenance of plots used for
  breeding and selection.

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• 2005 (summer): Summer Research Program in Biology (SRP-Bio)/UW–Madison at the University of Wisconsin Madison, WI. Title: "Subcelullar localization of the SUNN protein in Medicago truncatula", Dr. Jean-Michel Ané (professor) and Nicole Buckner (mentor).

 2004-05: Undergraduate Research Program/UPR—Mayagüez at the UPR-Mayagüez Campus, PR. Title: "Dairy compost application and its effect on growth of Zoysia turfgrass", Dr. Elide Valencia (professor and mentor).

## **PUBLICATIONS AND SCIENTIFIC PRESENTATIONS**

- Belay, D.K., Huckaba, R.M., Ramirez, A., Rodrigues, J.C.V., and Foster, J.E. Insecticidal control of *Bemisia tabaci* (Hemiptera: *Aleyrodidae*) transmitting Carlavirus on soybeans and detection of the virus in alternate hosts.
   Crop Protection 35, 53-57 (2012).
- Dorcinvil, R., Ramirez, A., Sotomayor, D., and Beaver, J.S. Performance of dry bean lines in a low N soil in Puerto Rico. Annual Report of the Bean Improvement Cooperative. Vol. 52 (2009).
- Ramírez-Madera, A.O. and Valencia, E. Dairy compost application and its effect on growth of Zoysia turfgrass. Livestock and Environment Group. Year 2, Vol. 1, UPR-Mayagüez (2005).
- Ramírez-Madera, A.O., Buckner, N., and Ané, J.M. Subcelullar localization of the SUNN protein in *Medicago truncatula*. SRP-Bio 2005 Research Journal, University of Wisconsin Madison (2005).
- Poster presentation of "Response of Common Bean (*Phaseolus vulgaris* L.) to *Rhizobium* Inoculation and Nitrogen Fertilization" at the Minority Student Poster Contest and Minorities in Agronomy Committee Meeting, 2008 Joint Annual Meeting in Houston, TX (2008).
- Oral presentation of "Respuesta de la habichuela (*P. vulgaris* L.) a la inoculación con *Rhizobium* y fertilización nitrogenada" at SOPCA in Aguadilla, PR (2008).
- Oral presentation of "Response of common bean (*Phaseolus vulgaris* L.) to *Rhizobium* inoculation and nitrogen fertilization" at the 44th Annual Reunion of the Caribbean Food and Crop Society in Miami, FL (2008).
- Presented a Poster of "Respuesta del frijol común (*P. vulgaris* L.) a la inoculación con *Rhizobium* y fertilización nitrogenada" in the 54 Annual Reunion of the "Programa Cooperativo Centroamericano para el Mejoramiento de Cultivos y Animales" (PCCMCA initials in Spanish) and publicated an Abstract in the Memorials in San José, Costa Rica (2008).
- Oral presentation of "Dairy compost application and its effect on growth of *Zoysia* turfgrass" at the Minorities in Agriculture, Natural Resources, and Related Sciences (MANRRS) conference in St. Louis, MO (2006).
- Oral presentation of "Subcelullar localization of the SUNN protein in Medicago truncatula" at the "Segunda
  Jornada Científica" (Second Scientific Day) for Undergraduate students, UPR-Mayagüez, College of Agricultural
  Sciences (2006).
- 4th place in oral presentation of "Dairy compost application and its effect on growth of Zoysia turfgrass" at the
  "Primera Jornada Científica" (First Scientific Day) for Undergraduate students, UPR-Mayagüez, College of
  Agricultural Sciences (2005).
- Participation in X Sigma Xi Poster Day and Published the Abstract of "Dairy compost application and its effect on growth of *Zoysia* turfgrass" in their journal, UPR-Mayagüez (2005).

# WORKSHOPS AND OTHER PROFESSIONAL DEVELOPMENT

- JCVI Plant Bioinformatics Workshop, J. Craig Venter Institute in Rockville, MD (July 15-19, 2013).
- Marker-Assisted Plant Breeding Short-Course, University of Minnesota, Saint Paul, MN (5–8 June 2012).
- National Organization Professional Hispanics Natural Resources Conservation Service Employee (NOPHNRCSE) Annual Training Conference, Madison, WI (July 7-11, 2008).
- The Fourth International Nitrogen Conference (N-2007), Costa do Sauipe Bahia, Brazil (October 1-5, 2007).
- Bioinformatics workshop at the College of Agricultural Sciences (7 hrs) (2007).

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• AZ National Agricultural Leadership Conference 2006 (NALC), San Luis Obispo, CA, and NALC and Conclave 2007, St. Louis, MO.

The 35th Annual Graduate and Professional Schools Visitation Days, Ohio State University (Nov 6 – Nov 8, 2005).

# **INTERSTS AND SKILLS**

- Work with minorities and community in general on outreach and service events. Conduct research in the area
  of plant breeding and data analysis and teach agriculture to the underrepresented. Sharing my cooking with
  family and friends, salsa dancing, and exercising (running, biking, basketball, snowboarding, and windsurfing).
- Computer knowledge in statistical packages such as SAS, R and Infostat.

#### **REFERENCES**

Michael J. Havey
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