

Gadi V.P. Reddy

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Personal History and Professional Experience

Educational background

Postdoctoral Fellow (1996), IACR-Rothamsted, Harpenden, United Kingdom. Dissertation title: Integration of sex pheromones and entomopathogenic fungi *Zoophthora radicans* for the control of diamondback moth, *Plutella xylostella*.

Ph.D. (1991), Department of Entomology, University of Agricultural Sciences, Bangalore, India. Dissertation title: Studies with sex pheromones in the management of diamondback moth, *Plutella xylostella*.

Citizenship

United States of America

Professional and Leadership Development Training:

Graduate, Leadership for the 21st Century (LEAD21) Professional Development Program (University of Georgia Fanning Institute), Class X; 2014–15. LEAD21 is intended to meet the future needs for leadership development of team leaders, research station and center directors, district and regional directors, department heads and chairs, and others in land grant universities colleges of agricultural, environmental, and human sciences and USDA/NIFA. The primary purpose for LEAD21 is to develop leaders in land grant institutions and their strategic partners who link research, academics, and extension in order to lead more effectively in an increasingly complex environment, either in their current position or as they aspire to other positions.

Current interests

Administration: Land-grant university governmental policy and programs affecting higher education, research and the public interest; higher education administration and leadership.

Research: Development of pest-management strategies, particularly synthetic pheromones and host volatiles for use in integrated pest management (IPM); behavioral and chemical ecology of multitrophic interactions (plant-insect/predatory-prey/host-parasitoid); management of invasive species; insecticide evaluation and its use in pest-management programs.

Teaching: Insect Pest management, biological control, behavioral and chemical ecology.

Extension: Assistance to agricultural producers in identifying pest problems and recommendation of environmentally sound, sustainable solutions. Close association with agricultural growers in the field also affords me the opportunity to identify and respond to research needs in my areas of expertise.

List of academic positions since final degree

Professor (Tenured) -Entomology and Insect Ecology, (65% research, 25% extension/outreach, 10% Service) (March 2017– present). Western Triangle Ag Research Center, Montana State University, USA. Enhanced research and outreach activities on developing management practices for the insect pests of cereal, forage, pulse and oilseed crops.

Associate Professor (Entomology and Insect Ecology) and Superintendent (65% research, 25% administration, 10% outreach/Service) (June 2012–March 2017), Job duties changed due to increasing entomological problems in the Western Triangle region from administration to enhanced research and outreach programs from December 14, 2016. Western Triangle Ag Research Center, Montana State University, USA. Developing management practices for insect pests of cereal, forage, pulse and oilseed crops.

Associate Professor (Chemical Ecologist/Entomologist) (August 2011–May 2012), Western Pacific Tropical Research Center, University of Guam, USA. Developing chemical ecology methods for sweet potato weevil, biological control of invasive weeds and teaching “General Entomology” and “Ecology” courses to the undergraduate and graduate students.

Assistant Professor (Chemical Ecologist/Entomologist) (July 2007–July 2011), Western Pacific Tropical Research Center, University of Guam, USA. Research focused on USDA and USEPA funded projects on the developing IPM programs for cabbage and eggplant. Program also incorporated identification of pest problems in farmers’ fields and providing suggestions for control methods.

Research Scientist (contractual) (July 2002–June 2007), Western Pacific Tropical Research Center, University of Guam, USA. Research focused on USDA funded projects dealing with semiochemical-based pheromone trapping of the sugarcane weevil, banana borer, and household pests and biological control of insect pests (papaya and hibiscus mealy bugs, scales) and weeds, in addition to control of the ivy gourd and siam weed.

Visiting Scientist/Lise Meitner Scientist (April 2002–June 2002), Department of Evolutionary Biology, Institute of Zoology, University of Vienna, Vienna, Austria, under the Austrian Science Fund (FWF). Identified primer pheromones with a function in the regulation of reproduction in the primitively eusocial bumblebees.

Visiting Scientist (July 2001–March 2002), Department of Ecology and Environmental Science, University of Kuopio, Finland, under special grants from the Academy of Finland. Evaluated the alterations of tritrophic signaling between cruciferous crop plants, insect herbivores (*P. xylostella* and *Spodoptera littoralis*), and their natural enemies (parasitoid *Cotesia plutellae* and spined soldier bug *Podisus maculiventris*) under stress caused by elevated atmospheric carbon dioxide concentrations.

Visiting Scientist (July 1999–June 2001), Institute of Chemical and Environmental Research-CSIC, Barcelona, Spain. Research dealt with the inhibition of pheromone behavioral responses in economically important maize borers, *Sesamia nonagrioides*, as well as in the polyphagous pest *S. littoralis* by trifluoromethyl ketones.

Humboldt Research Fellow (January 1998–June 1999), Institute of Animal Ecology-II, University of Bayreuth, Bayreuth, Germany, under the Alexander von Humboldt Fellowship. Work based on the chemical ecology of longhorned beetle, *Hylotrupes bajulus*.

Associate Professor of Entomology (October 1997–December 1997), Haramaya University (formerly Alemaya Agricultural University), Ethiopia, East Africa. Taught insect toxicology and pest management to graduate students under the UNDP program.

Assistant Professor of Entomology (April 1996–September 1997) (60% research, 10% teaching, 30% extension) and Acting Farm Superintendent and Campus Head (Administration), University of Agricultural Sciences, Hagari, India. Developed an IPM package for mites on eggplant.

Postdoctoral Investigator (March 1995–March 1996), Rothamsted Experimental Station, Harpenden, United Kingdom. Investigated the impact of infection by a fungal entomopathogen (*Zoophthora radicans*) on the behavioral responses associated with pheromone production and reception by the diamondback moth.

Assistant Professor of Entomology (February 1992–February 1995; 60% research, 10% teaching, 30% extension) and Acting Farm Superintendent and Campus Head (Administration), University of Agricultural Sciences, Hagari, India. Development of an IPM program for bollworms on cotton and diamondback moth on cabbage.

Other professional employment

USAID/Winrock Farmer-to-Farmer Program (Assignment#NEP177), Use of Entomopathogens in Insect Pest Management”, Entomology Division, National Agricultural Research Institute, Khumaltar, Lalitpur, NEPAL, October 25th – November 13th, 2014.

Certificate of Training, Excelling as a Manager or Supervisor, SkillsPath’s Seminars, August 2013

Affiliate Associate Professor, Department of Land Resources and Environmental Sciences (LRES), Montana State University, February 2013–present.

Technical Advisory Member, Shenzhen Bioglobal Agricultural Sciences Co. Ltd (China), September 2012–present.

Director for the Western Pacific Biocontrol Quarantine Laboratory (WPBQL) at the University of Guam and interact with commodity producers and regulatory agency personnel in all import permits related issues, 06/2006–05/2012.

Consultant to Guam’s Department of Agriculture Forestry Protection Group. Advised on methods for maintaining healthy forest trees and established biocontrol agents for invasive plant species that suppress native plants, 2003–05/2012.

Technical Advisory Panel Member, BioGlobal Limited, Wacol, Qld 4076 (Australia), Jan 2010–May 2012.

Certified Senior Ecologist, Ecological Society of America, Washington, DC 20036 (June, 2010–present).

Technical Advisor to Mr. Francisco Atalig, producer and project coordinator for the project “Neem Tree Production for Alternative Pesticides, Nematode Control and Fertilizers”, Rota, Northern Mariana Islands. Farmer/Rancher Grant: FW07-001 was funded by Western SARE, 2007–2009.

2014 The President’s Volunteer Service Award by The Corporation for National and Community Service, Washington DC for recognition and appreciation to strengthen the nation and communities through volunteer service (given a number of scientific training programs in Nepal sponsored by USAID/Winrock International).

2010 Award for Excellence in Research by Western Association of Agricultural Experiment Station Directors, in recognition of Outstanding Contributions to Western Region Multistate Research.

Lise Meitner Fellowship (Austrian Science Fund, FWF) for 2002–03.

Competitive grants from the Academy of Finland for 2001–02.

Spanish International Fellowship for 1999–01.

Alexander von Humboldt Fellowship for 1998–99.
 Rothamsted International Fellowship for 1995–96.
 National "Crop Research Award-1997" for outstanding contributions in the field of vegetable entomology, by the National Agricultural Information Center.
 List of Scientists ranked as excellent at the University of Guam for outstanding contributions.
 Biological control program on ivy gourd; G. V. P. Reddy; cited at <http://www.wptrc.org/article.asp?artID=35>.
 University Merit Scholarship during doctoral study.

Professional Service

Editorships

Editorial Board Member, *Nature Scientific Reports*, 2017–present.
 Academic Editor, *PLoS ONE*, 2015–present
 Subject Editor, *Environmental Entomology*, 2008–present.
 Subject Editor, *Annals of the Entomological Society of America*, 2008–present.
 Associate Editor, *Florida Entomologist*, 2005–June 2016.
 Co-Editor, *Florida Entomologist*, July 2016–present.
 Editorial Member, *Journal of Biofertilizers & Biopesticides*, 2011–2013.

Memberships

Asia-Pacific Association of Chemical Ecologists (2009–present)
 Biological Control in Pest Management Systems of Plants: W3185 (2009–present)
Ecological Society of America (2009–present)
 Entomological Society of America (2005–present)
 Florida Entomological Society (2006–present)
 International Association for the Plant Protection Sciences (2006–present)
 International Organization for Biological Control of Noxious Animals and Plants (2012–present).
 International Society of Chemical Ecology (2005–present)
 International Working Group for Diamondback Moth (2000–present)
 Sigma Xi, The Scientific Research Society (2010–present)
 Systematic and Applied Acarology Society (2002–present)
 The Weed Science Society of Japan (WSSJ) (2010–present)

Courses/Chapters Taught and Students Advised

<i>Year</i>	<i>Fall</i>	<i>Spring</i>
1996–1997	Insect Pest Management	
1997–1998	Insect Toxicology	
2001–2002	Chemical Ecology of Wood Borers	Behavioral and Chemical Ecology
2002–2003	Insect Pest Management	Behavioral and Chemical Ecology
2004–2005	Behavioral and Chemical Ecology	
2005–2006	Insect Pest Management	
2006–2007	Behavior and Chemical Ecology	
2007–2008	Insect Pest Management	
2009–2010	Insect Pest Management	
2011–2012	General Entomology (AG/BI 345)	
2011–2012	Ecology (EV510)	

Meetings Organized

Field Day (attended 150 participants), MSU Western Triangle Ag Research Center, Conrad, MT, June 23, 2016.

The Professional Development Program (PDP) of the USDA-WSARE workshop on “Biological Control in the Northern Plains: Providing Tools for Agriculture Professionals”, (50 participants attended), Best Western Plus Heritage Inn, Great Falls, MT, March 1–2, 2016.

Field Day (attended 110 participants), MSU Western Triangle Ag Research Center, Conrad, MT, July 17, 2015.

Chair, Symposium on the “Application of Entomopathogenic Nematodes in IPM”, Eighth International Integrated Pest Management Symposium, Salt Lake City, Utah, USA, March 23–26, 2015.

Coordinator, Agronomy College-Basic Entomology Course (20 participants), MSU-Western Triangle Ag Research Center, Conrad, MT, February 04, 2015.

Organizer, Training Program (16 participants) “Life Tables: Theory, Data Analysis and Application”, MSU-Western Triangle Ag Research Center, Conrad, MT, November 21–23, 2014.

Organizer, a barbeque field day (attended 50 participants) at the Western Triangle Ag Research Center, Conrad, MT. Effectively interacted with Montana State Legislatures, Mr. Roy Hollingsworth, Mr. Llew Jones, Mr. Robert Laas, Mr. David Brownell, Mr. Kurt Dyer and Mr. Rob Cook about the long range building plans at the research center, September 16, 2014.

Organizer, Member Symposium on the “Canola Insect Pests and Their Management”, 61st Annual meeting of the Entomological Society of America, Austin, TX, November 10–13, 2013.

Field Day (attended 170 participants), MSU Western Triangle Ag Research Center, Conrad, MT, July 10th 2013.

Chair, Symposium on the “Semiochemicals in IPM”, Seventh International Integrated Pest Management Symposium, Memphis, Tennessee, March 27–29, 2012.

Presider for the “Behavior” session, Ecological Society of America Meeting, Austin, TX (August 7–12, 2011)

The Professional Development Program (PDP) of the USDA-WSARE workshop on “Semiochemicals”, (30 participants), Western Pacific Tropical Research Center, University of Guam, February 16th, 2011.

The Seventh International Workshop entitled “Biological Control and Management of *Chromolaena odorata* and *Mikania micrantha*,” National Pintung University of Science and Technology, Taiwan, September 12–15, 2006.

Organizing Secretary for the "National Young Scientists' Seminar on Environmental Pollution," held at the University of Agricultural Sciences, Bangalore, India, August 1989.

Grant Activity:

As PI/Co-PI, \$4,093,628 extramural and \$477,642 intramural grants were obtained.

Publications

Overall, 152 publications in peer-reviewed journals/book chapters/edited books.

Invited Lectures and Conference Presentations

Sixty presentation and invited talk in international conferences/meetings.

Public Service

Developed 113 extension presentations and 55 media coverage events and published eight extension brochures.