Kaushalya G. Amarasekare Assistant Professor of Entomology and IPM Coordinator

Office Address:

Tennessee State University College of Agriculture, Human and Natural Sciences Department of Agricultural and Environmental Sciences 202 P, Farrell Westbrook Complex 3500 John A. Merritt Blvd. Nashville, TN, 37209

Contact information

Phone: 615 963 5001 Fax: 615 963 5706 Email: kamarase@tnstate.edu

RESEARCH INTERESTS:

Integrated pest management (IPM) Biological control Pest and natural enemy monitoring Effects of newer, reduced risk insecticide on natural enemies Pesticide efficacy Biology and life history of pests and natural enemies Effects of temperature on development, reproduction and survival of pests and natural enemies

EDUCATION:

Ph.D. (Entomology) University of Florida, Gainesville, FL

M.S. (Entomology) Oklahoma State University, Stillwater, OK

B.S. (Honors) (Agriculture) University of Peradeniya, Peradeniya, Sri Lanka

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Postdoctoral Researcher – Affiliate Faculty, Oregon State University	2015 – Sept 2015
Postdoctoral Research Associate, Oregon State University	2009 – 2014
Research Associate, University of Florida	2008 – 2009

HONORS AND AWARDS:

Entomological Society of America - Student and Young Professional Participation Award2011Entomological Society of America - Student and Young Professional Participation Award2010Entomological Society of America - Student and Young Professional Participation Award2009L. Russell Norton Memorial Fellowship–Miami-Dade County Agri-Council, Inc.2007

	Entomological Society of America - Student and Young Professional Participation Award	2007	
	IFAS (Institute of Food and Agricultural Sciences) Travel Grant - University of Florida	2007	
	Graduate Student Council Travel Grant - University of Florida	2007	
	Gamma Sigma Delta National College Honor Scholarship Society	2007	
	Graduate Student Travel Grant- University of Florida	2006	
	Graduate Student Travel Grant- University of Florida	2007	
	Florida Entomological Society Mini Research Grant	2006	
	Florida Entomological Society Mini Research Grant	2007	
	Florida Entomological Society Travel Grant	2006	
	Florida Entomological Society Travel Grant	2007	
	William H. Krome Memorial Fellowship-Miami-Dade County Agri-Council, Inc.	2004	
	Alpha Zeta National College Honor Scholarship Society	2004	
	Phi Kappa Phi National College Honor Scholarship Society	2002	
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PUBLICATIONS (PEER-REVIEWED):

- Amarasekare, K. G., P. W. Shearer and N. J. Mills. 2016. Testing the selectivity of pesticide effects on natural enemies in laboratory bioassays. (for a special issue of Biological Control) (review).
- Beers, E. H., Mills, N. J., Shearer, P. W., Horton, D.R., Milickzy, E., Amarasekare, K. G., 2016. Nontarget effects of orchard pesticides on natural enemies: lessons from the field and laboratory. (for a special issue of Biological Control) (submitted).
- Shearer, P. W., Amarasekare, K. G., Mills, N. J., Castagnoli S., Beers, E. Hand Jones, V. P. 2016. Large-plot field studies to assess impacts of newer insecticides on non-target arthropods in western orchards. (for a special issue of Biological Control) (submitted).
- 4. Mills, N. J., Beers, E. H., Shearer, P. W., Unruh, T., and **Amarasekare, K. G.**, 2016. Comparative analysis of pesticide effects on natural enemies in western orchards: a synthesis of laboratory bioassay data. (for a special issue of Biological Control). (accepted).
- 5. Jones, V., Horton, D.R., Mills, N. J., Unruh, T., Baker, C., Melton, T., Milickzy, E., Steffan, S., Shearer, P. W., and **Amarasekare, K. G.**, 2015. Evaluating plant volatiles for monitoring natural enemies in apple, pear and walnut orchards. (for a special issue of Biological Control). (in press).
- Jones, V., Horton, D.R., Mills, N. J., Unruh, T., Milickzy, E., Shearer, P. W., Amarasekare, K. G., Baker, C., and Melton, T., 2015. Using plant volatile traps to develop phenology models for natural enemies: An example using *Chrysopa nigricornis* (Burmeister) Neuroptera: Chrysopidae). (for a special issue of Biological Control). (in press).
- Mills, N. J., Jones, V., Baker, C., Melton, T., Steffan, S., Unruh, T., Horton, D.R., Shearer, P. W., Amarasekare, K. G., and Milickzy, E. 2016. Using herbivore-induced plant volatiles and floral volatiles to attract natural enemies for studies of ecosystem structure and function. (for a special issue of Biological Control). (submitted).

- Jones, V., Mills, N. J., Brunner, J.F., Horton, D.R., Beers, E. H., Unruh, T., Shearer, P. W., Goldberger, J., Gallardo, K., Castagnoli, S., Lehrer, N., Steffan, S., Amarasekare, K. G., Chambers, U., and Gadino, A.N. 2015. From planning to execution to the future: an overview of a concerted effort to enhance biological control in western apple, pear and walnut orchards. (for a special issue of Biological Control). (submitted).
- 9. Amarasekare, K. G. and P. W. Shearer. 2013^c. Life history comparison of two green lacewings species, *Chrysoperla johnsoni* and *Chrysoperla carnea* (Neuroptera: Chrysopidae). Environmental Entomology. 42:1079-1084.
- Amarasekare, K. G. and P. W. Shearer. 2013^b. Comparing Effects of insecticides on two green lacewings species, *Chrysoperla johnsoni* and *Chrysoperla carnea* (Neuroptera: Chrysopidae). Journal of Economic Entomology. 106: 1126-1133.
- 11. **Amarasekare, K. G.** and P. W. Shearer. 2013^a. Laboratory bioassays to estimate the lethal and sublethal effects of various insecticides and fungicides on *Deraeocoris brevis* (Hemiptera: Miridae). Journal of Economic Entomology. 106: 776-785.
- 12. Amarasekare, K. G., C. M. Mannion and N. D. Epsky. 2012. Developmental time, longevity and lifetime fertility of three introduced parasitoids of the mealybug *Paracoccus marginatus* (Hemiptera: Pseudococcidae). Environmental Entomology 41: 1184-1189.
- Amarasekare, K. G. and Mannion C. M. 2011. Life history of a new-to-science exotic soft scale insect *Phalacrococcus howertoni* (Hemiptera: Coccidae) found in Florida. Florida Entomologist. 94(3): 588-593.
- Amarasekare, K. G., C. M. Mannion, and N. D. Epsky. 2010. Host instar susceptibility and selection and interspecific competition of three introduced parasitoids of the mealybug *Paracoccus marginatus* (Hemiptera: Pseudococcidae). Environmental Entomology. 39(5): 1506-1512.
- Amarasekare, K. G., C. M. Mannion and N. D. Epsky. 2009. Efficiency and establishment of the three introduced parasitoids of the mealybug, *Paracoccus marginatus* (Hemiptera: Pseudococcidae). Biological Control. 51, 91-95.
- Amarasekare, K. G., J.C. Chong, N. D. Epsky, and C. M. Mannion. 2008^b. Effect of temperature on the life history of the mealybug, *Paracoccus marginatus* (Hemiptera: Pseudococcidae) Journal of Economic Entomology. 101(6):1798-1804.
- Amarasekare, K. G., C. M. Mannion, L. S. Osborne and N. D. Epsky. 2008^a. Life history of Paracoccus marginatus (Hemiptera: Pseudococcidae) on four host plant species under laboratory conditions. Environmental Entomology. 37(3): 630-635.
- 18. Amarasekare, K. G. and J. V. Edelson. 2004. Effect of temperature on efficacy of insecticides to differential grasshopper (Orthoptera: Acrididae). Journal of Economic Entomology. 97(5): 1595-1602.

PUBLICATIONS (OTHER):

- Chambers, U., N. Mills, E. Beers, T. Unruh, P. Shearer, J. Brunner, K. G. Amarasekare and V. Jones. 2013. Part 6: Your management program matters. Good Fruit Grower. April 15, 2013. PP. 8-9.
- Amarasekare, K. G. and Shearer, P. W. 2011. Effects of rynaxypyr (Altacor) and petroleum oil (Omni Supreme Spray) on the lacewing *Chrysoperla carnea* (Stephens) (Neuroptera: Chrysopidae), 2010. Arthropod Management Tests. 36: L12.

- Amarasekare, K. G. and J. V. Edelson. 2003. Efficacy and residual effect of insecticides for managing differential grasshopper in leafy green vegetables, 2001. Arthropod Management Tests. 28: E17.
- 4. **Amarasekare, K. G.** and J. V. Edelson. 2003. Efficacy of insecticides for managing differential grasshopper in leafy green vegetable crops, 2002. Arthropod Management Tests. 28: E18.
- Amarasekare, K. G. and J. V. Edelson. 2002. Efficacy of insecticides for managing differential grasshopper in leafy green vegetable crops, 2002. Vegetable Trial Report- Insect Management. Department of Horticulture and Landscape Architecture, Oklahoma State University, Stillwater, OK.
- Amarasekare, K. G. and J. V. Edelson. 2002. Efficacy and residual effects of insecticides for managing differential grasshopper in leafy green vegetables, 2001. Vegetable Trial Report-Insect Management. Department of Horticulture and Landscape Architecture, Oklahoma State University, Stillwater, OK.

GRANTS:

Shearer, P.W., **K. G. Amarasekare**. Conservation biological control of pear psylla in Pacific Northwest pears. Washington Tree Fruit Research Commission. (\$71,571).

Shearer, P.W., **K. G. Amarasekare**, V.P. Jones, S.A. Steffan. Improving biological control of insect pests of cherry. Washington Tree Fruit Research Commission. (\$79,485).

PROFESSIONAL PRESENTATIONS:

- 2015 Lethal and sublethal effects of newer insecticides on *Chrysoperla carnea* and *Chrysoperla johnsoni* (Neuroptera: Chrysopidae). Annual Meeting of the Entomological Society of America (ESA), Minneapolis, MN. (Presented by Dr. Peter Shearer on my behalf).
- 2014 Impacts of field-aged insecticide residues on the generalist predator *Deraeocoris brevis* (Hemiptera: Miridae). Annual Meeting of the Entomological Society of America (ESA), Portland, OR.
- 2014 Lethal and sublethal effects of newer insecticides *Chrysoperla johnsoni* and *Chrysoperla carnea* (Neuroptera: Chrysopidae). International Organization for Biological Control (IOBC)/WPRS-Pome Fruit Arthropods, Vienna, Austria.
- 2014 Lethal and sublethal effects of field-aged residues of reduced-risk and OP-replacement insecticides on *Chrysoperla johnsoni* (Neuroptera: Chrysopidae). Annual Meeting of the Pacific Branch Entomological Society of America (ESA), Tucson, AZ.
- 2014 Effects of field-aged residues of reduced-risk and OP-replacement insecticides on *Chrysoperla johnsoni* (Neuroptera: Chrysopidae). Annual Meeting of Orchard Pest and Disease Management Conference, Portland, OR.
- 2013 Effects of newer insecticides on the green lacewing *Chrysoperla carnea*. (Neuroptera: Chrysopidae). Annual Meeting of the Washington State Horticultural, Wenatchee, WA.
- 2013 Lethal and sublethal effects of newer insecticides on the natural enemy *Deraeocoris brevis* (Uhler) (Hemiptera: Miridae). Annual Meeting of the Washington State Horticultural, Wenatchee, WA.
- 2013 Comparing effects of newer insecticides on two green lacewings species, *Chrysoperla johnsoni* and *Chrysoperla carnea* (Neuroptera: Chrysopidae). Annual Meeting of Orchard Pest and Disease Management Conference, Portland, OR.

- 2012 Lethal and sublethal effects of insecticides on *Chrysoperla carnea* (Neuroptera: Chrysopidae). 7th International IPM Symposium, Memphis, TN.
- 2012 Effects of newer insecticides on the green lacewing *Chrysoperla carnea*. Annual Meeting of the Pacific Branch Entomological Society of America (ESA), Portland, OR.
- 2012 Effects of newer insecticides on the green lacewing *Chrysoperla carnea*. Annual Meeting of Orchard Pest and Disease Management Conference, Portland, OR.
- 2011 Lethal and sublethal effects of insecticides on the green lacewing *Chrysoperla carnea*. Annual Cumberland-Shenandoah Fruit Workers Conference 2011. Winchester, VA.
- 2011 Laboratory bioassays to estimate lethal and sub effects of newer insecticides on the green lacewing *Chrysoperla carnea*. Annual Meeting of the Entomological Society of America (ESA), Reno, NV.
- 2011 Lab and field studies to improve biological control in pear orchards. Winter Horticulture Meeting, Oregon State University Extension Service, Hood River, OR.
- 2011 Effects of two key orchard fungicide treatments on the natural enemy *Deraeocoris brevis* (Uhler) (Hemiptera: Miridae). Annual Meeting of the Pacific Branch Entomological Society of America (ESA), Waikoloa, HI.
- 2011 Lethal and sublethal effects of fungicides on the natural enemy *Deraeocoris brevis* (Uhler) (Hemiptera: Miridae). Annual Meeting of Western Orchard Pest and Disease Management Conference, Portland, OR.
- 2010 Use of laboratory bioassays to estimate pesticide effect on biological control agent. Annual Meeting of the Entomological Society of America (ESA), San Diego, CA. (invited symposia).
- 2010 Effects of newer insecticides on the natural enemy *Deraeocoris brevis* (Uhler) (Hemiptera: Miridae). International Organization for Biological Control (IOBC)/WPRS-Integrated protection of fruit crops, Tremiti Islands, Italy. (invited).
- 2010 Effects of newer insecticides on the natural enemy *Deraeocoris brevis* (Uhler) (Hemiptera: Miridae). Annual Meeting of the Pacific Branch Entomological Society of America (ESA), Boise, ID.
- 2010 Lethal and sublethal effects of newer insecticides on the natural enemy *Deraeocoris brevis* (Uhler) (Hemiptera: Miridae). Annual Meeting of Western Orchard Pest and Disease Management Conference, Portland, OR.
- 2009 Biology, host instar suitability and susceptibility, and interspecific competition of three introduced parasitoids of *Paracoccus marginatus* (Hemiptera: Pseudococcidae). Annual Meeting of the Entomological Society of America (ESA), Indianapolis, IN.
- 2007 Field assessment of three introduced parasitoids of *Paracoccus marginatus* Williams and Granara de Willink (Hemiptera: Pseudococcidae). Annual Meeting of the Entomological Society of America (ESA), San Diego, CA.
- 2007 Effect of temperature on the biology of *Paracoccus marginatus* Williams and Granara de Willink (Hemiptera: Pseudococcidae). Annual Meeting of Florida Entomological Society (FES), Sarasota, FL
- 2006 Development, survival, and reproduction of papaya mealybug (*Paracoccus marginatus* Williams and Granara de Willink [Hemiptera: Pseudococcidae]) on different host plant species. Annual Meeting of the Entomological Society of America (ESA), Indianapolis, IN

- 2004 Effect of temperature on efficacy of insecticides used to control grasshoppers in vegetables *Melanoplus differentialis* (Orthoptera: Acrididae). Annual Meeting of the Entomological Society of America (ESA), Salt Lake City, UT.
- 2001 Efficacy of insecticides in four temperature regimes to control differential grasshopper (Orthoptera: Acrididae). Annual Meeting of the Entomological Society of America (ESA), San Diego, CA
- 2001 Efficacy of insecticides in controlling the differential grasshopper under four temperature regimes (Orthoptera: Acrididae). Annual Research Symposium, Oklahoma State University, Stillwater, OK.

CONTRIBUTED PROFESSIONAL PRESENTATIONS AND PULISHED ABSTRACTS:

- 2015 Shearer, P. W., **Amarasekare, K.G.** and Castagnoli, S. Assessing commercial attractants for monitoring spotted wing drosophila. Annual Meeting of Orchard Pest and Disease Management Conference, Portland, OR (Published abstract only).
- 2014 Shearer, P. W., **Amarasekare, K.G.** and Castagnoli, S. Assessing conservation biological control in Mid-Columbia pear orchards. Annual Meeting of the Pacific Branch Entomological Society of America (ESA), Tucson, AZ.
- 2012 Shearer, P. W., **Amarasekare, K.G.** and Brown P. H. Evaluating codling moth spray impacts on biological control in pear. Annual Meeting of Orchard Pest and Disease Management Conference, Portland, OR.
- 2012 Shearer, P. W., **Amarasekare, K.G.** and Brown P. H. Developing new information and tools to enhance biological control in pear and sweet cherry orchards. Winter Horticulture Meeting, Oregon State University Extension Service, Hood River, OR.

INVITED SEMINARS:

- 2015 Enhancing IPM through research and outreach. Tennessee State University, Nashville, TN.
- 2013 The pros and cons of introduced natural enemies and reduced-risk insecticides in integrated pest management. University of Missouri, Columbia, MO.
- 2013 Introduced natural enemies and reduced-risk insecticides in integrated pest management. Fisher Delta Research Center, University of Missouri, Portageville, MO.
- 2009 Research Moments- past and current. Mid-Columbia Agricultural Research and Extension Center, Oregon State University, Hood River, OR
- 2008 Challenges in developing and delivering an insect pest management program to Alabama producers. Department of Entomology, Auburn University, Auburn, AL
- 2008 Papaya mealybug and its introduced parasitoids. University of California Cooperative Extension Center, Monterey, CA
- 2007 Life history of papaya mealybug (*Paracoccus marginatus*) and the effectiveness of three introduced parasitoids (*Acerophagus papayae*, *Anagyrus loecki*, and *Pseudleptomastix mexicana*). Tropical Research and Education Center, University of Florida, Homestead, FL
- 2002 Efficacy of insecticides in four temperature regimes to control differential grasshopper

(Orthoptera: Acrididae). Department of Entomology and Plant Pathology, Oklahoma State University, Stillwater, OK

2002 Effect of temperature on efficacy of insecticides to differential grasshopper (Orthoptera: Acrididae). Wes Watkins Agricultural Research and Extension Center, Oklahoma State University, Lane, OK

INSECT COMMON NAME PROPOSALS APPROVED AND ACCEPTED:

- Amarasekare, K. G. 2014. A common name proposal for *Chrysoperla johnsoni* Henry, Wells and Pupedis (Neuroptera: Chrysopidae) submitted to the Entomological Society of America (ESA) was approved and accepted by the ESA common names committee and the governing board. Proposed common name: Johnson's green lacewing.
- Amarasekare, K. G. and C. M. Mannion. 2008. A common name proposal for *Paracoccus marginatus* (Hemiptera: Pseudococcidae) submitted to the Entomological Society of America (ESA) was approved and accepted by the ESA common names committee and the governing board. Proposed common name: papaya mealybug.

PROFESSIONAL AFFILIATIONS:

Entomological Society of America

International Organization for Biological Control (IOBC) - NRS

Pacific Branch Entomological Society of America

Southeastern Branch Entomological Society of America

Florida Entomological Society

Southeastern Branch Entomological Society of America

PROEFESSIONAL SERVICE:

Peer reviewer for:

Environmental Entomology

Journal of Economic Entomology

Florida Entomologist

Pest Management Science

Annals of the Entomological Society of America

Entomologia Experimentalis et Applicata

PLOS ONE

Date Joined staff: November 2015