

CURRICULUM VITAE

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BACKGROUND

EDUCATION

1996 Ph.D., Entomology, Cornell University
1988 B.S., Zoology and Entomology, University of Wisconsin, Madison

ACADEMIC RANK

Assistant Professor (Cornell University, 2003)

PRIMARY DEPARTMENTAL/PROGRAM AREA

Soil insect ecology and turfgrass entomology

AREAS OF EXPERTISE

Insect ecology; turfgrass entomology; applied ecology of soil insects; integrated pest management; biology, ecology, taxonomy and management of the Cercopidae

PROFESSIONAL EXPERIENCE

2003 – present Assistant Professor, Department of Entomology, NYSAES, Cornell University, Geneva, NY
2000 – 2002 Visiting Fellow, Cornell International Institute for Food, Agriculture and Development (CIIFAD) and Department of Entomology, Cornell University, Ithaca, NY
1999 – 2003 Senior Research Fellow, IPM Program and Tropical Forages Program, International Center for Tropical Agriculture (CIAT), Cali, Colombia
1996 – 1999 Postdoctoral Fellow, Tropical Forages Program, International Center for Tropical Agriculture (CIAT), Cali, Colombia
1995 – 1996 Teaching Assistant, Department of Ecology and Evolutionary Biology, Cornell University, Ithaca, NY

- 1991 – 1995 Graduate Research Assistant, Department of Entomology, Cornell University, Ithaca, NY
- 1990 – 1991 Teaching Assistant, Department of Entomology, Cornell University, Ithaca, NY
- 1989 – 1990 Graduate Research Assistant, Department of Entomology, Cornell University, Ithaca, NY

HONORS AND AWARDS

- 2009 Highest Award for Achievement, Dale Carnegie training course
- 2006 Best non-student poster. Colombian Society of Entomology national conference, Manizales, Colombia. Presenter C. Ospina; Co-authors J. Rodriguez and D.C. Peck
- 2005 Honorable mention, Student oral paper competition. Entomological Society of America, national conference, Ft. Lauderdale, FL. Presenter M. Diaz; Co-author D.C. Peck
- 2005 Third Place, Student oral paper competition. Eastern Branch meeting, Entomological Society of America, Harrisburg, PA. Presenter M. Diaz; Co-author D.C. Peck
- 2004 Nomination for best non-student paper. Colombian Society of Entomology, Bogotá, Colombia. Presenter J. Rodriguez; Co-author D.C. Peck
- 2003 Nomination for best non-student paper. Colombian Society of Entomology, Cali, Colombia. Presenter J. Rodriguez; Co-author D.C. Peck
- 2001 Frosty Hill Agricultural Research Fellowship, Cornell University
- 2000 Outstanding Research Team of the Year Award (team leader), CIAT Board of Trustees
- 2000 First Place, Best student oral paper and publication, Colombian Society of Entomology. Presenter and first author F. López; Co-author D.C. Peck
- 1996 Organization of American States, PRG Research Fellowship (2 years)
- 1994 First Place, Student oral paper competition, Entomological Society of America national conference, Dallas, TX
- 1993 Honorable mention, Student oral paper competition, Entomological Society of America national conference, Indianapolis, IN
- 1991 Liberty Hyde Bailey Graduate Research Fellowship, Cornell University (4 years)
- 1989 Sage Graduate Research Fellowship, Cornell University (2 years)

GRANT SUPPORT

Summary Since starting my position at Cornell (02/2003), I have had 29 of 63 proposals approved for funding from competitive grant programs. Two of 63 are in review. The sources of funding for these awards included New York State turfgrass associations (12), national turfgrass associations (2), state programs (5) and federal programs (7). I was lead Principal Investigator on 20 and Co-Principal Investigator on 9.

Active Grants:

1. Liu and Peck. Patterning the Behavior of Root-Feeding Insects in Response to Soil-Borne Antagonists. Chinese Scholarship Council. \$24,000. 09/01/2009 – 08/31/2010.
2. Peck. Diagnosis Turf: Expanding New York's Opportunities to Resolve Pest Issues and Reduce Pesticide Use. NY Environmental Stewardship Fund, NY Greengrass Association. \$105,000. 05/01/2009 – 08/30/2010.

3. **Peck.** Host Plant and Habitat Associations of the Invasive Crane Fly, *Tipula paludosa*. NYS Turfgrass Association. \$10,000. 01/01/2009 – 12/31/2010.
4. **Peck.** Curbing the Economic and Environmental Impacts of Invasive Crane Fly Pests on Production Sod Farms. NY Farm Viability Institute. \$198,948. 01/01/2008 – 12/31/2009.
5. **Peck.** Invasive Crane Flies in the Northeast, a Website. NYS IPM Program. \$4,500. 10/01/2008 – 03/31/2009.
6. **Peck.** Tandem Control of Invasive Crane Flies and White Grubs: Prospects for Scoring a Twofer. NYS Turfgrass Association. \$10,000. 02/01/2008 – 01/31/2009.
7. **Peck et al.** Biology, Ecology, and Management of Emerging Pests of Annual Bluegrass on Golf Courses. Federal Formula Multistate NE-1025. \$4,500 per year. 10/01/2005 – 09/30/2010.

ACADEMIC RESPONSIBILITIES

DIVISION OF EFFORT

- Teaching 0%
- Research 60% (80% before 07/01/2005)
- Extension 40% (20% before 07/01/2005)
- Administration 0%

GRADUATE FIELD MEMBERSHIPS

- Entomology (2003 – present)
- International Agriculture and Rural Development (2005 – present)

STUDENTS AND STAFF SUPERVISED

Current and Former Graduate Students Advised

- Maria Diaz, M.Sc., Entomology, Cornell University, 2006.
- Anuar Morales, M.Sc., Entomology, Cornell University, 2009.
- Masanori Seto, Ph.D., Entomology, Cornell University, expected 2010
- Jairo Rodriguez, M.Sc., Crop Protection. National University of Colombia, Palmira, expected 2011

Current Postdoctoral Associates

- Mathew Petersen, Ph.D. 2008 Iowa State University, 2008 – present

Current Program Staff

- Daniel Olmstead, 2005 – present
- Akiko Seto, 2007 – present

Current and Former Visiting Scientists

- Ulises Castro, Colegio de Posgraduados, Mexico, 2004 – 2005
- Valerie Descours, ENESAD, France, 2004

- Anyimilehidi Mazo, CIAT, Colombia, 2005 – 2006; University of Puerto Rico, 2008
- Anuar Morales, CIAT, Colombia, 2003 – 2005
- Claudia Ospina, CIAT, Colombia, 2005
- Jairo Rodriguez, CIAT, Colombia, 2003, 2008
- Gengping Zhu, Nankai University, China, expected 2009 – 2010
- Mathew Petersen, Postdoctoral Associate (2008 – present) Postdoctoral Associate:

EXTENSION RESPONSIBILITIES

Cornell Program Work Team Participation

- Landscape Horticulture PWT, Member (2003 – present)

Extension Workshops, Field Days, and Conferences

- Since starting my position at Cornell (02/2003), I have made 90 extension presentations. An additional 7 talks were presented by program staff and students. Annual individual contact-hours from 2003 to 2009 (07/2009) are estimated at 348, 1420, 1619, 2123, 1787, 1747 and 1518. Numbers of stakeholders reached over the same period are estimated at 444, 960, 1860, 1342, 1825, 2138 and 862.
- Of the 97 events, were conducted in New York State, 14 in other states (MA, MD, MI, NJ, PA), 4 in Canada (ON) and 6 in Latin America.
- Presentations were made at a variety of venues, including conferences, county-based programs, field days, field tours, industry sponsored programs, in-service training, short-courses, trade shows and workshops. The main audiences were Master Gardener Volunteers, stakeholder associations (golf course superintendents, green industry, horticulture, landscape, turfgrass, sod farmer) and pesticide recertification classes.
- Among the major themes addressed were:
 - Fundamental concepts: habitat selection, insect dispersal, landscape ecology, nontarget effects, soil arthropod communities and synergistic interactions.
 - Plant protection concepts: biological control, decision-making, diagnosis, host plant resistance, intervention and natural history.
 - Insect pests: annual bluegrass weevils, grass-feeding spittlebugs, invasive crane flies, white grubs and other turf-infesting, soil-dwelling and grass-feeding pest complexes.
 - Management systems: residential lawns, golf courses, production sod farms, forage grass and sugar cane.

OTHER PROFESSIONAL ACTIVITIES

PROFESSIONAL SOCIETIES

- Association for Tropical Biology (1997 – present)
- Colombian Society of Entomology (1997 – present)
- Ecological Society of America (1994 – present)

- Entomological Society of America (1991 – present)
- Entomological Society of Brazil (2001 – present)
- Florida Entomological Society (2000 – present)
- Xerces Society (2003 – present)

EDITORIAL BOARDS

- *Pest Management Guidelines for Commercial Turf* (Cornell University), Insect Management Discipline Editor (2004 – present)
- *Colombian Journal of Entomology (Revista Colombiana de Entomología)*, English Editor (2003 – present)

COMMITTEE ASSIGNMENTS

International/National

- External reviewer, research proposals on non-target impacts of GMOs submitted under a World Bank funded project coordinated by CIAT ("Latin America: Multi-country capacity building for compliance with the Cartagena Protocol on Biosafety") (2009)
- Chair, Federal Formula Multistate project (NE-1025). "Biology, Ecology, and Management of Emerging Pests of Annual Bluegrass on Golf Courses Involvement." (2007)
- Vice-Chair, Federal Formula Multistate project (NE-1025). "Biology, Ecology, and Management of Emerging Pests of Annual Bluegrass on Golf Courses Involvement." (2006)
- External reviewer, tenure promotion package, National Research Foundation, University of Stellenbosch, Pretoria, South Africa (2005)

State/Local

- Member, Steering Committee for the New York State Turfgrass Industry Summit (2009)

University/College

- Member, University Faculty Senate, representative for Entomology-NYSAES (2008 – present)
- Member, CALS Faculty Senate, representative for Entomology-NYSAES (2008 – present)

Field/Department

- Member, Graduate Admissions Committee, Field of Entomology (2007 – present)

PUBLICATIONS

- Since starting my position at Cornell (02/2003), I have in press or published 18 peer-reviewed journal articles. Of these, 12 are the result of activities conducted while at Cornell, and 6 are the result of activities conducted prior to Cornell. Among the Cornell publications, I am first author (lead researcher and writer) on 6, last author (program leader for student or support staff) on 4, and co-author with collaborators outside of my program on 2. Other Cornell publications include 5 conference proceedings, 2 book chapters, 13 reports to

Arthropod Management Tests, 11 extension publications, 10 trade publications and 2 websites.

- Over the course of my career I have published 31 peer-reviewed journal articles. I have also served as director of 2 published M.Sc. theses and as director or co-director of 8 published undergraduate theses.

PROGRAM OVERVIEW

My overall area of academic interest is applied insect ecology emphasizing the associations of soil insects with perennial grass-based agroecosystems. My current research and extension program in soil insect ecology and turfgrass entomology emphasizes two trajectories. The first is on the natural history and management of key turfgrass pests. Our objective is to fill major knowledge gaps in our understanding of biology and ecology, advance alternative cultural and biological controls, disseminate the newest information, and identify and exploit new windows for pest management. We are conducting studies in three systems that represent major priorities of New York State stakeholders and in turn are highly relevant to pest management in the Northeast and beyond. This includes the landscape ecology of annual bluegrass weevils, the invasion biology of exotic crane flies, and the biological control of white grubs. A second trajectory is the impact of plant protection technologies on nontarget soil arthropod communities. Our objective is to gauge the magnitude and relevance of impacts on the abundance, diversity and ecological function of soil- and surface- active arthropods. We are examining two contrasting systems. In low-maintenance turf, we are conducting a series of field trials that are shedding light on the unintended consequences of reliance on long-residual soil insecticides for insect pest management. In a second system, we are using a similar approach to examine nontarget effects within two tropical cropping systems – maize and cotton – where modern Bt-transgenic technology is being deployed for the first time in Colombia.