# César R. Rodríguez-Saona

PROGRAM GOALS AND AREAS OF EXPERTISE

<u>Program Goals</u>: The goal of my Research Program is the development and implementation of cost-effective reduced-risk Integrated Pest Management (IPM) practices for blueberries and cranberries. This goal is achieved through the integration of chemical, behavioral, and biological methods in insect control and by gaining, through empirically anchored research, a better understanding on the ecology of pests and their natural enemies. My *Extension Program* delivers IPM information to growers by conducting on-farm demonstration trials, presentations, and extension publications.

<u>Areas of Expertise</u> include IPM, Tritrophic Interactions, Biological Control, Insect Chemical Ecology, Insect-Plant Interactions, and Host-Plant Resistance.

h-Index(as of May 2019)Web of Science26Google Scholar36RG Score(as of May 2019)Research Gate37.05 (h-index = 33)Websiteshttps://sites.rutgers.edu/cesar-rodriguez-saona/https://entomology.rutgers.edu/personnel/cesar-rodriguez-saona.htmlhttps://pemaruccicenter.rutgers.edu/entomology/

## EDUCATION

**Ph.D. in Entomology** 1994-1999, University of California, Riverside, U.S.A. Major Advisor: Dr. John T. Trumble (GPA 3.95)

Inside Major: Insect-Plant Interactions / Integrated Pest Management Inside Minor: Insect Behavior

Outside Minor: Statistics

Dissertation Title: "Defensive role of avocado idioblast cells against herbivorous insects and chemistry of the insecticidal constituents"

**M.Sc. in Entomology** 1992-1994, Oregon State University, Oregon, U.S.A. Major Advisor: Dr. Jeffrey C. Miller (GPA 3.76)

Major: Biological Control

Minor: Integrated (Botany & Statistics)

Thesis title: "Improvement of biological control agents: Laboratory selection for fast larval development in the convergent lady beetle, *Hippodamia convergens* Guérin-Méneville (Coleoptera: Coccinellidae)"

**B.S. in Biology** 1986-1991, Universidad Nacional Agraria, Lima, Perú. Major Advisor: Dr. Inés Redolfi de Huiza

Major: Biology – Animal Science (with emphasis in Entomology)

Thesis Title: "Bemisia tabaci (Genn.) (Homoptera: Aleyrodidae) and its parasitoids in sweet potato in the central coast of Perú"

#### PROFESSIONAL EXPERIENCE

**PROFESSOR AND EXTENSION SPECIALIST IN ENTOMOLOGY. 2016-PRESENT.** Department of Entomology. Rutgers University. 70% extension, 30% research.

**Associate professor and Extension Specialist in Entomology. 2011-2016.** Department of Entomology. Rutgers University. 70% extension, 30% research.

ASSISTANT PROFESSOR AND EXTENSION SPECIALIST IN ENTOMOLOGY. 2005-2011. Department of Entomology. Rutgers University. 70% extension, 30% research.

**MEMBER OF THE GRADUATE FACULTY IN THE ECOLOGY AND EVOLUTION PROGRAM. 2006-PRESENT.** Department of Ecology, Evolution, and Natural Resources. Rutgers University.

**SABBATICAL LEAVE (6 MONTHS, WITH DR. NICOLE VAN DAM). 2014-2015.** German Center for Integrative Biodiversity Research (iDiv). Leipzig, Germany.

 Investigated the effects of belowground herbivory on the distribution of plant defenses aboveground. The project involved glucosinolate (HPLC) and molecular (RT-PCR) analyses.

**RESEARCH ENTOMOLOGIST (POST-DOC). 2004-2005.** Department of Entomology. Michigan State University.

- Conducted laboratory and field studies on the use of plant volatiles for insect control.
- Investigated the effects of plant volatiles on host plant selection by an invasive species, the emerald ash borer, in the laboratory and field. The project required analyses of headspace plant volatiles by gas chromatography (GC), behavioral assays (olfactometer), and electroantennogram detection (EAG, GC-EAD).

RESEARCH ENTOMOLOGIST (POST-DOC). 2001-2004. Department of Botany. University of Toronto.

- Conducted studies on multitrophic interactions involving plants, herbivores, and the natural enemies of herbivores.
- Investigated the effects of plant chemical defenses on herbivores and their natural enemies in the laboratory and field. The project required collection of field data on arthropod abundance, examination of parasitoid search behavior through use of wind tunnels, studies on insect performance, and analysis of plant chemistry (proteinase inhibitors, polyphenol oxidases, peroxidases, among others).

#### RESEARCH ENTOMOLOGIST (POST-DOC). 1999-2001. USDA-ARS. WESTERN COTTON RESEARCH LAB.

- Conducted studies to improve current techniques to control cotton and alfalfa pests with the use of plant volatiles.
- Investigated the specificity of volatile emission in plants induced by phytohormones and different insect feeding guilds (caterpillars, *Lygus* bugs, and whiteflies) and its effects on herbivore behavior. The project required the use of GC, olfactometers, and analysis of plant chemistry.

**GRADUATE RESEARCH ASSISTANT, 1994–1999.** Department of Entomology, University of California, Riverside, CA

- Tested the effects of plant secondary compounds from specialized avocado oil cells on herbivores to determine their potential role in plant protection.
- Employed techniques to isolate plant chemicals and bioassays to test their effects on insect behavior and performance.

**GRADUATE RESEARCH ASSISTANT, 1992–1994.** Department of Entomology, Oregon State University, Corvallis, OR

 Investigated whether the efficiency of natural enemies can be improved through the selection of specific developmental traits in insects.

PUBLICATIONS IN REFEREED JOURNALS (underline indicates graduate student/post-doc author/co-author)

# <u>2020</u>

1. Tooker, J., O'Neal, M.E., and **Rodriguez-Saona, C**. 2020. Balancing disturbance and conservation in agroecosystems to improve biological control. Annual Review of Entomology. In Press

# <u>2019</u>

- 2. Rodriguez-Saona, C., Vincent, C., and Isaacs, R. 2019. Blueberry IPM: Past successes and future challenges. Annual Review of Entomology 64: 95–114.
- 3. **Rodriguez- Saona, C.**, <u>Cloonan, K.R.</u>, Sanchez-Pedraza, F., Zhou, Y., Giusti, M.M., and Benrey, B. 2019. Differential susceptibility of wild and cultivated blueberries to an invasive frugivorous pest. J. Chem. Ecol. 45: 286–297. **FEATURED ON THE COVER OF THE JOURNAL.**
- 4. <u>De Lange, E., Salamanca, J.</u>, Polashock, J., and **Rodriguez-Saona, C**. 2019. Genotypic variation and phenotypic plasticity in gene expression and herbivore-induced volatiles, and their potential tritrophic implications, in cranberries. J. Chem. Ecol. 45: 298–312.
- Klick, J., Rodriguez-Saona, C.R., <u>Hernández Cumplido, J.</u>, <u>Holdcraft, R.J.</u>, Urrutia, W.H., da Silva, R.O., Borges, R., Mafra-Neto, A., and Seagraves, M.P. 2019. Testing a novel attract and kill strategy for *Drosophila suzukii* (Diptera: Drosophilidae) management. J. Insect Sci. 19(1): 3; 1–6. doi: 10.1093/jisesa/iey132.
- Benevenuto, R.F., Seldal, T., Hegland, S.J., Rodriguez-Saona, C., Kawash, J., and Polashock, J. 2019. Transcriptional profiling of methyl jasmonate-induced defense responses in bilberry (*Vaccinium myrtillus* L.). BMC Plant Biology 19:70. doi.org/10.1186/s12870-019-1650-0.
- <u>De Lange, E.S.</u>, Kyryczenko-Roth, V., Johnson-Cicalese, J., Davenport, J., Nicholi Vorsa, N., and Rodriguez-Saona, C. 2019. Increased nutrient availability decreases insect resistance in cranberry. Agricultural and Forest Entomology 21: 326-335.
- 8. **Rodriguez-Saona, C.**, Nielsen, A.L., Shapiro-Ilan, D.I., <u>Tewari, S.</u>, Kyryczenko-Roth, V., Firbas, N., Leskey, T.C. 2019. Exploring an odor-baited "trap bush" approach to aggregate plum curculio (Coleoptera: Curculionidae) injury in blueberries. Insects 10, 113; doi:10.3390/insects10040113.
- <u>De Lange, E.S.</u> and Rodriguez-Saona, C. 2019. Does enhanced nutrient availability increase volatile emissions in cranberry? Plant Signaling & Behavior (Short Communication). 14:8, DOI: 10.1080/15592324.2019.1616517.
- Pradit, N., Rodriguez-Saona, C., Kawash, J., and Polashock, J. 2019. Phytoplasma infection influences gene expression of American Cranberry. Frontiers in Ecology and Evolution (section Behavioral and Evolutionary Ecology) 7:178. doi: 10.3389/fevo.2019.00178.
- 11. <u>Pradit, N.</u>, Mescher, M.C., Wang, Y., Vorsa, N., and **Rodriguez-Saona, C**. 2019. Phytoplasma infection of cranberries benefits non-vector phytophagous insects. Frontiers in Ecology and Evolution section Chemical Ecology 7:181. doi: 10.3389/fevo.2019.00181.
- 12. Stratton, C.A., Hodgdon, E., **Rodriguez-Saona, C.**, Shelton, A.M., and Chen, Y.H. Phylogeneticallydistant plants with odors similar to Brassicas repel the swede midge (Diptera: Cecidomyiidae), a Brassica specialist. Scientific Reports 9:10621 doi: 10.1038/s41598-019-47094-8.
- <u>Cloonan, K.R., Hernández-Cumplido, J., Viana de Sousa, A.L.,</u> Gomes Ramalho, D., Burrack, H.J., Della Rosa, L., Diepenbrock, L.M., Drummond, F.A., Gut, L.J., Hesler, S., Issacs, R., Leach, H., Loeb, G.M., Nielsen, A.L., Nitzsche, P., Park, K.R., Syed, Z., Van Timmeren, S., Wallingford, A.K., Walton, V.M., and **Rodriguez-Saona, C**. Laboratory and field evaluation of host-related foraging odor-cue combinations to attract *Drosophila suzukii* (Diptera: Drosophilidae). J. Economic Entomology. In Press.

# <u>2018</u>

- 14. **Rodriguez-Saona, C.R.**, Polk, D., Oudemans, P.V., <u>Holdcraft, R.</u>, <u>Zaman, F.U.</u>, Isaacs, R., and Cariveau, D. 2018. Landscape features determine the abundance and distribution of *Rhagoletis mendax*, a key fruit fly pest of blueberries. Agriculture, Ecosystems and Environment 258: 113–120.
- 15. <u>Silva, D.</u>, Kyryczenko-Roth, V., Alborn, H., and **Rodriguez-Saona, C**. 2018. Comparison of trap types, placement, and colors for capturing *Anthonomus musculus* Say (Coleoptera: Curculionidae) adults in highbush blueberries. J. Insect Science 18(2): 19; 1–9, doi: 10.1093/jisesa/iey005.
- Hernandez-Cumplido, J., Giusti, M., Zhou, Y., Kyryczenko-Roth, V., Chen, Y.H., and Rodriguez-Saona, C. 2018. Testing the 'plant domestication-reduced defense' hypothesis in blueberries: The role of herbivore identity. Arthropod-Plant Interactions. https://doi.org/10.1007/s11829-018-9605-1.
- 17. <u>Salamanca, J.</u>, Brigida, S. and **Rodriguez-Saona, C**. 2018. Cascading effects of combining herbivore-induced plant volatiles with companion plants to manipulate natural enemies in an agroecosystem. Pest Management Science 74: 2133–2145.

- Jaffe, B.D., Avanesyan, A., Bal, H.K., Grant, J.,Grieshop M.J., Lee, J.C., Liburd, O.E., Rhodes, E., Rodriguez-Saona, C., Sial, A.A., Yan Feng, Y., Zhang, A., Guédot, C. 2018. Multistate comparison of attractants and the impact of fruit development stage on trapping *Drosophila suzukii* (Diptera: Drosophilidae) in raspberry and blueberry. Environmental Entomology 47: 935–945.
- Kostromytska, O.S., Rodriguez-Saona, C., Alborn, H., and Koppenhöfer, A.M. 2018. Role of plant volatiles in host plant recognition by annual bluegrass weevil, *Listronotus maculicollis* (Coleoptera: Curculionidae). J. Chem. Ecol. 44: 580–590.
- Benevenuto, R.F., Hegland, S.J., Töpper J.P., Rydgren K., Moe S.R., Rodriguez-Saona C., and Seldal T. 2018. Multiannual effects of induced plant defenses: Are defended plants good or bad neighbors? Ecology and Evolution 8: 8940–8950.
- 21. Gallardo, K.R., Zhang, Q., Dossett, M., Polashock, J., **Rodriguez-Saona, C.**, Vorsa, N., Edger, P.P., Ashrafi, H., Babiker, E., Finn, C.E., and Iorizzo, M. 2018. Breeding trait priorities of the blueberry industry in the United States and Canada. HortScience 53: 1021–1028.
- 22. Vidal-Gomez, U., **Rodriguez-Saona, C.**, and Kaplan, I. 2018. Constitutive exposure to the volatile methyl salicylate reduces per-capita foraging efficiency of a generalist predator to learned prey associations. Entomol. Exp. et Appl. 166: 661–672.
- 23. <u>Cloonan</u>; K. Abraham, J.; Angeli, S.; Syed, Z.; and **Rodriguez-Saona, C**. 2018. Advances in the chemical ecology of *Drosophila suzukii* and its applications. J. Chem. Ecol. 44: 922–939.
- Gallardo, K.R., Klingthong, P., Zhang, Q., Polashock, J., Atucha, A., Zalapa, J., Rodriguez-Saona, C., Vorsa, N., and Iorizzo, M. 2018. Breeding trait priorities of the cranberry industry in the United States and Canada. HortScience 53: 1467–1474.

# <u>2017</u>

- 25. Williams, L., Rodriguez-Saona, C., and Castle del Conte, S. 2017. Methyl jasmonate-induction of cotton: a field test of the 'attract and reward' strategy of conservation biological control. AoB Plants (Special Issue on Using Non-Model Systems to Explore Plant-Pollinator and Plant-Herbivore Interactions). AoB PLANTS 9: plx032; doi: 10.1093/aobpla/plx032.
- Weber, D.C., Morrison, W.R. III, Khrimian, A., Rice, K., Leskey, T.C., Rodriguez-Saona, C., Nielsen, A.L., and Blaauw, B.R. 2017. Chemical Ecology of *Halyomorpha halys*: Discoveries and applications. J. Pest Sci. (Special issue on "The brown marmorated stink bug: an emerging pest of global concern"). DOI: 10.1007/s10340-017-0876-6.
- 27. <u>Hahn, N.G.</u>, **Rodriguez-Saona, C.**, and G.C. Hamilton. 2017. Characterizing the spatial distribution of brown marmorated stink bug populations in peach orchards. PLoS ONE 12(3): e0170889.
- Hernandez-Cumplido, J., Leskey, T.C., <u>Holdcraft, R.</u>, Zaman, F.U., <u>Hahn, N.G.</u>, and **Rodriguez-Saona, C**. 2017. Tempo-spatial dynamics of adult plum curculio (Coleoptera: Curculionidae) based on semiochemical-baited trap captures in blueberries. Environ. Entomol. 46: 674–684.
- Salamanca, J., Souza, B., Lundgren, J.G., and Rodriguez-Saona, C. 2017. Laboratory to field: Electro-antennographic and behavioral responsiveness of two insect predators to methyl salicylate. Chemoecology 27: 51–63.
- Seldal, T., Hegland, S.J., Rydgren, K., Rodriguez-Saona, C., Töpper, J. 2017. How to induce plant defence responses in wild plant populations? Using a dominant boreal plant species as example. Ecology and Evolution 7: 1762–1769.
- 31. <u>Wadhwa, S.</u>, Gallagher, F.J., **Rodriguez-Saona, C.**, and Holzapfel, C. 2017. Analysis of fluctuating asymmetry in isopod and hardwood tree populations in brownfields. Ecological Indicators 76: 42–51.

# <u>2016</u>

- 32. <u>Fraga, D.F.</u>, <u>Parker, J.</u>, Busoli, A.C., Hamilton, G.C., Nielsen, A.L., and **Rodriguez-Saona, C.** 2016. Behavioral responses of predaceous minute pirate bugs (Hemiptera: Anthocoridae) to tridecane, a volatile emitted by the brown marmorated stink bug. J. Pest Sci. (Special issue on "The brown marmorated stink bug: an emerging pest of global concern"). DOI 10.1007/s10340-016-0825-9
- 33. McArt, S.H., Miles, T., **Rodriguez-Saona, C.**, Schilder, A., Adler, L.S., and Grieshop, M.J. 2016. Floral scent mimicry and the transmission of a pollinator-vectored plant pathogen. PLoS ONE 11(11): e0165761. doi:10.1371/journal.pone.0165761
- <u>Rivera, M.</u>, Rodriguez-Saona, C., Alborn, H., and Koppenhöfer, A. 2016. Differential response of a local population of entomopathogenic nematodes to non-native herbivore induced plant volatiles (HIPV) in the laboratory and field. J. Chem. Ecol. 42: 1259–1264.

- 35. Zhou, Y., Giusti, M.M., <u>Parker, J.</u>, <u>Salamanca, J.</u>, and **Rodriguez-Saona, C**. 2016. Frugivory by brown marmorated stink bug (Hemiptera: Pentatomidae) alters blueberry fruit chemistry and preference by conspecifics. Environ. Entomol. 45:1227–1234.
- 36. <u>Holdcraft, R.</u>, **Rodriguez-Saona, C.**, and L.L. Stelinski. 2016. Pheromone autodetection: Evidence and implications. Insects (Special issue on "Sexual Communication in an Evolutionary Context") 7, 17; doi:10.3390/insects7020017
- Rodriguez-Saona, C., Wanumen, A.C., <u>Salamanca, J., Holdcraft, R</u>., and Kyryczenko-Roth, V. 2016. Toxicity of insecticides on various life stages of two totricid pests of cranberries and on a non-target predator. Insects (Special issue on "Collection on Integrated Pest Management") 7, 15; doi:10.3390/insects7020015.
- <u>Hahn, N.G.</u>, Kaufman, A.J., Rodriguez-Saona, C., Nielsen, A.L., LaForest J., and Hamilton, G.C. 2016. Exploring the spread of brown marmorated stink bug in New Jersey through the use of crowdsourced reports. American Entomologist 62: 36–45.
- 39. <u>Rivera, M.J.</u>, **Rodriguez-Saona, C.**, Elgizi, A., Fonseca, D.M., Jennings, D.E., and Koppenhofer, A.M. 2016. Cultivation and domestication of highbush blueberry (*Vaccinium corymbosum*) alters abundance, diversity, and virulence of entomopathogenic nematodes. Agriculture, Ecosystems & Environment 222: 148–155.

# <u>2015</u>

- 40. <u>Rivera, M.J.</u>, **Rodriguez-Saona, C.**, Jennings, D.E., and Koppenhöfer, A.M. 2015. Assessing the impact of cultivation and plant domestication of highbush blueberry (*Vaccinium corymbosum*) on soil properties and associated plant-parasitic nematode communities (Short Communication). Soil Biology and Biochemistry 88: 25–28.
- 41. **Rodriguez-Saona, C.**, C. Vincent, D. Polk, and F.A. Drummond. 2015. The blueberry maggot fly, *Rhagoletis mendax* Curran (Diptera: Tephritidae): A review. Journal of Integrated Pest Management. 15(1): 11; DOI: 10.1093/jipm/pmv010.
- 42. Leskey, T., Agnello, A., Bergh, J. C., Dively, G., Hamilton, G., Jentsch, P., Khrimian, A., Krawczyk, G., Kuhar, T., Lee, D., Morrison, W., Polk, D., Rodriguez-Saona, C., Shearer, P., Short, B., Shrewsbury, P., Walgenbach, J., Weber, D., Welty, C., Whalen, J., Wiman, N., Zaman, F. 2015. Attraction of the invasive *Halyomorpha halys* (Hemiptera: Pentatomidae) to traps baited with semiochemical stimuli across the United States. Environmental Entomology 44: 746–756.
- <u>Chacón-Fuentes, M.</u>, Parra, L., Rodriguez-Saona, C., Seguel, I., and Quiroz, A. 2015. Domestication in murtilla (*Ugni molinae*) reduced defensive flavonol levels but increased resistance against a native herbivorous insect. Environmental Entomology 44: 627–637.
- 44. Kim, H., **Rodriguez-Saona, C.,** Kwon, D.H., Park, S., Kang, T-J., Kim, S-J., Hong, K-J., Lee, H-S. 2015. Development and characterization of 12 microsatellite loci from the blueberry gall midge *Dasineura oxycoccana* (Diptera: Cecidomyiidae). Journal of Entomology and Zoology 50: 415–418.
- 45. Wiman, N., <u>J. Parker</u>, **C. Rodriguez-Saona**, and V. Walton. 2015. Characterizing damage and impacts of brown marmorated stink bug, *Halyomorpha halys* (Hemiptera: Pentatomidae), on commercial blueberries. Journal of Economic Entomology 108: 1156–1163.
- Burrack, H.J., Asplen M., Bahder L., Collins, J., Drummond F.A., Guédot C., Isaacs, R., Johnson D., Blanton A., Lee J.C., Loeb G., Rodriguez-Saona, C., Van Timmeren, S., Walsh D., and McPhie D.R. 2015. Multi-state comparison of attractants for monitoring *Drosophila suzukii* (Diptera: Drosophilidae) in blueberries and caneberries. Environmental Entomology 44: 704–712.
- <u>Abraham, J.</u>, A. Zhang, S. Abubeker, S. Angeli, and C. Rodriguez-Saona. 2015. Behavioral and antennal responses of spotted wing drosophila, *Drosophila suzukii*, to volatiles from fruit extracts. Environmental Entomology 44: 356–367.
- 48. Deutsch, A.E., **C. Rodriguez-Saona**, J.E. Zalapa, and S.A. Steffan. 2015. Temperature-mediated development of *Sparganothis sulfureana* (Lepidoptera: Tortricidae) in cranberries. Environmental Entomology 44: 400–405.
- Cowles, R.S., C. Rodriguez-Saona, R. Holdcraft, G.M. Loeb, J.E. Elsensohn, and S.P. Hesler. 2015. Sucrose improves insecticide activity against *Drosophila suzukii* (Diptera: Drosophilidae). Journal of Economic Entomology 108: 640–653.
- 50. <u>Salamanca, J.</u>, M. Pareja, **C. Rodriguez-Saona**, A.L.S. Resende, and B. Souza. 2015. Behavioral responses of adult lacewings, *Chrysoperla externa*, to a rose-aphid-coriander complex. Biological Control 80: 103–112.

# 2014

- 51. Deutsch, A.E., **C.R. Rodriguez-Saona**, V. Kyryczenko-Roth, J. Sojka, J.E. Zalapa, and S.A. Steffan. 2014. Degree-day benchmarks for *Sparganothis sulfureana* (Lepidoptera: Tortricidae) development in cranberries. Journal of Economic Entomology 107: 2130–2136.
- 52. Rice, K., C. Bergh, E. Bergman, D. Biddinger, C. Dieckhoff, G. Dively, H. Fraser, T. Gariepy, G. Hamilton, T. Haye, A. Herbert, K. Hoelmer, C. Hooks, A. Jones, G. Krawczyk, T. Kuhar, W. Mitchell, A.L. Nielsen, D. Pfeiffer, M. Raupp, **C. Rodriguez-Saona**, P. Shearer, P. Shrewsbury, D. Venugopal, J. Whalen, N. Wiman, T. Leskey, and J. Tooker. 2014. Biology, ecology, and management of brown marmorated stink bug (*Halyomorpha halys*). Journal of Integrated Pest Management 5: A1-A13.
- 53. <u>Hung, R.</u>, Lee, S., **Rodriguez-Saona, C.**, and Bennett, J.W. 2014. Common gas phase molecules from fungi affect seed germination and plant health in *Arabidopsis thaliana*. Applied Microbiology and Biotechnology Express 4: 53.
- 54. Stelinski, L., <u>R. Holdcraft</u>, and **C. Rodriguez-Saona**. 2014. Female moth calling and flight behavior are altered hours following pheromone autodetection: Possible implications for practical management with mating disruption. Insects 5: 459-473; doi:10.3390/insects5020459.
- 55. Lee, I.-M., Polashock, J., Bottner-Parker, K.D., Bagadia, P.G., **Rodriguez-Saona, C.R.**, Zhao, Y., and Davis, R.E. 2014. New subgroup 16SrIII-Yphytoplasmas associated with false-blossom diseased cranberry (*Vaccinium macrocarpon*) plants and with known and potential insect vectors in New Jersey. Eur. J. Plant Pathol. 139: 393–400.
- 56. <u>Wallner, A.M.</u>, Hamilton, G.C., Nielsen, A.L., Hahn, N., Green, E., and **Rodriguez-Saona, C.R**. 2014. Landscape factors facilitating the invasive dynamics and distribution of the brown marmorated stink bug, *Halyomorpha halys* (Hemiptera: Pentatomidae), after arrival in the United States. PLoS ONE 9(5): e95691. doi:10.1371/journal.pone.0095691.
- 57. Roubos, C.R., **Rodriguez-Saona, C.**, and Isaacs, R. 2014. Mitigating the effects of insecticides on arthropod biological control at field and landscape scales. Biological Control Special Issue on Impact of Environmental Change on Biological Control 75: 28–38.
- 58. Roubos, C.R., **Rodriguez-Saona, C.**, Holdcraft, R., Mason, K.S., and Isaacs, R. 2014. Relative toxicity and residual activity of insecticides used in blueberry pest management: Mortality of natural enemies. J. Econ. Entomol. 107: 277–285.
- 59. Rodriguez-Saona, C.R., Polk, D., Holdcraft, R., and Koppenhöfer, A.M. 2014. Long-term evaluation of field-wide oriental beetle (Col., Scarabaeidae) mating disruption in blueberries using female-mimic pheromone lures. J. Appl. Entomol. 138: 120–132.
- Medina, R.F., <u>Szendrei, Z.</u>, Harrison, K., Isaacs, R., Averill, A., Malo, E.A., and **Rodriguez-Saona, C**. 2014. Exploring host-associated differentiation in the North American native cranberry fruitworm, *Acrobasis vaccinii*, from blueberries and cranberries. Entomol. Exp. et Appl. 150: 136–148.

# <u>2013</u>

- Lee, J.C., Barrantes, L.D., Beers, E.H., Burrack, H.J., Dalton, D.T., Dreves, A.J., Gut, L.J., Hamby, K.A., Haviland, D.R., Isaacs, R., Nielsen, A.L., Richardson, T., Rodriguez-Saona, C.R., Shearer, P.W., Stanley, C.A., Walsh, D.B., Walton, W.M.,Yee, W.L., Zalom, F.G., and Bruck, D.J. 2013. Trap designs for monitoring *Drosophila suzukii* (Diptera: Drosophilidae). Environmental Entomology. 42: 1348-1355.
- 62. **Rodriguez-Saona, C.**, Polashock, J., and <u>Malo, E.A</u>. 2013. Jasmonate-mediated induced volatiles in the American cranberry, *Vaccinium macrocarpon*: from gene expression to organismal interactions. Frontiers in Plant Science 4: 115. doi: 10.3389/fpls.2013.00115.
- 63. Rodriguez-Saona, C.R., Wise, J.C., Polk, D., Leskey, T.C., and Vandervoort, C. 2013. Lethality of reduced-risk insecticides against plum curculio (Coleoptera: Curculionidae) in blueberries, with emphasis on their curative activity. Pest Management Science 69: 1334-1345.

# <u>2012</u>

- 64. **Rodriguez-Saona, C.R.**, Byers, J.A., and Schiffhauer, D. 2012. Effect of trap color and height on captures of blunt-nosed and sharp-nosed leafhoppers (Hemiptera: Cicadellidae) and non-target arthropods in cranberry bogs. Crop Protection 40: 132-144.
- 65. Ali, J.G., Alborn, H.T., Campos-Herrera, R., Kaplan, F., Duncan, L.W., Rodriguez-Saona, C., Koppenhofer, A.M., and Stelinski, L.L. 2012. Subterranean, herbivore-induced plant volatile increases

biological control activity of multiple beneficial nematode species in distinct habitats. PLoS ONE 7(6): e38146. doi:10.1371/journal.pone.0038146.

 Leskey, T.C., Hamilton, G.C., Nielsen, A.L., Polk, D., Rodriguez-Saona C., Bergh J.C., Herbert A., Kuhar, T., Pfeiffer, D., Dively, G., Hooks, C., Raupp, M., Shrewsbury, P., Krawczyk, G., Shearer, P.W., Whalen, J., Koplinka-Loehr, C., Myers, E., Inkley, D., Hoelmer, K., Lee, D., and Wright, S.E. 2012. Pest Status of the Brown Marmorated Stink Bug, *Halyomorpha halys* (Stål) in the USA. Outlooks in Pest Management 23: 218-226.

# <u>2011</u>

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- Rodriguez-Saona, C. 2011. Plum curculio management in blueberries: New solutions for an old problem. Proceedings of the Mid-Atlantic Fruit & Vegetable Convention. Hershey, PA.
- Rodriguez-Saona, C. 2010. Intrepid® use in cranberry. Wisconsin Cranberry School, 2009 Proceedings. Volume 17.
- Rodriguez-Saona, C. 2010. Topics in cranberry entomology. Wisconsin Cranberry School, 2009 Proceedings. Volume 17.
- Zaman, F., C. Rodriguez-Saona, D. Polk, and P. Oudemans. 2009. Monitoring insect pests in highbush blueberries using spatially-based methods. Proceedings of the 85<sup>th</sup> Annual Cumberland-Shenandoah Fruit Workers Conference.
- Rodriguez-Saona, C., and D. Polk. 2009. SPLAT-OrB: A new pheromone formulation for oriental beetle mating disruption in blueberries. Proceedings of the 85<sup>th</sup> Annual Cumberland-Shenandoah Fruit Workers Conference.
- Rodriguez-Saona, C. 2009. Blueberry insect pests and their control. Proceedings of the Mid-Atlantic Fruit & Vegetable Convention. Hershey, PA.
- Rodriguez-Saona, C., D. Polk, and V. Kyryczenko-Roth. 2009. Within-plant and within-field distribution of blueberry thrips. Proceedings of the 54<sup>th</sup> New Jersey Annual Vegetable Growers Meeting. Atlantic City, NJ.

- Rodriguez-Saona, C., and D. Polk. 2008. Oriental beetle mating disruption: From Research to Commercialization. Proceedings of the 84<sup>th</sup> Annual Cumberland-Shenandoah Fruit Workers Conference.
- Polk, D., C. Rodriguez-Saona, and P. Oudemans. 2008. A three year summary of blueberry maggot activity. Proceedings of the 84<sup>th</sup> Annual Cumberland-Shenandoah Fruit Workers Conference.
- Rodriguez-Saona, C. 2008. Insect pest management practices for highbush blueberries in the Northeast U.S. Pennsylvania Vegetable Growers News.
- Rodriguez-Saona, C., D. Polk, and R. Holdcraft. 2008. Update on Oriental beetle mating disruption in blueberries. Proceedings of the 53<sup>rd</sup> New Jersey Annual Vegetable Growers Meeting. Atlantic City, NJ.
- Rodriguez-Saona, C. 2007. Evaluation of new reduced-risk pest management strategies in blueberries. Proceedings of the Mid-Atlantic Fruit and Vegetable Convention. Hershey, PA.
- Rodriguez-Saona, C. 2007. Seasonal life-history and management strategies for blueberry gall midge and thrips in highbush blueberries. Proceedings of the 52<sup>nd</sup> New Jersey Annual Vegetable Growers Meeting. Atlantic City, NJ.
- Rodriguez-Saona, C., D. Polk, and R. Holdcraft. 2006. Reduced pheromone rates for mating disruption control of Oriental beetle in highbush blueberry. Proceedings of the 82<sup>nd</sup> Annual Cumberland-Shenandoah Fruit Workers Conference.
- Rodriguez-Saona, C. 2006. Development and implementation of reduced-risk pest management programs for blueberries in New Jersey. Proceedings of the 10<sup>th</sup> North American Blueberry Research and Extension Workers Conference. Tifton, GA.
- Rodriguez-Saona, C., T. Poland, J. Miller, L. Stelinski, L. Buchan, G. Grant, P. de Groot, and L. MacDonald. 2006. Emerald ash borer responses to induced plant volatiles. Proceedings of the 17<sup>th</sup> USDA Interagency Research Forum on Gypsy Moth and Other Invasive Species. Annapolis, MD.
- Rodriguez-Saona, C. and D. Polk. 2006. Baits and beneficial arthropods in a reduced-risk IPM program. Proceedings of the 51<sup>st</sup> New Jersey Annual Vegetable Growers Meeting. Atlantic City, NJ.
- Polk, D., C. Rodriguez-Saona, and R. Holdcraft. 2006. Sex, traps, and timing Progress in blueberry IPM. Proceedings of the 51<sup>st</sup> New Jersey Annual Vegetable Meeting. Atlantic City, NJ.
- Blackmer, J.L., Byers, J.A., and C. Rodriguez-Saona. 2006. Visual and volatile preferences of the generalist herbivore, *Lygus hesperus* (Heteroptera: Miridae). In: Proceedings Beltwide Cotton Conferences. National Cotton Council, San Antonio, Texas. D. Richter & M. Huffman (Eds.) Pp. 1048-1052.
- Polk, D.F., J.D. Barry, R. Holdcraft, and C. Rodriguez-Saona. 2006. Progress in mating disruption of oriental beetle in highbush blueberries. Proceedings of the 81<sup>st</sup> Annual Cumberland-Shenandoah Fruit Workers Conference. Winchester, Virginia.
- Rodriguez-Saona, C. and J. T. Trumble. 1999. Role of avocado idioblast cells in resistance to herbivorous insects. Breeding for Resistance to Insects and Mites. IOBC wprs Bulletin 22 (10): 1-3.

## INVITED PRESENTATIONS

- Rodriguez-Saona, C., Salamanca, J., and Urbaneja-Bernat, P. 2019. Manipulation of natural enemies via plant volatiles to increase ecosystem function and services. Symposium on "Application and Manipulation of Plant Volatiles for Crop Protection." FEATURED TALK. 35<sup>th</sup> Annual Meeting of the International Society of Chemical Ecology. Atlanta, Georgia.
- **Rodriguez-Saona, C**. 2019. The potential consequences of crop domestication on tri-trophic interactions. Department of Entomology. Texas A&M.
- Burrack, H., Sial, A., Isaacs, R., **Rodriguez-Saona, C.**, et al. 2018. SCRI Update. Developing and implementing sustainable strategies to manage spotted-wing drosophila in United States fruit crops. Entomological Society of America Annual Meeting. Vancouver, Canada.
- Isaacs, R., Sial, A., Zalon F., **Rodriguez-Saona, C.** et al. 2018. An update on insecticide resistance monitoring for SWD in berry crops. Entomological Society of America Annual Meeting. Vancouver, Canada.
- Sial, A., Isaacs, R., Zalon, F., **Rodriguez-Saona, C**. et al. 2018. Spotted-wing drosophila: an invasive pest that has changed blueberry insect pest management and export considerations. Entomological Society of America Annual Meeting. Vancouver, Canada.
- Rodriguez-Saona, C., Sanchez, F., Giusti, M., Zhou, Y., and Benrey, B. 2018. Effects of domestication of blueberries on the invasive vinegar fly *Drosophila suzukii*. Symposium on "Semiochemical

application for invasive species." 34<sup>th</sup> Annual Meeting of the International Society of Chemical Ecology. Budapest, Hungary.

- Rodriguez-Saona, C. and Cloonan, K. 2018. Investigaciones en la ecología química de la drosophila de alas manchadas. Sociedad Colombiana de Entomología (SOCOLEN). Cali, Colombia.
- Rodriguez-Saona, C., Vincent, C., and Isaacs, R. 2018. Avances en manejo de plagas en frutales pequeños con énfasis en arándanos. PLENARY TALK. Sociedad Colombiana de Entomología (SOCOLEN). Cali, Colombia.
- **Rodriguez-Saona, C**. 2018. Volátiles inducidos por herbivoría y su aplicación en el control biológico. Universidad Nacional Abierta y a Distancia (UNAD). Fusagasugá, Colombia.
- de Lange, E., Salamanca, J., and **Rodriguez-Saona, C.** 2018. Beating the bugs in the bogs with natural enemy-attracting volatiles. Symposium on "Discovery, development, regulation and implementation of novel insect pest management strategies in urban and agricultural environments." ESA Pacific Branch Meeting. Reno, Nevada.
- Rodriguez-Saona, C. 2018. Manipulation of natural enemies with plant volatiles: Is it a good idea? Department of Entomology. University of Wisconsin-Madison.
- Rodriguez-Saona, C. 2018. Manipulation of natural enemies using herbivore-induced plant volatiles in agro-ecosystems. Department of Entomology and Acarology. Universidade de São Paulo, Piracicaba, Brazil.
- Rodriguez-Saona, C. 2018. Use of herbivore-induced plant volatiles to manipulate natural enemies in agro-ecosystems. Faculty of Philosophy, Sciences and Letters, University of São Paulo, Ribeirão Preto, Brazil.
- Rodriguez-Saona, C., Hernández-Cumplido, J., Burrack, H., Drummond, F., Gut, L., Isaacs, R., Loeb, G., Nielsen, A., Syed, Z., Park, K., Walton, V., and Zhang, A. 2017. Testing novel attractants for Drosophila suzukii. Entomological Society of America Annual Meeting. Denver, Colorado.
- Burrack, H., Chiu, J., Daane, K., Gomez, M., Gut, L., Isaacs, R., Loeb, G., Rodriguez-Saona, C., Sial, A., Walton, V., and Zalom, F. 2017. Sustainable spotted wing drosophila management in US fruit crops: Year 2 update. Entomological Society of America Annual Meeting. Denver, Colorado.
- Rodriguez-Saona, C. 2016. Applying chemical ecology for blueberry insect pest management. Department of Entomology. University of Georgia.
- Rodriguez-Saona, C., M. Giusti, F. Sanchez-Pedraza, Y. Zhou, M. Chacon-Fuentes, and B. Benrey. 2016. Facilitation by domestication? Susceptibility of wild and cultivated blueberries to an invasive pest. XXV International Congress of Entomology. Orlando, Florida, USA.
- McArt, S., T. Miles, **C. Rodriguez-Saona**, A. Schilder, L.S. Adler, and M. Grieshop. 2016. Floral scent mimicry by a pollinator-vectored plant pathogen. XXV International Congress of Entomology. Orlando, Florida, USA.
- Hernandez-Cumplido, J., B. Benrey, and **C. Rodriguez-Saona**. 2016. From Mexico, Switzerland, and the USA: the effects of early induction on the performance of the seeds and fruit predators, changing the physiological state of the seeds and fruits. XXV International Congress of Entomology. Orlando, Florida, USA.
- Rodriguez-Saona, C. 2016. Impacto de una plaga invasiva en el Manejo Integrado de Plagas: Drosophila de alas manchadas en arándano en los EE.UU (Impact of an invasive species on Integrated Pest Management: Spotted wing drosophila in blueberries in the USA). Servicio Nacional de Sanidad Agraria (SENASA). Dirección de Sanidad Vegetal. La Molina, Lima, Perú.
- Rodriguez-Saona, C., T. Leskey, A. Zhang, K. Rice., and J. Abraham. 2016. Chemical ecology of *Drosophila suzukii*: Attraction to fruit volatiles. 32<sup>nd</sup> Annual Meeting of the International Society of Chemical Ecology/1<sup>st</sup> Joint Meeting ISCE/ALAEQ. Foz do Iguassu, Brazil.
- Rodriguez-Saona, C., McArt, S.H., Miles, T., Schilder, A., Adler, L.S., and Grieshop, M.J. 2016. Floral scent mimicry and vector-pathogen associations in a pseudoflower-inducing plant pathogen system. 32<sup>nd</sup> Annual Meeting of the International Society of Chemical Ecology/1<sup>st</sup> Joint Meeting ISCE/ALAEQ. Foz do Iguassu, Brazil.
- Rodriguez-Saona, C. 2016. Manipulation of natural enemy behavior for conservation biological control: Is it possible? Departamento de Biologia Animal, Instituto de Biologia, Universidade Estadual de Campinas UNICAMP, Campinas, Brasil.
- Rodriguez-Saona, C. 2016. Potential for manipulation of tri-trophic interactions in agro-ecosystems. Department of Entomology. University of Arkansas.
- **Rodriguez-Saona, C.** 2016. Floral scent mimicry and the transmission of a pollinator-vectored plant pathogen. Gordon Research Conference on Plant Volatiles. Ventura, California.

- Rodriguez-Saona, C., D. Polk, A. Raudenbush, R. Holdcraft, and A. Mafra-Neto. 2015. Challenges in blueberry pest management: Insect invasions. Symposium: Beyond Corn and Soybeans: Challenges to Integrated Pest Management in Specialty Crops. The 63<sup>rd</sup> Annual Meeting of the Entomological Society of America. Minneapolis, Minnesota.
- Rodriguez-Saona, C., T. Leskey, A. Zhang, A. Nielsen, K. Rice, and C. Michel. 2015. Progress towards developing behavior-based control strategies for spotted wing drosophila. Organized meeting: Beyond Partnering to Develop Solutions against the Infamous Invasive Pest Spotted Wing Drosophila. The 63<sup>rd</sup> Annual Meeting of the Entomological Society of America. Minneapolis, Minnesota.
- Rodriguez-Saona, C., T. Leskey, A. Zhang, A. Nielsen, and C. Michel. 2015. Managing the invasive spotted wing drosophila using behavior-based strategies: Challenges and successes. Symposium: Challenges for Invasive Species Pest Management via Semiochemicals. 8<sup>th</sup> Asia-Pacific Chemical Ecology Conference. Anaheim, California.
- Rodriguez-Saona, C. 2015. Interactions between insects and two perennial native US crops: Connecting basic and applied research. Department of Entomology. University of Maryland.
- Rodriguez-Saona, C. 2015. Understanding and exploiting multitrophic-level species interactions in agricultural systems. German Center for Integrative Biodiversity Research. Leipzig, Germany.
- Rodriguez-Saona, C. 2015. Tri-trophic interactions in agroecosystems: From basic to applied research. Faculty of Science. Université de Neuchatel. Neuchatel, Switzerland.
- Kostromytska, O., **C. Rodriguez-Saona**, and A. Koppenhöfer. 2015. Host plant resistance of bentgrass species and cultivars (*Agrostis* spp) to annual bluegrass weevil (*Listronotus maculicollis*) and its mechanisms. 86<sup>th</sup> Annual Meeting of the Eastern Branch of the Entomological Society of America. Rehoboth beach, Delaware.
- Rodriguez-Saona, C. 2015. The impact of an invasive pest on integrated pest management: The spotted wing drosophila in blueberries in the US. Faculty of Science and Technology. University of Bolzano, Italy.
- **Rodriguez-Saona, C.**, and Polk, D. 2014. The impact of spotted wing drosophila in blueberries. Symposium: Challenges of Emerging and Resilient Insect Pests for IPM Implementation. The 62<sup>nd</sup> Annual Meeting of the Entomological Society of America. Portland, Oregon.
- Burrack, H.J., M.K. Asplen, B.W. Bahder, F. Drummond, C. Guedot, R. Isaacs, D. Johnson, A.K. Kirk, J.C. Lee, G.M. Loeb, C. Rodriguez-Saona, and S. Van Timmeren. 2014. Comparing the attractiveness of homemade baits and synthetic lures for monitoring Drosophila suzukii (Diptera: Drosophilidae) in host crops. Organized Meeting: Spotted Wing Drosophila: Developing Solutions for a Challenging Pest. The 62nd Annual Meeting of the Entomological Society of America. Portland, Oregon.
- Isaacs, R., H.J. Burrack, J.C. Wise, **C. Rodriguez-Saona**, and S. Van Timmeren. 2014. Evaluation of crop protectants for minimizing SWD infestation in berries. Organized Meeting: Spotted Wing Drosophila: Developing Solutions for a Challenging Pest. The 62nd Annual Meeting of the Entomological Society of America. Portland, Oregon.
- Leskey, T.C., B. Short, and **C. Rodriguez-Saona**. 2014. Developing behaviorally based tools for management of spotted wing drosophila. Organized Meeting: Spotted Wing Drosophila: Developing Solutions for a Challenging Pest. The 62nd Annual Meeting of the Entomological Society of America. Portland, Oregon.
- Rodriguez-Saona, C. 2014. Research objectives and preliminary findings from Rodriguez-Saona lab. Spotted Wing Drosophila Northeastern IPM Working Group. Highland, New York.
- **Rodriguez-Saona, C.**, J. Abraham, and A. Zhang. 2014. Comparing spotted wing drosophila attraction to various fruit volatiles. 97<sup>th</sup> Annual meeting of the Florida Entomological Society. Jupiter, Florida.
- Rodriguez-Saona, C., J. Abraham, and A. Zhang. 2014. Integrating alternative SWD management practices. American Society for Horticultural Science Annual Conference. Orlando, Florida.
- Rodriguez-Saona, C. 2014. Two decades of research on insect-plant interactions and applied chemical ecology: Lessons learned. Student Science Apprenticeship Program Lecture. Monell Chemical Senses Center. Philadelphia, PA.
- Rodriguez-Saona, C. 2014. Volatile-mediated plant-insect interactions in a multi-trophic context. GARY SIMMONS MEMORIAL LECTURE (speaker selected by the students in the department). Department of Entomology. Michigan State University, Michigan.
- Rodriguez-Saona, C. 2014. Exploring and exploiting the multifunctional roles of herbivore-induced plant volatiles. Department of Plant and Soil Science. University of Vermont. Burlington, Vermont.

- Rodriguez-Saona, C. 2014. Can we make crops more attractive to the natural enemies of herbivores? 85<sup>th</sup> Annual Meeting of the Eastern Branch of the Entomological Society of America. Williamsburg, Virginia.
- Rodriguez-Saona, C. 2014. NEIPM Working Group Meeting update. eFly: Spotted Wing Drosophila SIPM Working Group Meeting. Savannah, GA.
- Roubos, C.R., **C. Rodriguez-Saona**, and R. Isaacs. 2013. Scale-dependent impacts of pesticides on arthropod biological control. Symposium: Impacts of Global Change on Biodiversity and Biological Control. The 61<sup>st</sup> Annual Meeting of the Entomological Society of America. Austin, Texas.
- Rodriguez-Saona, C. 2013. Connecting research and extension IPM in berry crops: The satisfactions of a job in extension. Symposium: Making Connections Abroad: First Latin American/Hispanic Symposium. The 61<sup>st</sup> Annual Meeting of the Entomological Society of America. Austin, Texas.
- Rodriguez-Saona, C. 2013. Towards sustainable IPM in small fruit: Successes and challenges. Symposium: Connecting Our Past with Our Future. A Look at Past Student Award Winners. Then, Now, and in the Future: Student-Sponsored Symposium. The 61<sup>st</sup> Annual Meeting of the Entomological Society of America. Austin, Texas.
- Rodriguez-Saona, C. J. Abraham, and A. Zhang. 2013. Steps towards the identification of host-plant volatile attractants for spotted wing drosophila. 84<sup>th</sup> Annual Meeting of the Eastern Branch of the Entomological Society of America. Lancaster, Pennsylvania.
- **Rodriguez-Saona, C**. 2013. Response of insect predators to methyl salicylate in cranberries. 4<sup>th</sup> International Symposium on Biological Control of Arthropods. Pucón, Chile.
- Wallner, A.M., **C. Rodriguez-Saona**, A.L. Nielsen, and G. Hamilton. 2012. Examining landscape factors that are facilitating the distribution of the brown marmorated stink bug (*Halyomorpha halys*) in New Jersey. 60<sup>th</sup> Annual Meeting of the Entomological Society of America. Knoxville, Tennessee.
- **Rodriguez-Saona C**. 2012. Multi-trophic level consequences of domestication in a native U.S. crop. 60<sup>th</sup> Annual Meeting of the Entomological Society of America. Knoxville, Tennessee.
- Rodriguez-Saona, C. and Z. Szendrei 2012. Patterns of attraction of herbivore pests to plant volatiles. XXIV International Congress of Entomology. Daegu, South Korea.
- Rodriguez-Saona, C. 2012. Multi-functional roles of herbivore-induced plant volatiles and their applications in IPM. Citrus Research and Education Center. Florida University. Lake Alfred, Florida.
- Rodriguez-Saona, C. 2011. Herbivore-induced plant volatiles: Functions and potential uses in IPM. Department of Entomology. Purdue University. West Lafayette, Indiana.
- Rodriguez-Saona, C. 2011. Managing the invasive oriental beetle with mating disruption in blueberries. 6<sup>th</sup> Asian Pacific Conference on Chemical Ecology. Beijing, China.
- Rodriguez-Saona, C. 2011. Can plant volatiles help in crop protection against herbivores? Department of Entomology. University of Wisconsin-Madison. Madison, Wisconsin.
- Rodriguez-Saona, C. 2011. Uso de feromonas en manejo integrado de plagas, con énfasis en el cultivo de arándanos (The use of pheromones in Integrated Pest Management, with emphasis on blueberries). Universidad Nacional Agraria, La Molina. Lima, Perú.
- Rodriguez-Saona, C., R. Musser, and J. Thaler. 2010. From genes to organisms: Investigating induced plant responses to multiple herbivores. Symposium: Molecular and Biochemical Aspects of Plant-Insect Interactions: Student-Sponsored Symposium. The 58<sup>th</sup> Annual Meeting of the Entomological Society of America. San Diego, California.
- Rodriguez-Saona, C. 2010. Managing blueberry maggot using spatially-based tools. FEATURED TALK Great Lakes EXPO. Grand Rapids, Michigan.
- Rodriguez-Saona, C. 2010. Uncovering and exploiting the multifunctional roles of plant volatiles. Department of Plant Biology and Pathology. Rutgers University. New Brunswick, New Jersey.
- Rodriguez-Saona, C. 2010. Integrating applied insect chemical ecology into blueberry pest management. Department of Entomology. Penn State University. State College, Pennsylvania.
- Rodriguez-Saona, C. 2010. The ecological functions and applications in pest management of herbivoreinduced plant volatiles. Department of Biological Sciences. Simon Fraser University. Vancouver, Canada.
- Rodriguez-Saona, C. 2010. Cranberry tipworm. FEATURED TALK. British Columbia Cranberry Congress. Vancouver, Canada.
- Rodriguez-Saona, C. 2010. Cranberry industry in New Jersey. FEATURED TALK. British Columbia Cranberry Congress. Vancouver, Canada.
- Rodriguez-Saona, C. 2009. Manipulación de enemigos naturales mediante volátiles inducidos por

herbivoría y su aplicación en control biológico (Manipulation of natural enemies with herbivoreinduced plant volatiles and their application in biological control). **PLENARY TALK**. XXXII Congreso Nacional de Control Biológico (XXXII National Congress of Biological Control). Villahermosa, Mexico.

- Rodriguez-Saona, C. 2009. The scent of plants in insect-plant interactions and pest management. Department of Entomology. Michigan State University. East Lansing, Michigan.
- Rodriguez-Saona, C. 2009. Topics in cranberry entomology. FEATURED TALK. Wisconsin Cranberry School. Wassaw, Wisconsin.
- Rodriguez-Saona, C. 2009. Intrepid use in cranberry. FEATURED TALK. Wisconsin Cranberry School. Wassaw, Wisconsin.
- Rodríguez-Saona, C. 2008. Environmental influence on tri-trophic interactions: Plant phenotypic diversity and multiple herbivory. XXIII International Congress of Entomology. Durban, South Africa.
- Rodriguez-Saona, C. 2007. Semiochemical-based management of blueberry pests. Fruit Symposium. ESA Eastern Branch Meeting. Harrisburg, Pennsylvania.
- Rodriguez-Saona, C. 2007. Semiochemicals in small fruit entomology: From lab research to field trials. American Entomological Society. Newark, Delaware.
- Rodriguez-Saona, C. 2006. Tri-trophic level interactions: Increasing the scale, complexity, and realism. Department of Entomology. The Ohio State University. Wooster, Ohio.
- Rodriguez-Saona, C. 2006. Increasing the scale, complexity, and realism to better understand tritrophic (plant-herbivore-natural enemy) interactions. Ecology & Evolution Graduate Program Seminar. Rutgers University, New Brunswick, New Jersey.
- Rodriguez-Saona, C. 2006. New directions in the study of tri-trophic interactions: Increasing the complexity. University of Massachusetts, Amherst, Massachusetts.
- Rodriguez-Saona, C. 2005. Neighborhood and multiple herbivory affect interactions between plants, herbivores, and natural enemies. USDA, ARS Plant Sciences Institute, Beltsville Maryland.
- Rodriguez-Saona, C. 2005. Real world complexity influences tri-trophic level interactions: The effects of neighborhood and multiple herbivores on plants. Department of Entomology, Texas A&M. College Station, Texas.
- Rodriguez-Saona, C. 2005. Adaptation and environment in interactions between plants and insects: A tri-trophic level approach. Central Washington University. Ellensburg, Washington.
- Rodriguez-Saona, C. 2005. Plant chemicals for insect control: An integrative approach in IPM. Marucci Center Research Extension, Rutgers University. Chatsworth, New Jersey.
- Rodriguez-Saona, C. 2005. Tritrophic level interactions: Integrating the complexity of a real agricultural setting. Department of Entomology, Rutgers University. New Brunswick, New Jersey.
- Blackmer J, S. Naranjo, **C. Rodriguez-Saona**, and L. Williams III. 2005. Dispersal and host location by *Lygus* spp.: underlying behavioral and ecological mechanisms. International symposium ecology and management of *Lygus* plant bugs. Ottawa, Canada.
- Williams, L. III, **C. Rodriguez-Saona**, S.C. Castle, V. Manrique, J.S. Bernal, and W.A. Jones. 2005. Utilization of herbivore-induced plant volatiles for conservation biological control of *Lygus* species- from lab to field. International symposium ecology and management of *Lygus* plant bugs. Ottawa, Canada.
- Rodriguez-Saona, C. 2004. Exploiting herbivore-induced plant volatiles in insect control. USDA Forest Services. East Lansing, Michigan.
- Rodriguez-Saona, C. 2004. Scaling-up the consequences of induced plant responses: Effects of multiple herbivory and plant neighborhood. Michigan State University. East Lansing, Michigan.
- Rodriguez-Saona, C. 2004. Herbivore-induced plant volatiles: Specificity of response and implications. Western Illinois University. Macomb, Illinois.
- Rodriguez-Saona, C. 2004. From chemicals within plants to complex species interactions: Effects of plant compounds on herbivores and their natural enemies. Tennessee State University, Nashville, Tennessee.
- Rodriguez-Saona, C. 2004. Effects of plants on herbivores and their natural enemies: Integrating the complexity of a real agricultural setting. Texas A&M Research Station, Amarillo, Texas.
- Rodriguez-Saona, C., S. Crafts-Brandner, L. Williams III, and P. Paré. 2003. Salivary gland extracts of the piercing-sucking *Lygus hesperus* induce volatile emissions in plants. In Symposium "Insect Saliva: An integrative approach". ESA Annual Meeting. Cincinnati, Ohio.

#### PRESENTATIONS AT PROFESSIONAL MEETINGS (SINCE 2006)

- Salamanca, J. and **Rodriguez-Saona, C**. 2019. Herbivore-induced plant volatiles to attract natural enemies in agroecosystems: Are 2 better than 1? 35<sup>th</sup> Annual Meeting of the International Society of Chemical Ecology. Atlanta, Georgia.
- Urbaneja-Bernat, P. and **Rodriguez-Saona, C**. 2019. Wild blueberries are more attractive than cultivated blueberries to the invasive vinegar fly *Drosophila suzukii*. 35<sup>th</sup> Annual Meeting of the International Society of Chemical Ecology. Atlanta, Georgia.
- Rodriguez-Saona, C. and Cloonan, K. 2018. Double-edged sword: Cultivated blueberries are more susceptible, but less attractive, to spotted wing drosophila than wild blueberries. 94th Cumberland–Shenandoah Fruit Workers Conference. Winchester, Virginia.
- Cloonan, K. and **Rodriguez-Saona, C**. 2018. Domestication reduces the attraction of a vinegar fly to fruit volatiles. Entomological Society of America Annual Meeting. Vancouver, Canada.
- Cloonan, K. and **Rodriguez-Saona, C**. 2018. Red-sticky traps: a more friendly method for capturing the spotted wing drosophila. Entomological Society of America Annual Meeting. Vancouver, Canada.
- Pradit, N. and **Rodriguez-Saona, C**. 2018. Disease infection benefits non-vector phytophagous insects of cranberries. Entomological Society of America Annual Meeting. Vancouver, Canada.
- Salamanca, J., Garzón-Tovar, **Rodriguez-Saona, C.**, and Mendoza, C. 2018. Combining herbivoreinduced plant volatiles to attract natural enemies in coffee crops in Colombia. Entomological Society of America Annual Meeting. Vancouver, Canada.
- Leskey, T.C., Shapiro-Ilan, D., Cullum, J., Pinero, J., Nielsen, A., and **Rodriguez-Saona, C**. 2018. A multi-life stage management strategy for the pervasive tree fruit pest, the plum curculio, *Conotrachelus nenuphar* (Herbst), in apple orchards. Entomological Society of America Annual Meeting. Vancouver, Canada.
- Urrutia, W., **Rodriguez-Saona, C.**, Klick, J., Seagraves, M., et al. 2018. SPLAT SWD: a semiochemical attract and kill formulation for spotted-wing drosophila, *Drosophila suzukii*. Entomological Society of America Annual Meeting. Vancouver, Canada.
- Cloonan, K. and **Rodriguez-Saona**, **C**. 2018. Testing novel attractants for *Drosophila suzukii*. 34<sup>th</sup> Annual Meeting of the International Society of Chemical Ecology. Budapest, Hungary.
- Pradit, N. and **Rodriguez-Saona, C**. 2018. Phytoplasma infection in cranberries benefits non-vector phytophagous insects. 34<sup>th</sup> Annual Meeting of the International Society of Chemical Ecology. Budapest, Hungary.
- Isaacs, R., Vincent, C., and **Rodriguez-Saona, C**. 2018. Blueberry insect pest management: Historical trends and future challenges. North American Blueberry Research and Extension Workers Conference. Orono, Maine.
- Garzón-Tovar, V., Jiménez, G., Mendoza, C., **Rodriguez-Saona, C.**, and Salamanca, J. 2018. Caracterización de enemigos naturales atraídos por el salicilato de metilo y benzaldehído en cultivos de café. Sociedad Colombiana de Entomología (SOCOLEN). Cali, Colombia.
- Silva, R., Seagraves, M., Klick, J., Rodriguez-Saona, C., Holdcraft, R., Urrutia, W., Bernardi, C., Mafra-Neto, A., and Saroli, J. 2017. SPLAT SWD: A semiochemical attract and kill formulation for spotted-wing drosophila, *Drosophila suzukii*. Entomological Society of America Annual Meeting. Denver, Colorado.
- Pradit, N. and **Rodriguez-Saona, C**. 2017. Plant-mediated phytoplasma-vector interaction in American cranberry. Entomological Society of America Annual Meeting. Denver, Colorado.
- Holdcraft, R., **Rodriguez-Saona, C.**, Mafra-Neto, A., and Stelinski, L. 2017. Analyzing oriental beetle behavior in proximity to pheromone point sources in novel attract-&-kill scenario. Entomological Society of America Annual Meeting. Denver, Colorado.
- Stratton, Ch., **Rodriguez-Saona, C.**, Shelton, T., and Chen, Y. 2017. Repelling *Contarinia nasturtii* (Diptera: Cecidomyiidae), a specialist pest of brassica crops, using non-host essential oils. Entomological Society of America Annual Meeting. Denver, Colorado.
- Salamanca, J., Souza, B., Lundgren, J., and **Rodriguez-Saona, C**. 2017. Electrophysiological and behavioral response of *Chrysoperla rufilabris* (Neuroptera: Chrysopidae) to methyl salicylate. Entomological Society of America Annual Meeting. Denver, Colorado.
- Silva, D., Kyryczenko-Roth, V, Alborn, H., and **Rodriguez-Saona, C**. 2017. Comparison of trap types, colors, and placement for capturing cranberry weevil (Coleoptera: Curculionidae) adults in highbush blueberries. Entomological Society of America Annual Meeting. Denver, Colorado.
- Jaffe, B., Bal, H.K., Grant, J., Grieshop, M., Lee, J., Liburd, O., McDougal, E., Rodriguez-Saona, C., Rhodes, E., Sial, A., Zhang, A., and Guédot, Ch. 2017. Multistate comparison of attractants, and the impact of background volatiles on trapping Drosophila suzukii (Diptera: Drosophilidae) in

raspberry and blueberry. Entomological Society of America Annual Meeting. Denver, Colorado.

- Rodriguez-Saona C., Kyryczenko-Roth, V., and Holdcraft, R. 2017. Cranberry toad-bugs: what are they? North American Cranberry Research and Extension Workers Conference. Plymouth, Massachusetts.
- Holdcraft, R. and **C. Rodriguez-Saona**. 2017. Female autodetection of pheromones: what it means and why it matters. The 88<sup>th</sup> Annual Meeting of the Eastern Branch Entomological Society of America. Newport, Rhode Island. (WINNER: 2<sup>nd</sup> place student oral competition).
- Benevenuto, R.F., Seldal, T., Hegland, S.J., Moe, S., Rydgren, K. and C. Rodriguez-Saona. 2017. Impacts of climate change on plant defense responses and plant-animal interactions. The 88<sup>th</sup> Annual Meeting of the Eastern Branch Entomological Society of America. Newport, Rhode Island.
- Rodriguez-Saona, C., Giusti, M., Sanchez, F., Zhou, Y., and Benrey B. 2017. The effects of domestication of blueberries on a frugivorous insect pest. Gordon Conference, Plant-Herbivore Interaction. Ventura, California.
- Salamanca, J., **C. Rodriguez-Saona**, and B. Souza. 2016. Manipulation of natural enemy behavior to enhance their ecosystem services in agricultural crops. XXV International Congress of Entomology. Orlando, Florida, USA.
- Stratton, C., **C. Rodriguez-Saona**, E. Hodgdon, and Y. Chen. 2016. Repellency of phylogenetically diverse plant odors to *Contarinia nasturtii* (Diptera: Cecidomyiidae). XXV International Congress of Entomology. Orlando, Florida, USA.
- de Lange, E., V. Kyryczenko-Roth, J. Johnson-Cicalese, J. Davenport, N. Vorsa, and **C. Rodriguez-Saona**. 2016. Beating the bugs in the cranberry bogs nutrients influence plant resistance. XXV International Congress of Entomology. Orlando, Florida, USA.
- Fraga, D., C. Rodriguez-Saona, A. Busoli, O. Aguirre-Gil, and L. Souza. 2016. Population dynamics, vertical distribution, and natural parasitism of eggs of *Chrysodeixis includes* by *Trichogramma* spp. in soybean. XXV International Congress of Entomology. Orlando, Florida, USA. (WINNER: 1<sup>st</sup> place student oral competition).
- Blaauw, B., **C. Rodriguez-Saona**, G. C. Hamilton, and A. Nielsen. 2016. When stink bugs react: Host stimuli and the Brown marmorated stink bug. XXV International Congress of Entomology. Orlando, Florida, USA.
- Holdcraft, R. and **C. Rodriguez-Saona**. 2016. Evaluating the behavior of oriental beetle (*Anomala orientalis*) in proximity to pheromone point sources used in mating disruption and attract-and-kill. XXV International Congress of Entomology. Orlando, Florida, USA.
- Holdcraft, R. and **C. Rodriguez-Saona**. 2015. A novel attract and kill technology for oriental beetle, *Anomala orientalis*, control in blueberries. The 63<sup>rd</sup> Annual Meeting of the Entomological Society of America. Minneapolis, Minnesota. (WINNER: 2<sup>nd</sup> place student oral competition).
- Salamanca, J., **C. Rodriguez-Saona**, and B. Souza. 2015. Helping our partners: Herbivore-induced plant volatiles increase natural enemy attraction and function in an agro-ecosystem. The 63<sup>rd</sup> Annual Meeting of the Entomological Society of America. Minneapolis, Minnesota.
- Fraga, D.F., **C. Rodriguez-Saona**, G.C. Hamilton, A. Nielsen, and A.C. Busoli. 2015. Stink lover: A predator uses common stink bug volatile to find an invasive host pest. The 63<sup>rd</sup> Annual Meeting of the Entomological Society of America. Minneapolis, Minnesota.
- Hahn, N., C. Rodriguez-Saona, and G.C. Hamilton. 2015. Utilizing the power of the masses to examine invasive insect migration. The 63<sup>rd</sup> Annual Meeting of the Entomological Society of America. Minneapolis, Minnesota.
- Fraga, D.F., **C. Rodriguez-Saona**, G.C. Hamilton, A. Nielsen, and A.C. Busoli. 2015. Tridecane, a Brown marmorated stink bug volatile attracts and arrests Orius spp. The 63<sup>rd</sup> Annual Meeting of the Entomological Society of America. Minneapolis, Minnesota.
- Blaauw, B., C. Mathews, **C. Rodriguez-Saona**, and A. Nielsen. 2015. Making scents of brown marmorated stink bug host selection. The 63<sup>rd</sup> Annual Meeting of the Entomological Society of America. Minneapolis, Minnesota.
- Hahn, N., **C. Rodriguez-Saona**, and G.C. Hamilton. 2015. Making sense of the distribution of *Halyomorpha halys* populations on fine and broad scales. The 63<sup>rd</sup> Annual Meeting of the Entomological Society of America. Minneapolis, Minnesota.
- Stratton, C., A.M. Shelton, C. Rodriguez-Saona, E. de Lange, and Y. Chen. 2015. Can phylogenetic distance of plant essential oils influence repellency to the specialist swede midge, *Contarinia nasturtii* (Diptera: Cecidomyiidae). The 63<sup>rd</sup> Annual Meeting of the Entomological Society of America. Minneapolis, Minnesota.

- de Lange, E., J. Polashock, N. Vorsa, and **C. Rodriguez-Saona**. 2015. Beating the bugs in the cranberry bogs: Induced resistance in wild and cultivated cranberry. The 63<sup>rd</sup> Annual Meeting of the Entomological Society of America. Minneapolis, Minnesota.
- Salamanca, J., B. Souza, and **C. Rodriguez-Saona**. 2015. Testing herbivore-induced plant volatiles for natural enemy conservation in agricultural systems. International Society of Chemical Ecology (ISCE) meeting. Stockholm, Sweden.
- Salamanca, J., B. Souza, and **C. Rodriguez-Saona**. 2015. Can herbivore-induced plant volatiles enhance biological control services in agroecosystems?. 86<sup>th</sup> Annual Meeting of the Eastern Branch of the Entomological Society of America. Rehoboth beach, Delaware. (WINNER: 1<sup>st</sup> place student poster competition).
- Hahn, N., C. Rodriguez-Saona, and G. C. Hamilton. 2015. Using a spatially autoregressive model to identify factors influencing clustering of *Halyomorpha halys*. 86<sup>th</sup> Annual Meeting of the Eastern Branch of the Entomological Society of America. Rehoboth beach, Delaware.
- Strom, M., and **C. Rodriguez-Saona**. 2014. Comparing host-plant resistance to herbivory between domesticated and wild highbush blueberry populations in southern New Jersey. The 62nd Annual Meeting of the Entomological Society of America. Portland, Oregon.
- Salamanca, J., M. Pareja, **C. Rodriguez-Saona**, A.L. Resende, and B. Souza. 2014. Behavioral responses of *Chrysoperla externa* (Neuroptera: Chrysopidae) in a rose-aphid-coriander complex interaction. The 62nd Annual Meeting of the Entomological Society of America. Portland, Oregon.
- Fraga, D.F., C. Rodriguez-Saona, G.C. Hamilton, A.L. Nielsen, and A.C. Busoli. 2014. The role of volatiles from brown marmorated stink bug, *Halyomorpha halys*, on host location and egg predation by minute pirate bug, *Orius insidiosus*. The 62nd Annual Meeting of the Entomological Society of America. Portland, Oregon.
- Holdcraft, R., **C. Rodriguez-Saona**, A. Mafra-Neto, L. Stelinski, and D. Polk. 2014. Evaluation of a novel attract-&-kill technology for control of oriental beetle in blueberries. The 62nd Annual Meeting of the Entomological Society of America. Portland, Oregon.
- De Lange, E., J. Polashock, N. Vorsa, and **C. Rodriguez-Saona**. 2014. Differential induction of insect defenses in seven cranberry varieties. The 62nd Annual Meeting of the Entomological Society of America. Portland, Oregon.
- Rodriguez-Saona, C., T.C. Leskey, and A.L. Nielsen. 2014. Testing the "trap-bush" concept to manage plum curculio adults in blueberries. The 62nd Annual Meeting of the Entomological Society of America. Portland, Oregon.
- McArt, S., **C. Rodriguez-Saona**, J-P. Salminen, and L. Adler 2014. Chemical ecology of a pollinatorvectored plant pathogen. 99<sup>th</sup> Ecological Society of America Annual Meeting. Sacramento, California.
- Rodriguez-Saona C. 2014. Chemical ecology of a pollinator-vectored plant pathogen. International Society of Chemical Ecology. Urbana-Champaign, Illinois.
- Rodriguez-Saona C. 2014. Attraction of spotted wing drosophila to fruit volatiles. North American Blueberry Research and Extension Workers Conference. Atlantic City, New Jersey.
- Rodriguez-Saona C. 2014. Injury diagnostics for small fruit. Brown Marmorated Stink Bug Working Group Meeting. Georgetown, Delaware.
- Kostromytska, O., Koppenhöfer, A., and **Rodriguez-Saona, C.** 2014. Bentgrasses (*Agrostis* spp.) resistance to annual bluegrass weevils, *Listronotus macullicolis*, and its mechanisms. 85<sup>th</sup> Annual Meeting of the Eastern Branch of the Entomological Society of America. Williamsburg, Virginia.
- Tewari, S., D. Polk, T.C. Leskey, A. Nielsen, and **C. Rodriguez-Saona**. 2013. Seasonal and spatial dynamics of plum curculio adults (Coleoptera: Curculionidae) in highbush blueberries. The 61<sup>st</sup> Annual Meeting of the Entomological Society of America. Austin, Texas.
- Rivera, M.J., A.M. Koppenhöfer, and **C. Rodriguez-Saona**. 2013. Assessing the entomopathogenic nematode community associated with highbush blueberry (*Vaccinium corymbosum*) in both agroecosystem and natural settings. The 61<sup>st</sup> Annual Meeting of the Entomological Society of America. Austin, Texas.
- Hahn, N.,**C. Rodriguez-Saona**, and G.C. Hamilton. 2013. Factors affecting spatial patterns of brown marmorated stink bug, *Halyomorpha halys*, in peach orchard. The 61<sup>st</sup> Annual Meeting of the Entomological Society of America. Austin, Texas.
- Strom, M., M.J. Rivera,, and **C. Rodriguez-Saona**. 2013. Domestication of highbush blueberry, *Vaccinium corymbosum*, affects community composition. The 61<sup>st</sup> Annual Meeting of the Entomological Society of America. Austin, Texas.

- Mafra-Neto, A., L. Stoltman, R. Borges, L. Mafra, C. Bernardi, K. Mafra-Spencer, M. Mafra-Spencer, C. Rodriguez-Saona, and R.I. Vargas. 2013. Invasive species management with SPLAT semiochemical Attract&Kill formulations: A moth, a beetle, and a fly. The 61<sup>st</sup> Annual Meeting of the Entomological Society of America. Austin, Texas.
- Kostromytska, O., Koppenhöfer, A., and **Rodriguez-Saona, C.** 2013. Host plant resistance and tolerance of bentgrass species and cultivars (*Agrostis* spp.) to annual bluegrass weevils, *Listronotus macullicolis* Dietz. The 61<sup>st</sup> Annual Meeting of the Entomological Society of America. Austin, Texas..
- Rodriguez-Saona C., Vorsa, N., Johnson-Cicalese, J., and J. Davenport. 2013. Effects of nutrient and genotype on cranberry resistance to insect herbivores. North American Cranberry Research and Extension Workers Conference. Québec, Canada.
- Rodriguez-Saona C., Polashock, J., and E. Malo. 2013. Jasmonate-mediated induced volatiles in the American cranberry. North American Cranberry Research and Extension Workers Conference. Québec, Canada.
- Hahn, N., G.C. Hamilton, and C. Rodriguez-Saona, G.C. Hamilton, and A. Kaufman. 2013. Spatial distribution of brown marmorated stink bug (*Halyomorpha halys*) in peach orchards. 84<sup>th</sup> Annual Meeting of the Eastern Branch of the Entomological Society of America. Lancaster, Pennsylvania.
- Rivera M., **C. Rodriguez-Saona**, and A. Koppenhöfer. 2012. Does plant domestication change the dynamics of belowground herbivore-natural enemy interactions? 60<sup>th</sup> Annual Meeting of the Entomological Society of America. Knoxville, Tennessee.
- Harrison, K., Z. Szendrei, C. Rodriguez-Saona, and R. Medina. 2012. Testing for genetic differentiation among populations of the North American native cranberry fruitworm, *Acrobasis vaccinii* (Lepidoptera: Pyralidae), from blueberries and cranberries. 60<sup>th</sup> Annual Meeting of the Entomological Society of America. Knoxville, Tennessee.
- Hahn, N., G.C. Hamilton, and C. Rodriguez-Saona. 2012. Landscape effects on spatial distribution of brown marmorated stink bug (*Halyomorpha halys*) in peach orchards.60<sup>th</sup> Annual Meeting of the Entomological Society of America. Knoxville, Tennessee.
- Kostromytska, O., **C. Rodriguez-Saona**, and A. Koppenhöfer. 2012. Role of volatiles in host recognition and preference of *Listronotus maculicollis* (Coleoptera: Curculionidae).60<sup>th</sup> Annual Meeting of the Entomological Society of America. Knoxville, Tennessee.
- Kostromytska, O., **C. Rodriguez-Saona**, and A. Koppenhöfer. 2012. Evaluation of bentgrasses species and cultivars for resistance/tolerance to annual bluegrass weevil, *Listronotus maculicollis* (Coleoptera: Curculionidae).60<sup>th</sup> Annual Meeting of the Entomological Society of America. Knoxville, Tennessee.
- Roubus, C.R. R. Isaacs, **C. Rodriguez-Saona**, K.S. Mason, and D. Polk. 2012. Relative toxicity and residual activity of insecticides used in blueberry pest management: Mortality of natural enemies in laboratory bioassays.60<sup>th</sup> Annual Meeting of the Entomological Society of America. Knoxville, Tennessee.
- Burrack, H., J. Price, R. Isaacs, D. Horton, **C. Rodriguez-Saona**, J. Powell Smith, and G. Loeb. 2012. *Drosophila suzukii* host selection and utilization in eastern United States agroecosystems. XXIV International Congress of Entomology. Daegu, South Korea.
- Polk, D. and **C. Rodriguez-Saona.** 2012. Monitoring and distribution of SWD in NJ in 2011. 83<sup>rd</sup> Annual Meeting of the Eastern Branch of the Entomological Society of America. Hartford, Connecticut.
- **Rodriguez-Saona, C.** and D. Polk. 2012. Impact of BMSSB in Fruit Crops in New Jersey. 83<sup>rd</sup> Annual Meeting of the Eastern Branch of the Entomological Society of America. Hartford, Connecticut.
- Rodriguez-Saona, C., L. Parra, A. Quiroz, and R. Isaacs. 2012. Variation in blueberry floral volatiles emissions and its significance for bee attraction. Gordon Conference, Plant Volatiles. Ventura, California.
- Rodriguez-Saona, C., I. Kaplan, and L. Williams. 2011. Response of predaceous arthropods to methyl salicylate in agricultural fields. 59<sup>th</sup> Annual Meeting of the Entomological Society of America. Reno, Nevada.
- Williams, L., **C. Rodriguez-Saona**, S. C. Castle del Conte. 2011. Host plant volatile effects on arthropods in cotton fields. 59<sup>th</sup> Annual Meeting of the Entomological Society of America. Reno, Nevada.
- Pfeiffer, D. G., **C. Rodriguez-Saona**, and J. Fiola. 2011. Potential impacts on grapes and small fruits in the mid-Atlantic USA. 59<sup>th</sup> Annual Meeting of the Entomological Society of America. Reno, Nevada.
- Kostromytska, O., C. Rodriguez-Saona, and A. Koppenhöfer. 2011. Annual bluegrass weevil IPM: plant

resistance/tolerance and semiochemicals for monitoring and management. 59<sup>th</sup> Annual Meeting of the Entomological Society of America. Reno, Nevada.

- Isaacs, R., Parra, L., Quiroz, A., and **Rodriguez-Saona, C**. 2011. Bees, bouquets and blueberries: variation in flower volatiles and responses of pollinators. ENTO '11, Royal Entomological Society International Symposium and National Science Meeting, University of Greenwich, Chatham, Kent.
- Rodriguez-Saona C., Kaplan, I., and L. Williams. 2011. Field responses of predaceous arthropods to methyl salicylate. North American Cranberry Research and Extension Workers Conference. Wisconsin Dells, Wisconsin.
- **Rodriguez-Saona, C.**, N. Vorsa, J. Johnson-Cicalese, and J. Davenport. 2011. Interactive effects of nutrient and genotype on cranberry resistance to herbivores. 82<sup>nd</sup> Annual Meeting of the Eastern Branch of the Entomological Society of America. Harrisburg, Pennsylvania.
- Zaman, F.U., **C. Rodriguez-Saona**, P. Oudemans, and D. Polk. 2010. Where do the flies come from? An analysis of blueberry maggot fly distribution in New Jersey blueberry farms. 58<sup>th</sup> Annual Meeting of the Entomological Society of America. San Diego, California.
- Polk, D., F.U. Zaman, C. Rodriguez-Saona, P. Oudemans, and M. Hughes. 2010. The impact of spatial IPM on pesticide inputs in New Jersey blueberry production. 58<sup>th</sup> Annual Meeting of the Entomological Society of America. San Diego, California.
- McGraw, B., **C. Rodriguez-Saona**, R. Holdcraft, and A. Koppenhöfer. 2010. Behavioral and electrophysiological responses of the annual bluegrass weevil to turfgrass volatiles. 58<sup>th</sup> Annual Meeting of the Entomological Society of America. San Diego, California.
- **Rodriguez-Saona C.** 2010. The entomology blueberry IPM research and extension program at Rutgers University. North American Blueberry Research and Extension Workers Conference. Kalamazoo, Michigan.
- **Rodriguez-Saona, C.**, and D. Polk. 2010. Competitive attraction is a mating disruption mechanism in oriental beetle. 81<sup>st</sup> Annual Meeting of the Eastern Branch of the Entomological Society of America. Annapolis, Maryland.
- Rodriguez-Saona, C., C. J. Frost, N. Vorsa, J. Jonson-Cicalese, and Z. Szendrei. 2009. Genotypic variation in resistance to gypsy moth in cranberries. 57<sup>th</sup> Annual Meeting of the Entomological Society of America. Indianapolis, Indiana.
- Zaman, F.U., **C. Rodriguez-Saona**, D. Polk, and P. Oudemans. 2009. A GIS-based insect pest management program for highbush blueberries. 57<sup>th</sup> Annual Meeting of the Entomological Society of America. Indianapolis, Indiana.
- Polk, D., **C. Rodriguez-Saona**, F. Zaman, and P. Oudemans. 2009. The effect of a spatially-based blueberry IPM program on grower pesticide use. 57<sup>th</sup> Annual Meeting of the Entomological Society of America. Indianapolis, Indiana.
- Rodriguez-Saona, C., and N. Vorsa. 2009. Genotypic variation for resistance to gypsy moth in cranberries. 80<sup>th</sup> Annual Meeting of the Eastern Branch of the Entomological Society of America. Harrisburg, Pennsylvania.
- Polk, D., C. Rodriguez-Saona, and P. Oudemans. 2009. Distribution of blueberry maggot populations on commercial farms. 80<sup>th</sup> Annual Meeting of the Eastern Branch of the Entomological Society of America. Harrisburg, Pennsylvania.
- Drummond, F., J. Collins, and **C. Rodriguez-Saona**. 2009. Blueberry fruit flies in tree tops? 80<sup>th</sup> Annual Meeting of the Eastern Branch of the Entomological Society of America. Harrisburg, Pennsylvania.
- Rodriguez-Saona, C., R. Isaacs, V. Kyryczenko-Roth, and J. Tuell. 2008. Blueberry flower volatiles: Composition, diurnal patter of emissions, and effects of bees. ESA Annual Meeting. Reno, Nevada.
- Harrison, K., R. Medina, and **C. Rodriguez-Saona**. 2008. Detection of host-associated differentiation of *Acrobasis vaccinii* in a native fruit system. ESA Annual Meeting. Reno, Nevada.
- Barry, J., C. Rodriguez-Saona, D. Polk, and A. Zhang. 2008. Seasonal abundance and parasitism of Caloptilia porphyretica Braun (Lepidoptera: Gracillariidae), a leafminer on highbush blueberry. ESA Annual Meeting. Reno, Nevada.
- Szendrei, Z., E. Malo, and **C. Rodriguez-Saona**. 2008. Identification of volatile attractants for the cranberry weevil, *Anthonomus musculus* Say (Coleoptera: Curculionidae). ESA Annual Meeting. Reno, Nevada.
- Szendrei, Z., E. Malo, and **C. Rodriguez-Saona**. 2008. Identification of host-plant attractants for the cranberry weevil, *Anthonomus musculus* Say (Coleoptera: Curculionidae). International Society of

Chemical Ecology. 25<sup>th</sup> ISCE meeting, State College, Pennsylvania.

- Polk, D. **C. Rodriguez-Saona**, and P. Oudemans. 2008. Within farm use of GIS technology for spatial management of blueberry insects: the case for blueberry maggot. XXIII International Congress of Entomology. Durban, South Africa.
- Szendrei, Z., E. Malo, and **C. Rodriguez-Saona**. 2008. Identification of host-plant attractants for the cranberry weevil, *Anthonomus musculus* Say (Coleoptera: Curculionidae). XXIII International Congress of Entomology. Durban, South Africa.
- Rodriguez-Saona, C. 2007. Herbivore- and jasmonate-induced responses in *Vaccinium*: IPM implications. ESA Annual Meeting. San Diego, California.
- Polk, D., **C. Rodriguez-Saona**, and P. Oudemans. 2007. Spatially based pest management of blueberry maggot (*Rhagoletis mendax*) in highbush blueberry. ESA Annual Meeting. San Diego, California.
- **Rodriguez-Saona, C.**, and L. Rodriguez-Saona. 2007. Smelling the danger within: The role of induced volatiles in branch-branch communication. Gordon Conference Floral & Vegetative Volatiles. Les Diablerets, Switzerland.
- Williams, L., III, Castle, S. C., MontBlanc, E. M., Quinlan, R. M., Rodriguez-Saona, C., and Zhu, S. 2007. Synthetic herbivore-induced plant volatiles affect arthropod behavior in cotton. 91<sup>st</sup> Annual Meeting of the Pacific Branch of the Entomological Society of America. Portland, Oregon.
- Polk, D., **C. Rodriguez-Saona**, and P. Oudemans. 2006. Insecticide reduction through spatially referenced management of the blueberry maggot, *Rhagoletis mendax*, in highbush blueberry. ESA Annual Meeting. Indianapolis, Indiana.
- Musser, R., **C. Rodriguez-Saona**, S. Williams, H. Vogel, and J. Thaler. 2006. Aphid feeding alters expression of resistant genes induced by caterpillars in tomato. ESA Annual Meeting. Indianapolis, Indiana.
- Rodriguez-Saona, C., D. Polk, R. Holdcraft, and J.D. Barry. 2006. Optimization of pheromone dosage for Oriental beetle mating disruption in commercial blueberries. ESA Annual Meeting. Indianapolis, Indiana.
- **Rodriguez-Saona C.** and Polk, D. 2006. Development and implementation of reduced-risk pest management programs for blueberries in New Jersey. North American Blueberry Research and Extension Workers Conference. Tifton, Georgia.
- Blackmer, J.L., J.A. Byers, and **C. Rodriguez-Saona**. 2006. Visual and volatile preferences of the generalist herbivore, *Lygus hesperus* (Heteroptera: Miridae). Beltwide Cotton Conference. San Antonio, Texas.

#### SELECTED EXTENSION PRESENTATIONS

- Rodriguez-Saona, C. 2019. Using red sticky traps for spotted wing drosophila. Atlantic Coast Agricultural Convention and Trade Show. Atlantic City, New Jersey.
- Rodriguez-Saona, C. 2019. Efficacy of traps for monitoring spotted wing drosophila. Atlantic Coast Agricultural Convention and Trade Show. Atlantic City, New Jersey.
- **Rodriguez-Saona, C.** 2019. Trapping for SWD vs. infestation in blueberries. Mid-Atlantic Fruit & Vegetable Convention. Hershey, Pennsylvania.
- Rodriguez-Saona, C., R. Holdcraft, and V. Kyryczenko-Roth. 2019. Management of blunt-nosed leafhoppers in cranberries: Lessons learned from insecticide trials. American Cranberry Growers Association Annual Winter Meeting. Bordentown, New Jersey.
- Rodriguez-Saona, C. and K. Cloonan. 2018. Advances in spotted wing drosophila research. Blueberry Open House. Hammonton, New Jersey.
- Rodriguez-Saona, C. 2018. Progress towards spotted wing drosophila management in blueberries. Atlantic Coast Agricultural Convention and Trade Show. Atlantic City, New Jersey.
- Rodriguez-Saona, C., R. Holdcraft, V. Kyryczenko-Roth, and D. Schiffhauer. 2018. Management of cranberry insect pests: leafhoppers and toadbugs. American Cranberry Growers Association Annual Winter Meeting. Bordentown, New Jersey.
- Rodriguez-Saona, C. 2017. Insecticide efficacy trials and recommendations for 2017. Blueberry Open House. Hammonton, New Jersey.
- **Rodriguez-Saona, C.** 2017. Spotted wing drosophila: A research update. Atlantic Coast Agricultural Convention and Trade Show. Atlantic City, New Jersey.
- Rodriguez-Saona, C., R. Holdcraft, V. Kyryczenko-Roth, and D. Schiffhauer. 2017. What do we know and don't know about leafhoppers and toadbugs? American Cranberry Growers Association Annual Winter Meeting. Bordentown, New Jersey.

Rodriguez-Saona, C. 2016. Integrating insect pest management post-SWD invasion. Blueberry Open House. Hammonton, New Jersey.

- Rodriguez-Saona, C. 2016. An update on spotted wing drosophila management. Atlantic Coast Agricultural Convention and Trade Show. Atlantic City, New Jersey.
- Rodriguez-Saona, C. 2016. What we know and what we don't know about spotted wing drosophila. New Jersey Agricultural Convention and Trade Show. Atlantic City, New Jersey.
- Rodriguez-Saona, C., R. Holdcraft, V. Kyryczenko-Roth, and D. Schiffhauer. 2016. Management of cranberry insect pests: Leps and toadbugs. American Cranberry Growers Association Annual Winter Meeting. Bordentown, New Jersey.
- Rodriguez-Saona, C. 2015. The cranberry toadbug, 100 years later. Life history, scouting needs and control options. Ocean Spray. Chatsworth, New Jersey.
- Holdcraft, R., and **C. Rodriguez-Saona**. 2015. Progress towards managing spotted wing drosophila. Blueberry Open House. Hammonton, New Jersey.
- Kyryczenko-Roth, V., R. Holdcraft, and **C. Rodriguez-Saona.** 2015. Results from 2014 insecticide trials. American Cranberry Growers Association Annual Winter Meeting. Bordentown, New Jersey.
- de Lange, E., and **C. Rodriguez-Saona.** 2015. Exploring resistance against insect pests in cranberries. American Cranberry Growers Association Annual Winter Meeting. Bordentown, New Jersey.
- **Rodriguez-Saona, C.** 2014. Cranberry toad bug a "new" pest for NJ; Life history and control options. Ocean Spray Winter Workshop. Chatsworth, New Jersey.
- Rodriguez-Saona, C. 2014. New tools for managing major insect pests of blueberries. Blueberry Open House. Hammonton, New Jersey.
- Rodriguez-Saona, C., V. Kyryczenko-Roth, and R. Holdcraft. 2014. New tools to control insect pests of cranberries. American Cranberry Growers Association Annual Winter Meeting. Bordentown, New Jersey.
- Rodriguez-Saona, C. 2013. Ongoing research for managing spotted wing drosophila. Blueberry Open House. Hammonton, New Jersey.
- Rodriguez-Saona, C., V. Kyryczenko-Roth, and R. Holdcraft. 2013. Evaluation of new insecticides against lepidopteran pests. American Cranberry Growers Association Annual Winter Meeting. Bordentown, New Jersey.
- Rodriguez-Saona, C. 2013. Integrated management of major pests of blueberries. Mid-Atlantic Fruit & Vegetable Convention. Hershey, Pennsylvania.
- Rodriguez-Saona, C. 2013. Manejo integrado de las plagas principales del arándano. Mid-Atlantic Fruit & Vegetable Convention. Hershey, Pennsylvania.
- Rodriguez-Saona, C. 2012. Plum curculio update: results on new monitoring and management strategies. Atlantic Coast Agricultural Convention and Trade Show. Atlantic City, New Jersey.
- Rodriguez-Saona, C. 2012. Entomology Research in Cranberries: Fruitworms, Stink Bugs and more. 2012 American Cranberry Growers' Association Annual Winter Meeting. Bordentown, New Jersey.
- Rodriguez-Saona, C. 2011. New methods for cranberry weevil and plum curculio management in blueberries. Blueberry Open House. Hammonton, New Jersey.
- Rodriguez-Saona, C. 2010. New reduced-risk strategies for insect pest management in blueberries. Mid-Atlantic Fruit & Vegetable Convention. Hershey, Pennsylvania.
- Rodriguez-Saona, C. 2010. Current entomology research in cranberries. American Cranberry Growers Association. Bordentown, New Jersey.
- Rodriguez-Saona, C. 2010. Sexual distraction: a tactic for oriental beetle control. Vegetable Growers' Association of NJ Annual Meeting. Atlantic City, New Jersey.
- Rodriguez-Saona, C. 2009. Update on insect pest management for blueberries. Blueberry Open House. Hammonton, New Jersey.
- Rodriguez-Saona, C. 2009. Insect update and management. 2009 American Cranberry Growers' Association Annual Winter Meeting. Westhampton, New Jersey.
- Rodriguez-Saona, C. 2008. Ongoing battles with insect pests. Ocean Spray Winter Workshop. Chatsworth, New Jersey.
- Rodriguez-Saona, C. 2008. 2007 Insect pest seasonal occurrence in NJ cranberries and what to expect in 2008. 2008 American Cranberry Growers' Association Annual Winter Meeting. Bordentown, New Jersey.
- Rodriguez-Saona, C. 2007. Insect control in blueberries with attention to reduced-risk options. Blueberry Open House. Hammonton, New Jersey.

- Rodriguez-Saona, C. 2007. Update on cranberry insect pests and their management in New Jersey. 2007 American Cranberry Growers' Association Annual Winter Meeting. Bordentown, New Jersey.
- Rodriguez-Saona, C. 2007. Seasonal life-history and management strategies for blueberry gall midge and thrips in highbush blueberry. Vegetable Growers' Association of NJ Annual Meeting. Atlantic City, New Jersey.
- Rodriguez-Saona, C. 2006. New strategies for monitoring and management of insect pests in cranberries. 2006 American Cranberry Growers' Association Annual Summer Meeting. Chatsworth, New Jersey.
- Rodriguez-Saona, C. and Polk, D. 2006. Lessons learned from 3 years of reduced-risk programs in blueberries. Blueberry Open House. Hammonton, New Jersey.
- Rodriguez-Saona, C. 2006. Impact assessment of reduced-risk IPM strategies for cranberry insects in New Jersey. 2006 American Cranberry Growers' Association Annual Winter Meeting. Bordentown, New Jersey.
- Rodriguez-Saona, C. and Polk, D. 2006. Baits and natural enemies in a reduced-risk IPM program for blueberries. Vegetable Growers' Association of NJ Annual Meeting. Atlantic City, New Jersey.
- Rodriguez-Saona, C. 2005. Future directions towards a reduced-risk pest management program in cranberries. 2005 American Cranberry Growers' Association Annual Summer Meeting. Chatsworth, New Jersey.

#### POST-DOCS/VISITING SCHOLARS/STUDENT MENTORING (TOTAL = 65)

#### **POST-DOCTORAL RESEARCHERS TRAINED (TOTAL = 11)**

- Dr. Zsofia Szendrei (2007-2009)
- Dr. Faruque Zaman (2009-2011)
- Dr. Adam Wallner (2012)
- Dr. Joyce Parker (2012-2013)
- Dr. Sunil Tewari (2013-2014)
- Dr. Elvira de Lange (2013-2015)
- Dr. Johnattan Hernandez Cumplido (2016-2017)
- Dr. Ana Luiza Viana de Sousa (2017)
- Dr. Diego Silva (2017-2018)
- Dr. Kevin Cloonan (2017-2018)
- Dr. Pablo Urbaneja-Bernat (2019-present)

# GRADUATE STUDENT TRAINED (TOTAL = 25)

GRADUATE STUDENT ADVISOR

Current Robert Holdcraft (M.S. Entomology; Rutgers University)

Chelsea Abegg (Ph.D. Entomology, Rutgers University)

#### Completed (YEAR OF GRADUATION)

Diego Fraga (Ph.D. Entomology, Universidade Estadual Paulista (UNESP) Jaboticabal-SP (Brazil), co-advisor w/Dr. Antonio Busoli) (2016)

Jordano Salamanca Bastidas (Ph.D. Entomology, Federal Lavras University (Brazil), co-advisor w/Dr. Brigida Souza) (2016)

Matthew Strom (M.S. non-thesis, Ecology and Evolution, Rutgers University) (2017) Caryn Michel (M.S. non-thesis Entomology; Rutgers University) (2018) Nakorn Pradit (Ph.D. Entomology; Rutgers University) (2019)

#### COMMITTEE MEMBER

#### **Current**

Nicolas Avila (M.S. Entomology, Rutgers University) George Condon (Ph.D. Entomology; Rutgers University) Timothy Lampasona (Ph.D. Entomology, Rutgers University) James Occi (Ph.D. Entomology; Rutgers University)

Completed (YEAR OF GRADUATION)

Aabir Banerji (Ph.D. Ecology & Evolution; Rutgers University) (2011) Richard Hung (Ph.D. Plant Biology & Pathology; Rutgers University) (2013) John Abraham (Ph.D. Management of Mountain Environment-Specialization in Insect Chemical Ecology-Free University of Bolzano) (2014) Fave Benjamin (Ph.D. Ecology & Evolution; Rutgers University) (2015) Lauren Weidner (Ph.D. Entomology; Rutgers University) (2015) Elizabeth Davidson-Lowe (M.S. Entomology, Michigan State University) (2016) Amanda Purwar (Ph.D. Entomology; Rutgers University) (2016) Monique Rivera (Ph.D. Entomology; Rutgers University) (2016) Sahil Wadhwa (Ph.D. Biological Sciences; Rutgers University) (2017) Chen Zha (Ph.D. Entomology, Rutgers University) (2017) Ulianova Vidal Gomez (Ph.D. Entomology; Purdue University) (2017) Jeffrey Brown (Ph.D. Ecology and Evolution, Rutgers University) (2019) Rafael Fonseca Benevenuto (Ph.D. Ecology and Natural Resource Management, Norwegian University of Life Sciences, Norway) (2019) Sirley Palacios (Ph.D. Science-Biology; Universidad del Valle, Colombia) (2019)

UNDERGRADUATE STUDENT TRAINED (TOTAL = 18) UNDERGRADUATE STUDENT THESIS COMMITTEE Laurie Francoeur (Biology, Rutgers University, 2017)

**READER, HONORS THESIS, GEORGE COOK SCHOLARS PROGRAM** Richard Bennett (Biochemistry, Rutgers University, 2019)

#### **UNDERGRADUATE STUDENT INTERNS (2005-PRESENT)**

Heidi Sponsler (Stockton College, 2007) John Bolton (Rutgers University, 2008) Kendrick Brown (Rowan University, 2009) Jeff Antoniewicz (Rutgers University, 2009) Veronica Williamson (Rutgers University, 2010) Carly Chapel (Eckerd College, 2010) Tara Egan (Stockton College, 2011) Brian Tilton (Stockton College, 2012) Gabrielle Pintauro (Stockton College, 2014) Hylarie Boscan Ortiz (Rutgers University, 2015) Richard Bennett (Rutgers University, 2017) Alexander Bowers (Rutgers University, 2017) Courtney Mazzola (Rutgers University, 2017 & 2018)

# UNDERGRADUATE STUDENT SUPERVISOR (2001-2004)

Syed Habeeb (University of Toronto, Canada, 2003-2004) Sherosha Raj (University of Toronto, Canada, 2002-2003) Jennifer Chalmers (University of Toronto, Canada, 2001-2002)

#### VISITING STUDENTS, SABBATICAL, AND FULBRIGHT SCHOLARS HOSTED (TOTAL = 11)

- Dr. Edi Malo (Departamento de Entomología Tropical, El Colegio de la Frontera Sur (ECOSUR), Chiapas, México). 1-year sabbatical (2006).
- Dr. Chinnasamy Durairaj (Department of Agricultural Entomology, Tamil Nadu Agricultural University, Coimbatore, India). Fulbright scholar (2008).
- Dr. A. R. Prasad (Indian Institute of Chemical Technology Hyderabad, India). Visiting Scientist (June 2010).
- Dr. Gemma Albendín García (Centro IFAPA Las Torres-Tomejil, Sevilla, Spain). Visiting Scientist (July-August 2013).
- Manuel Alejandro Chacón (Universidad de La Frontera, Chile). PhD Student (March-August 2014).

Fernando Sánchez Pedraza (Universidad Autónoma Agraria Antonio Narro, Saltillo, Coahuila,

Mexico). Visiting Student (April-August 2015, May-September 2016, July-August 2018, June-August 2019).

- Andrea Carolina Wanumen Riaño (Universidad Politecnica de Madrid, Spain). PhD Student (May August 2015).
- Dagmara Gomes Ramalho (Departamento de Biologia, Universidade de São Paulo, Ribeirão Preto, Brazil). PhD Student (August-November 2016).
- Paolo Salazar (Universidade Estadual Paulista (UNESP) Jaboticabal-SP, Brazil). PhD Student (June-September 2017).
- Vanessa Garzón Tovar (Universidad Nacional Abierta y a Distancia UNAD, Bogotá, Colombia). Undergraduate Student (April-July 2019).
- Giovanna Jiménez (Universidad Nacional Abierta y a Distancia UNAD, Bogotá, Colombia). Undergraduate Student (April-July 2019).

## COURSES TAUGHT

INSECT BIOLOGY (ENTOMOLOGY DEPARTMENT). FALL 2015-2018. RUTGERS UNIVERSITY RESEARCH PROBLEMS IN ENTOMOLOGY (ENTOMOLOGY DEPARTMENT). SPRING 2015. RUTGERS UNIVERSITY

On "Plant-Insect Interactions"

SPECIAL TOPICS (ENTOMOLOGY DEPARTMENT). SPRING 2014, 2016, 2017. RUTGERS UNIVERSITY
 On "Plant-Insect Interactions"

SPECIAL TOPICS (ECOLOGY & EVOLUTION DEPARTMENT). SPRING 2008. RUTGERS UNIVERSITY
 On "Trait-mediated Indirect Effects in Plants".

- PROBLEMS IN ECOLOGY (ECOLOGY & EVOLUTION DEPARTMENT). SPRING 2007. RUTGERS UNIVERSITY
  On "Plant-provided Food for Insect Natural Enemies".
- ENTOMOLOGY SEMINAR. FALL 2007, FALL 2012, FALL 2016. RUTGERS UNIVERSITY

## INVITED LECTURES

**INSECT-PLANT INTERACTIONS. FALL 2017.** RUTGERS UNIVERSITY

- On "Multitrophic Interactions and Trophic Cascades" –2 Lectures. (Dr. Lena Brattsten, Course Instructor).
- On "Intraspecific Plant Communication". (Dr. Lena Brattsten, Course Instructor).

WORLD OF INSECTS. FALL 2016, 2017, 2018. RUTGERS UNIVERSITY

- On "Insect Chemical Communication". (Dr. Frank Carle, Course Instructor).
- INSECT STRUCTURE AND FUNCTION, PHYSIOLOGY. SPRING 2012, 2014, 2016, 2018. RUTGERS UNIVERSITY
- On "Insect Chemical Ecology, Laboratory". (Dr. Lena Brattsten, Course Instructor).

AGRICULTURAL ENTOMOLOGY AND PEST MANAGEMENT. SPRING 2006-2019. RUTGERS UNIVERSITY

- On "Blueberry Insect Pests and Control". (Dr. George Hamilton, Course Instructor).
- On "Cranberry Insect Pests and Control". (Dr. George Hamilton, Course Instructor).

INSECT ECOLOGY. SPRING 2014, 2016. RUTGERS UNIVERSITY

- On "Insect Chemical Ecology". (Dr. Anne Nielsen, Course Instructor).
- **INSECT ECOLOGY. FALL 2012.** RUTGERS UNIVERSITY
  - On "Pests and Biological Control". (Dr. Rachael Winfree, Course Instructor).
- **INSECT ECOLOGY. SPRING 2008. RUTGERS UNIVERSITY**

• On "Insect Chemical Ecology". (Dr. James Lashomb, Course Instructor).

- SPECIAL SEMINAR (ECOLOGY & EVOLUTION DEPARTMENT). FALL 2007-2008, 2012-2015. RUTGERS UNIVERSITY
  - On "Chemical Ecology of Multi-trophic Interactions" (2007-2008). (Dr. Peter Morin, Course Instructor).
  - On "Tri-trophic Interactions in Agricultural Systems" (2012-2014). (Dr. Julie Lockwood, Course Instructor).
  - On "Tri-trophic Interactions in Agricultural Systems" (2015). (Dr. Nina Fefferman, Course Instructor).

TRITROPHIC INTERACTIONS. Spring 2014. Michigan State University.

 On "Role of Herbivore-induced Plant Volatiles in Within Plant Signaling". (Dr. Zsofia Szendrei, Course Instructor).

BIOLOGICAL CONTROL. Spring 2005. Michigan State University.

 On "Interactions between Plants, Herbivores, and Natural Enemies of Herbivores". (Dr. Douglas Landis, Course Instructor).

**INSECT-PLANT INTERACTIONS.** Winter 2004. Western Illinois University.

• On "Effects of Plants on Herbivores and their Natural Enemies: Integrating Real-world Complexity". (Dr. Richard Musser, Course Instructor).

#### TEACHING ASSISTANT

**TEACHING ASSISTANT** for: Insect Behavior (Fall '96), Insect Ecology (Winter '97), Microtechniques in Insect Morphology (Winter '98). University of California, Riverside.

#### WORKSHOPS

WORKSHOP ON CHEMICAL ECOLOGY AND IPM: THEORY AND PRACTICE. February 2018. University of São Paulo, Ribeirão Preto, Brazil.

 Lectures on "Theory of Chemical Ecology", "Multitrophic Level Interactions", "Volatilemediated Communication in Plants", "Applied Research on Insect Chemical Ecology", "IPM: Theory", "Blueberry IPM", and "Cranberry IPM".

**WORKSHOP ON CHEMICAL ECOLOGY OF MULTITROPHIC INTERACTIONS.** Drs. M. Fernanda G.V. Peñaflor and Brigida Souza, Organizers. March 2016. University of Lavras, Lavras, Brazil.

• Lectures on "Tritrophic Level Interactions: Theory and Practice", "Volatile-mediated Communication in Plants", and "Applied Research on Insect Chemical Ecology".

**WORKSHOP ON BIOLOGICAL CONTROL.** Drs. M. S. Hoddle and D.H. Headrick, Organizers. July 1997. University of California, Riverside.

Lecture on "Biology, Ecology, Taxonomy, and Importance of Coccinellids".

#### EXTENSION TRAINING COURSES/WEBINARS TAUGHT

- 2016 Webinar panelist: Spotted wing drosophila: Current monitoring tools PROS and CONS. Sponsored by SENASA, Lima, Peru/NC State U.
- 2015 Webinar panelist: Spotted wing drosophila integrated pest management. Sponsored by Marrone Bio Innovations.
- 2014 Webinar panelist: Spotted wing drosophila research. Sponsored by the Canadian SWD working group.
- 2013 Webinar panelist: Spotted wing drosophila research. Sponsored by the Canadian SWD working group.
- 2013 Blueberry Growers School. Integrated Management of Major Pests of Blueberries. Sponsored by Penn State Extension and Penn State Department of Plant Sciences.
- 2011 Blueberry IPM Training. Location: Adams County Winery, Adams County, Pennsylvania. Course offered with Pennsylvania State University, Department of Horticulture.
- 2010 Blueberry IPM Training. Location: Dymonds Farm and Farm Market, Luzerne County, Pennsylvania. Course offered with Pennsylvania State University, Department of Horticulture.
- 2009 Blueberry IPM Workshop. Location: PE Marucci Blueberry/Cranberry Center, Chatsworth, New Jersey.
- 2009 Blueberry IPM Training. Location: Perry Acres, Berks County, Pennsylvania. Course offered with Pennsylvania State University, Department of Horticulture.
- 2008 Blueberry IPM Scout Training. Location: Frog Rock Inn, Hammonton, New Jersey. Course offered with Michigan State University.
- 2007 Canadian Export Training for Blueberry Growers. Location: PE Marucci Blueberry/Cranberry Center. Chatsworth, New Jersey. Course offered with the New Jersey Department of Agriculture.

## PATENTS

• UC Patent # 6133313. 2000. "Insecticidal Avocadofurans and Triolein". Inventors: Drs. Trumble, Rodriguez-Saona, Thompson, Platt, and Millar.

#### HONORS AND AWARDS

- 2017 Recipient of the Educational Institution and Federal Laboratory Partnership Award for "Specialty Crop Initiative Coordinated Agricultural Project: The BMSB". Federal Laboratory Consortium for Technology Transfer Mid-Atlantic Region.
- 2015 Recipient of the International IPM Award for Recognition. StopBMSB Program. 8<sup>th</sup> International IPM Symposium. Salt Lake City, Utah.
- 2011 Recipient of the Distinguished Service to New Jersey Agriculture Award. Team Award (Rutgers

Fruit IPM Program). New Jersey Farm Bureau.

- 2009 Recipient of the Merle V. Adams Award for Outstanding Achievement. Rutgers Cooperative Extension. 2010.
- 1999 Pacific Branch ESA Winner of the John Henry Comstock Award. 83rd Annual Meeting Pacific Branch of the ESA. Eugene, Oregon.
- 1998 First Place Ph.D. Oral Presentation. Student Seminar Day. Department of Entomology. University of California, Riverside.
- 1998-99 Lesley Award. University of California, Riverside.
- 1998 First Place Oral Presentation. Ph.D. Competition. 82nd Annual Meeting Pacific Branch of the ESA. Honolulu, Hawaii.
- 1997 President's Prize. Honorable Mention. Section Fa Poster Presentation. ESA Annual Meeting. Nashville, Tennessee.
- 1996-1997 Outstanding Teaching Assistant. Department of Entomology. University of California, Riverside.
- 1996 First Place Oral Presentation. Ph.D. Competition. 80th Annual Meeting Pacific Branch of the ESA. Big Sky, Montana.
- 1995 First Runner-Up Oral Presentation. Ph.D. Competition. 79th Annual Meeting Pacific Branch of the ESA. San Diego, California.
- 1990 Second Place Class of 1990-2<sup>nd</sup> semester. Graduating Class. Universidad Nacional Agraria. Lima, Peru.
- 1990 First Place Class of 1990-2<sup>nd</sup> Semester. School of Biological Sciences. Universidad Nacional Agraria. Lima, Peru.

# GRANTS (**GRAND TOTAL = \$ 7,506,397**)

#### Competitive External (Total = \$ 4,410,085)

- 2019-2021 USDA Sustainable Agriculture Research & Education (SARE) Partnership Grant. Alternative and organic management practices to control Oriental beetle in commercial blueberries. Dean Polk (PD), **C. Rodriguez-Saona**, Carrie Denson. \$ 29,848
- 2018-2023 USDA NIFA Crop Protection and Pest Management. Leveraging pest behavior for implementation of biological control for plum curculio. Anne Nielsen (PD), **C. Rodriguez-Saona**, C. Akotsen-Mensah, B. Blaauw, T. Leskey, D. Shapiro-Ilan, D. Polk. \$ 324,998
- 2018-2021 USDA Organic Research and Extension Initiative (OREI) Grant. Furthering the development and implementation of systems-based organic management strategies for spotted wing drosophila. Principal Investigators: Ash Sial (PD), **C. Rodriguez-Saona (Rutgers Co-PD)**, R. Isaacs, M. Grieshop, K. Daane, etc. \$ 145,000 (NJ Portion)
- 2018-2021 USDA Sustainable Agriculture Research & Education (SARE) Grant. An area-wide pest management program to Improve honey bee health in blueberry and cranberry pollination services. Principal Investigators: Dean Polk (PD), **C. Rodriguez-Saona**, T. Schuler, D. vanEngelsdorp, J. Katz. \$ 199,975
- 2016-2018 USDA Northeast Region-IPM Working Group. Spotted Wing Drosophila Working Group to Identify and Prioritize Research and Extension Needs. Principal Investigators: J. Carroll (PI). G. Loeb, **C. Rodriguez-Saona**, A. Nielsen, D. Polk. \$ 20,000
- 2016-2018 USDA Sustainable Agriculture Research & Education (SARE) Grant. Refining an Attracticidal Sphere Management System for Spotted Wing Drosophila in Small Fruit Production. Principal Investigators: Tracy Leskey (PD), **C. Rodriguez-Saona (Rutgers Co-PD)**, A. Nielsen, R. Morrison, K. Rice. \$ 60,000 (NJ Portion)
- 2015-2019 USDA NIFA Specialty Crop Research Initiative. Sustainable Spotted Wing Drosophila Management for United States Fruit Crops. Principal Investigators: Hannah Burrack (PD), **C. Rodriguez-Saona (Rutgers co-PD),** R. Isaacs, A. Sial, G. Loeb, V. Walton, etc. \$ 331,480 (NJ portion)
- 2015-2018 USDA NIFA Crop Protection and Pest Management. Managing an Invasive Drosophilid Species in Agriculture using Innovative Behavioral Manipulation Strategies. Principal Investigators: **C. Rodriguez-Saona (PI),** T. Leskey, A. Nielsen, A. Zhang, and G. Loeb. \$300,000
- 2014-2016 USDA NIFA Specialty Crop Research Initiative. Biology, Ecology, and Management of the Brown Marmorated Stink Bug in orchard crops, small fruit, vegetables, and ornamentals.

Principal Investigators: Tracy Leskey (PD), G. Hamilton (Rutgers co-PD), **C. Rodriguez-Saona**, D. Polk, A. Nielsen. \$576,951 (NJ portion)

- 2014-2015 IR-4 Biopesticide Grants. Efficacy of Phyllom BeetleGONE! for oriental beetle in blueberries. Principal Investigators: **C. Rodriguez-Saona (PI)** and D. Polk. \$20,000
- 2014-2015 USDA Northeast Region-IPM Working Group. Spotted Wing Drosophila Working Group to Update and Prioritize Research and Extension Needs. Principal Investigators: G. Loeb (PI), J. Carroll, **C. Rodriguez-Saona**, A. Nielsen, D. Polk. \$10,000
- 2013-2015 USDA NE-IPM. A Novel Attract-and-kill Approach for Managing the Invasive Spotted Wing Drosophila in Multiple Small Fruit Crops. Principal Investigators: **C. Rodriguez-Saona (PI)**, A. Nielsen, T. Leskey, A. Zhang. \$175,000
- 2013-2014 New York Greengrass Association. Towards Sustainable Management of the Annual Bluegrass Weevil. Principal Investigators: Koppenhöfer A.M., Kostromytska O., Rodriguez-Saona C. \$19,947
- 2013-2014 USDA Northeast Region-IPM Working Group. Spotted Wing Drosophila Working Group to Update and Prioritize Research and Extension Needs. Principal Investigators: G. Loeb (PI), J. Carroll, **C. Rodriguez-Saona**, D. Polk. \$9,993
- 2013-2014 OJ Noer Research Foundation. Advancing Integrated Management of Annual Bluegrass Weevil. Principal Investigators: A. Koppenhofer (PI), O. Kostromytska, **C. Rodriguez-Saona**. \$20,400
- 2012-2014 USDA Pest Management Alternatives Program (PMAP). An Integrated Multi-Tactic Approach for Managing Native Weevil Pests of Multiple U.S. Fruit Crops. Principal Investigators: **C. Rodriguez-Saona (PI)**, T. Leskey, and A. Nielsen. \$200,000
- 2012-2014 USDA NE-IPM. Spotted wing drosophila management. Principal Investigators: R. Cowles (PI), D.W. Li, S. Alm, G. Loeb, **C. Rodriguez-Saona**, P. Landolt. \$161,985 (\$24,000 NJ portion).
- 2012-2013 USDA NE-IPM Working Group. Spotted Wing Drosophila Working Group to Identify and Prioritize Research and Extension Needs. Principal Investigators: G. Loeb (PI), J. Carroll, C. Rodriguez-Saona, D. Polk. \$14,992
- 2011-2014 USDA NIFA Specialty Crop Research Initiative. Biology, Ecology, and Management of the Brown Marmorated Stink Bug in orchard crops, small fruit, vegetables, and ornamentals. Principal Investigators: Tracy Leskey (PD), G. Hamilton (Rutgers co-PD), **C. Rodriguez-Saona**, D. Polk, A. Nielsen, D. Ward \$750,000 (NJ portion)
- 2011-2012 IR-4 Biopesticide Grants. Field-wide oriental beetle mating disruption in blueberries: A new, more realistic approach for its control. Principal Investigators: **C. Rodriguez-Saona (PI)** and D. Polk. \$18,500
- 2011-2013 EPA Region 2, Pesticide Environmental Stewardship Program. Implementing IPM-based tools to increase adoption of reduced-risk insecticides in cranberries. Principal Investigators: **C. Rodriguez-Saona (PI)** and F. Zaman. \$53,000
- 2010-2012 USDA Crops-At-Risk (CAR). Integrating Applied Insect Ecology into Blueberry Pest Management. Principal Investigators: R. Isaacs (PI), **C. Rodriguez-Saona**, and D. Polk. \$554,558
- 2009-2011 USDA Sustainable Agriculture Research & Education (SARE) Grant. Spatially Based Whole-Farm Integrated Crop Management (ICM) Systems for Northeast Highbush Blueberry Production. Principal Investigators: **C. Rodriguez-Saona (PI)**, D. Polk, P. Oudemans, G. Pavlis, B. Majek, K. Demchak, J. Harper, and A. DeMarsay. \$180,000
- 2008-2009 IR-4 Biopesticide Grants. Flowable SPLAT OB for mating disruption of the oriental beetle. Principal Investigators: **C. Rodriguez-Saona (PI)** and D. Polk. \$18,000
- 2007-2009 USDA-CSREES Northeastern Region IPM Competitive Grant. Development and Implementation of Novel trapping Systems for Monitoring Cranberry Fruitworm and Cranberry Weevil Populations. Principal Investigators: **C. Rodriguez-Saona (PI)**, R. Isaacs, A. Averill, and L. Stelinski. \$130,000
- 2007-2008 IR-4 Biopesticide Grants. Optimization of pheromone dosage for oriental beetle mating disruption in commercial blueberries. Principal Investigators: **C. Rodriguez-Saona (PI)** and D. Polk. \$16,000
- 2006-2007 USDA-CSREES Northeastern Region IPM Competitive Grant. Isolation and Identification of host-plant attractants for cranberry weevil and cranberry fruitworm. Principal Investigators: **C. Rodriguez-Saona (PI)**. \$50,000

- 2006-2008 EPA Region 2, Food Quality Protection Act/Strategic Agricultural Initiative Program. Impact Assessment of Reduced-Risk Pest Management Strategies for Cranberries in New Jersey. Principal Investigators: **C. Rodriguez-Saona (PI)** and L. Meyer. \$96,200
- 2005-2007 EPA Region 2, Food Quality Protection Act/Strategic Agricultural Initiative Program. A Blueberry Reduced Risk Integrated Crop Management System- BRRICMS- for New Jersey. Principal Investigators: D. Polk (PI), **C. Rodriguez-Saona**, and L. Meyer. \$118,300
- 2003-2005 USDA Forest Service State and Private Forestry, Forest Health Protection, Special Technology Development Program (STDP) Grant. Project Number NA-2003-02. Development of Detection and Monitoring Techniques for the Emerald Ash Borer. Principal Investigators: T. Poland (PI), D. McCullough, R. A. Haack, and **C. Rodriguez-Saona**. \$164,762
- 1997 Graduate Dean's Dissertation Research Grant. University of California, Riverside. \$500

Due to the unfortunate death of Dr. S. Polavarapu, Dr. Rodriguez-Saona replaced him on the following grant:

2002-2006 USDA-CSREES RAMP. Development and implementation of reduced-risk pest management strategies for blueberries. Principal Investigators: Sridhar Polavarapu (PI) (**C**. **Rodriguez-Saona**), R. Isaacs, and F. Drummond. \$998,990

#### Competitive Internal (Total = \$ 143,103)

- 2012-2013 Rutgers Center for Turfgrass Science. Towards sustainable management of the annual bluegrass weevil. Principal Investigators: A. M. Koppenhöfer (PI), O. Kostromytska, S.A. Bonos, and **C. Rodriguez-Saona**. \$35,000
- 2011-2012 Rutgers Center for Turfgrass Science. Annual bluegrass weevil IPM: Plant resistance/tolerance and semiochemicals for monitoring and management. Principal Investigators: A. M. Koppenhöfer (PI), O. Kostromytska, **C. Rodriguez-Saona**, S.A. Bonos. \$90,000
- 2009-2010 Pre-tenure Faculty Career Development Award. Rutgers University. Improving Entomopathogenic Nematode Attraction to Oriental Beetle Grubs through the Use of Root Volatiles. Principal Investigator: **C. Rodriguez-Saona**. \$13,103
- 2008-2009 Internal Hatch Competitive Award. Constitutive and Inducible Resistance for Management of Cranberry Insect Pests. Rutgers New Jersey Agricultural Experiment Station. Principal Investigators: **C. Rodriguez-Saona (PI)** and N. Vorsa. \$5,000

#### *Non-competitive (Total = \$ 1,957,563)*

- 2010-2011 USDA-CSREES Special Grant. Cranberry and Blueberry Breeding, Disease and Insect Management. Principal Investigators: **C. Rodriguez-Saona (PI)**, P. Oudemans, N. Vorsa, A. Howell, and J. Polashock. \$511,868
- 2009-2010 USDA-CSREES Special Grant. Cranberry and Blueberry Breeding, Disease and Insect Management. Principal Investigators: **C. Rodriguez-Saona (PI)**, P. Oudemans, N. Vorsa, A. Howell, and J. Polashock. \$420,462
- 2008-2009 USDA-CSREES Special Grant. Cranberry and Blueberry Breeding, Disease and Insect Management. Principal Investigators: P Oudemans (PI), **C. Rodriguez-Saona**, N. Vorsa, A. Howell, T. Michael, and J. Polashock. \$424,490
- 2006-2007 USDA-CSREES Special Grant. Cranberry and Blueberry Breeding, Disease and Insect Management. Principal Investigators: P Oudemans (PI), **C. Rodriguez-Saona**, N. Vorsa, A. Howell, and J. Polashock. \$600,743

#### Grants-in-Aid and Service Fees (Total = \$ 890,574)

- 2019-2020 Testing novel resistance-based approaches to reduce false blossom disease in cranberries. New Jersey Cranberry Research Council Inc., Cape Cod Cranberry Growers Association, Cranberry Institute, and Ocean Spray Cranberries, Inc. **C. Rodriguez-Saona** and James Polashock. \$15,000
- 2019-2020 Investigations on the effects of fungicides on honey bee larval brood. New Jersey Blueberry Research Council Inc. **C. Rodriguez-Saona** and D. Polk. \$9,000
- 2019-2020 Efficacy trials in blueberries. FMC. C. Rodriguez-Saona. \$5,000
- 2018-2019 IR-4 Biopesticide Grants. IR-4 Minor Crop Pest Management Program. Spotted wing

2018	drosophila/blueberries- attract and kill. <b>C. Rodriguez-Saona</b> . \$26,000 Efficacy trials in blueberries. Bayer/Valent/ISCA Technologies Inc. <b>C. Rodriguez-Saona</b> . \$33,000
2018-2019	Research on blunt-nosed leafhoppers: A historic threat to cranberries. New Jersey Cranberry Research Council Inc., Cape Cod Cranberry Growers Association, and Ocean Spray Cranberries, Inc. <b>C. Rodriguez-Saona</b> . \$15,000
2018-2019	Evaluation of novel 'attract-and-kill' technologies for spotted wing drosophila control. New Jersey Blueberry Research Council Inc. <b>C. Rodriguez-Saona</b> and K. Cloonan. \$5,000
2017-2018	IR-4 Biopesticide Grants. IR-4 Minor Crop Pest Management Program. Spotted wing drosophila/blueberries- attract and kill. <b>C. Rodriguez-Saona</b> . \$12,000
2017 2017-2018	Efficacy trials in blueberries. Valent/ISCA Technologies Inc. <b>C. Rodriguez-Saona</b> . \$25,000 Screening for insecticides against sucking insect pests of cranberries – YEAR 2. New Jersey Cranberry Research Council Inc., Cape Cod Cranberry Growers Association, and Ocean Spray Cranberries, Inc. <b>C. Rodriguez-Saona</b> . \$15,000
2017-2018	Evaluation of SPLAT SWD, a novel 'attract-and-kill' formulation for spotted wing drosophila control - YEAR 2. New Jersey Blueberry Research Council Inc. <b>C. Rodriguez-Saona</b> . \$6,500
2016-2017	IR-4 Biopesticide Grants. IR-4 Minor Crop Pest Management Program. C. Rodriguez- Saona. \$15,000
2016 2016-2017	Efficacy trials in blueberries. Dow AgroSciences/DuPont. <b>C. Rodriguez-Saona</b> . \$8,000 Screening for insecticides against sucking insect pests of cranberries. New Jersey Cranberry Research Council Inc., Cranberry Institute, Cape Cod Cranberry Growers Association, and Ocean Spray Cranberries, Inc. <b>C. Rodriguez-Saona</b> . \$14,000
2016-2017	Evaluation of SPLAT SWD, a novel 'attract-and-kill' formulation for spotted wing drosophila control. New Jersey Blueberry Research Council Inc. <b>C. Rodriguez-Saona</b> . \$7,000
2015-2016	Two "new" insect pests of cranberries: Toad bugs and mirid. New Jersey Cranberry Research Council Inc./Ocean Spray. <b>C. Rodriguez-Saona</b> . \$44,500
2015-2016	On-farm evaluation of management programs and application methods to control SWD. New Jersey Blueberry Research Council Inc. <b>C. Rodriguez-Saona</b> and D. Polk. \$12,500
2015-2016	IR-4 Biopesticide Grants. IR-4 Minor Crop Pest Management Program. C. Rodriguez-Saona. \$20,000
2015	Efficacy trials in blueberries and cranberries. Marrone Bio Innovations/ISK Biosciences/Bayer/Dow AgroSciences/DuPont/Agriphar Crop Solutions. <b>C. Rodriguez-Saona</b> . \$46,000
2014-2015	Integrated research for sustainable insect pest management in cranberries: Year 2. New Jersey Cranberry Research Council Inc., Cranberry Institute, Cape Cod Cranberry Growers Association, Canadian Cranberry Growers Coalition, and Ocean Spray Cranberries, Inc. <b>C. Rodriguez-Saona</b> . \$47,500
2014-2015	Spotted Wing Drosophila: An urgent need for effective monitoring and management tools: Year 3. New Jersey Blueberry Research Council Inc. <b>C. Rodriguez-Saona</b> and D. Polk. \$10,000
2014	Efficacy trials in blueberries and cranberries. Nichino America/Cheminova/AMVAC/ UPI/DuPont/ChemTura/Dow AgroSciences/Valent/ISK Biosciences Co./ISCA Technologies. <b>C. Rodriguez-Saona</b> . \$57,600
2014-2015	Evaluation and integration of behavioral approaches with conventional control to manage key insect pests of blueberries. New Jersey Blueberry Research Council Inc. (Specialty Crop Block Grant). <b>C. Rodriguez-Saona</b> . \$33,667
2013-2015	Effective semiochemical management of the oriental beetle for small blueberry grower. USDA SBIR. A. Mafra-Neto and <b>C. Rodriguez-Saona</b> . \$40,000 (NJ Portion)
2013-2014	Spotted Wing Drosophila: An urgent need for effective monitoring and management tools: Year 2. New Jersey Blueberry Research Council Inc. <b>C. Rodriguez-Saona</b> and Dean Polk. \$10,000
2013-2014	Integrated research for sustainable insect pest management in cranberries. New Jersey Cranberry Research Council Inc., Cranberry Institute, Cape Cod Cranberry Growers Association, Canadian Cranberry Growers Coalition, and Ocean Spray Cranberries, Inc. <b>C</b> .
2013	Rodriguez-Saona. \$50,000 Efficacy trials in blueberries and cranberries. Bayer CropScience/ UPI/DuPont

2012-2013	/ChemTura/Dow/Valent/Marrone Bio/ISK Biosciences Co. <b>C. Rodriguez-Saona</b> . \$35,000 Spotted wing drosophila in New Jersey: An urgent need for effective monitoring and management. New Jersey Blueberry Research Council Inc. (Specialty Crop Block Grant). <b>C. Rodriguez-Saona</b> . \$32,254
2012	Efficacy trials in blueberries and cranberries. Bayer CropScience/ UPI/DuPont /ChemTura/Dow/Valent. <b>C. Rodriguez-Saona</b> . \$22,500
2012-2013	Spotted Wing Drosophila: An urgent need for effective monitoring and management tools. New Jersey Blueberry Research Council Inc. <b>C. Rodriguez-Saona</b> and Dean Polk. \$18,122
2012-2013	Development of a degree-day model to better time insecticide sprays against <i>Sparganothis</i> fruitworm: YEAR 2. New Jersey Cranberry Research Council Inc. <b>C. Rodriguez-Saona</b> and Dan Schiffhauer. \$8,186
2012-2013	Screening and evaluating newer and safer management materials for spotted fireworm, and continued assessment of Brown Marmorated Stink Bug survival and damage on cranberries. Cranberry Institute/Ocean Spray. <b>C. Rodriguez-Saona</b> . \$5,561
2011	Effective semiochemical management of the oriental beetle for the small blueberry grower. ISCA Technologies Inc. <b>C. Rodriguez-Saona</b> . \$20,000
2011	Efficacy trials in blueberries and cranberries. Bayer CropScience/UPI/DuPont/ChemTura/ Dow. <b>C. Rodriguez-Saona</b> . \$35,000
2011-2012	Evaluating new tools to better monitor and control plum curculio populations in blueberries: Year 2. New Jersey Blueberry Research Council Inc. <b>C. Rodriguez-Saona</b> , Dean Polk, Faruque Zaman, and Tracy Leskey. \$10,278
2011-2012	Development of a degree-day model to better time insecticide sprays against <i>Sparganothis</i> fruitworm. New Jersey Cranberry Research Council Inc. <b>C. Rodriguez-Saona</b> and Dan Schiffhauer. \$8,278
2011-2012	Screening and evaluating newer and safer management materials for <i>Sparganothis</i> fruitworm and assessing Brown Marmorated Stink Bug survival and damage on cranberries. Cranberry Institute. <b>C. Rodriguez-Saona</b> . \$7,278
2010	Efficacy trials in blueberries and cranberries. Bayer CropScience UPI/ DowAgrosciences /DuPont/ChemTura/FMC. C. Rodriguez-Saona. \$26,000
2010-2011	Evaluating new tools to better monitor and control plum curculio populations in blueberries. New Jersey Blueberry Research Council Inc. <b>C. Rodriguez-Saona</b> , Dean Polk, Faruque Zaman, Tracy Leskey, and John Wise. \$10,000
2010-2011	Evaluating cranberry resistance to insect pests and color traps for monitoring blunt-nosed leafhopper populations. New Jersey Cranberry Research Council Inc. <b>C. Rodriguez-Saona</b> , Nicholi Vorsa, Jennifer Johnson-Cicalese, Joan Davenport, and Dan Schiffhauer. \$7,778
2010-2011	Evaluation of new reduced-risk insecticides for efficacy against <i>Sparganothis</i> fruitworm, a key pest of cranberries. Cranberry Institute. <b>C. Rodriguez-Saona</b> . \$5,186
2009	Efficacy trials in blueberries and cranberries. Bayer CropScience / UPI/DowAgrosciences /DuPont/ChemTura/AgraQuest. <b>C. Rodriguez-Saona</b> . \$22,400
2009-2010	Development of new strategies for better monitoring pest populations and timing insecticide sprays in cranberries. New Jersey Cranberry Research Council Inc. <b>C. Rodriguez-Saona</b> . \$9,000
2009-2010	Development of new strategies for blueberry maggot, <i>Rhagoletis mendax</i> , control. New Jersey Blueberry Research Council Inc. <b>C. Rodriguez-Saona</b> . \$4,000
2009-2010	Screening for newer, safer, and effective materials for leafhopper and grub control. Cranberry Institute. <b>C. Rodriguez-Saona</b> . \$5,732
2008	Efficacy trials in blueberries and cranberries. Bayer CropScience / UPI/DowAgrosciences / DuPont. C. Rodriguez-Saona. \$20,000
2008-2009	Evaluation of new insecticides for efficacy against blueberry pests. New Jersey Blueberry Research Council Inc. <b>C. Rodriguez-Saona</b> . \$6,976
2008-2009	Survey of native wild bees and their habitat requirements in the New Jersey Pine Barrens as providers of supplemental pollination services for cranberries. New Jersey Cranberry Research Council Inc. <b>C. Rodriguez-Saona</b> . \$7,278
2008-2009	Evaluation of new insecticides for efficacy against cranberry pests. Cranberry Institute. <b>C. Rodriguez-Saona</b> . \$5,360

- 2007 Efficacy trials in blueberries and cranberries. Bayer CropScience /CerexAgri / Gowan / Syngenta / MANA. **C. Rodriguez-Saona**. \$12,000
- 2007-2008 Evaluation of new reduced-risk insecticides for cranberry insect pests. Cranberry Institute. **C. Rodriguez-Saona**. \$3,360
- 2007-2008 Evaluation of insecticide residues in cranberries. New Jersey Cranberry Research Council Inc. **C. Rodriguez-Saona**. \$9,460
- 2007-2008 Within field distribution of blueberry thrips and timing of insecticide applications. New Jersey Blueberry Research Council Inc. **C. Rodriguez-Saona**. \$6,360
- 2006 Efficacy trials in blueberries and cranberries. Bayer CropScience / DowAgroSciences/ CerexAgri/DuPont. **C. Rodriguez-Saona**. \$14,500
- 2006-2007 Evaluation of new reduced-risk insecticides for cranberry insect pests. Cranberry Institute. **C. Rodriguez-Saona**. \$5,360
- 2006-2007 Development and enhancement of monitoring techniques for new blueberry insect pests in NJ. New Jersey Blueberry Research Council Inc.**C. Rodriguez-Saona** and A. Zhang. \$6,000

#### GRANTS BY POST-DOCS AND GRADUATE STUDENTS

- 2012 USDA-SARE. Landscape effects on spatial distribution and movement of brown marmorated stink bug in peach orchards. Noel Hahn (PhD student). \$ 14,179
- 2011 USDA-SARE. Assessing nematode diversity in natural and managed blueberry habitats. Monique Rivera (PhD student). \$ 14,993
- 2009 USDA-SARE. Integrating cover crops into sustainable highbush blueberry production in New Jersey. Zsofia Szendrei (post-doc). \$ 10,000

## UNIVERSITY AND COMMUNITY SERVICE

# International Level:

Editorial Duties

- Subject Editor for the Journal of Economic Entomology, Horticultural Entomology (2014-present).
- Subject Editor for the Journal of Insect Science (2014-present).
- Subject Editor for the "Revista Ecologica Aplicada" (Journal of Applied Ecology), Department of Biology, Universidad Nacional Agraria, La Molina, Lima, Perú. (2003-present).
- Member of the Editorial Board for the Journal of Chemical Ecology (2018-present).
- Member of the Editorial Board for PLoS ONE (2012-2017).
- Member of the Editorial Board for Psyche: A Journal of Entomology (2012-2019).
- Review Editor for Frontiers in Ecology and Evolution–Chemical Ecology (2013-present).
- International Editorial Advisory Panel for the International Journal of Pest Management (2014present).
- Reviewer for >55 scientific national and international journals in Entomology, Ecology, Behavior, Plant Science, and Pest Management since 1997, including: Acta Physiologiae Plantarum, African J. of Biotechnology, Agricultural and Forest Entomology, Allelopathy Journal, Animal Behaviour, Arthropod-Plant Interactions, Behavior Genetics, Behavioral Ecology, Biocontrol Science & Technology, Biological Control, Canadian Entomologist, Canadian J. of Forest Research, Chemoecology, Crop Protection, Ecology, Ecological Applications, Ecological Entomology, Entomologia Experimentalis et Applicata, Environmental Entomology, Florida Entomologist, Frontiers in Ecology and Evolution, Frontiers in Plant Science, Functional Ecology, HortScience, International J. of Molecular Sciences, International J. of Pest Management, Insects, Insect Science, J. of Agricultural and Food Chemistry, J. of Agricultural and Urban Entomology, J. of Apicultural Research, J. of Applied Ecology, J. of Applied Entomology, J. BioControl, Biological Control, J. of Chemical Ecology, J. of Econ. Entomology, J. of the Entomological Research Society, J. of Entomology and Nematology, J. of Integrated Pest Management, J. of Pest Science, J. of Pollination Ecology, J. Plant Ecology, J. of Visualized Experiments, Molecular Ecology, Natural Product Communications, Nature Communications, New Phytologist, Oecologia, Oikos, PeerJ, Pest Management Science, Philosophical Transactions B. Physiological Entomology, Phytoparasitica, Plant Biology, PLoS ONE. Plant Signaling & Behavior, Proceedings of the Royal Society B, Revista Ciencia e Investigación Agraria, Revista Colombiana de Entomología, Revista Ecológica Aplicada, Scientific Reports-Nature, The Canadian Entomologist, The Great Lakes Entomologist, The Science of Nature (formerly

Naturwissenschaften), Trends in Plant Science.

## Committees

- External referee for the ETH Zurich Research Commission. 2019.
- External referee for The Research Foundation Flanders (FWO), Brussels, Belgium. 2018.
- External referee for The United States Israel Binational Agricultural Research and Development Fund (BARD). 2010.
- External referee for the Netherlands Organisation for Scientific Research (NOW, the Dutch research council). 2008.
- President for the International Organization for Biological Control, Nearctic Regional Section. 2018-Present.
- President-Elect for the International Organization for Biological Control, Nearctic Regional Section. 2016-2018.
- Vice-President for the International Organization for Biological Control, Nearctic Regional Section. 2015-2016.
- Member of the National Sciences and Engineering Research Council of Canada (NSERC) Site Visit Committee (SVC) for the review of the Industrial Research Chairs Regular Research (IRCPJ). 2019.
- Member of the Distinguished Scientist Award Committee for the International Organization for Biological Control, Nearctic Regional Section, Governing Board. 2015-2016.
- Member of the Early Career Award Committee for the International Organization for Biological Control, Nearctic Regional Section, Governing Board. 2013-2016.
- Member of the International Organization for Biological Control, Nearctic Regional Section, Governing Board. Member-at-Large. 2012-2015.
- Member of the Scientific Committee for the XXV Reunión Argentina de Ecología (XXV Argentine Meeting of Ecology). 2012.
- Moderator for the Blueberry Pests and Their Management session, North American Blueberry Research & Extension Workers Conference, Kalamazoo, Michigan. 2010.

## Meeting Organizer

- Co-Organizer (with Drs. Tracy Leskey and Vaughn Walton) of the symposium "Two Invasive Pests that Fundamentally Changed IPM in Fruit and Nut Crops: Brown Marmorated Stink Bug and Spotted Wing Drosophila". 8<sup>th</sup> International IPM Symposium: Solutions for a Changing World. Salt Lake City, Utah. 2015.
- Co-Organizer (with Drs. James Polashock, Gary Pavlis, Nicholi Vorsa, Peter Oudemans, and Mark Ehlenfeldt) of the North American Blueberry Research & Extension Workers Conference, Atlantic City, New Jersey. 2014.
- Co-Organizer (with Drs. Nicholi Vorsa, Peter Oudemans, and James Polashock) of the North American Cranberry Research & Extension Workers Conference, Egg Harbor City, New Jersey. 2007.

#### Others

- Evaluator of doctoral project for the "Escuela para Graduados de la Facultad de Agronomía", Universidad de Buenos Aires, Argentina. 2015.
- Hosted a Fulbright Visiting Scholar, Dr. Durairaj Chinnasamy, from India. 2008 (8 months).

## National Level:

Societal Duties

- Member of the Diversity and Inclusion Committee. Entomological Society of America. 2018-present.
- Member of the Awards and Honors Committee. Entomological Society of America. 2018-present.
- Member of Program Committee, Section F, Entomological Society of America. 1998.
- Member of Registration Committee, Pacific Branch of the Entomological Society of America. 1995.
- President, Entomological Society of America Eastern Branch. 2016-2017.
- Chair, Multistate Hatch Project WERA 1021: Spotted Wing Drosophila Biology, Ecology, and Management. 2014.

- Chair, Entomological Society of America Eastern Branch Program Committee. 2013.
- Co-chair, Entomological Society of America Eastern Branch Program Committee. 2012.
- Co-chair and moderator for the "Blueberries" session. Mid-Atlantic Fruit & Vegetable Convention, Hershey, Pennsylvania. 2009, 2010, 2011, 2014.

#### Meeting Organizer

- Organized Meeting Co-Organizer (with Drs. Ivan Hiltpold and Don Weber). "IOBC-NRS: Early career professionals advocating biological control". The 67<sup>th</sup> Annual Meeting of the Entomological Society of America. St. Louis, Missouri. 2019.
- Section Symposium Co-Organizer (with Dr. Mary Gardiner). "Insect-Mediated Ecosystem Services: Enhancing Interactions with our Beneficial Partners (IOBC-NRS Symposium)". Entomological Society of America. 63<sup>rd</sup> Annual Meeting, Minneapolis, Minnesota. 2015.
- Symposium Co-Organizer (with Dr. Elvira de Lange). "Painter's Legacy: Current Advances on Hostplant Resistance". Eastern Branch Annual Meeting. Rehoboth Beach, Delaware. 2015.
- Organized Meeting Co-Organizer (with Dr. Christelle Guedot). "Spotted Wing Drosophila: Developing Solutions for a Challenging Pest". The 62<sup>nd</sup> Annual Meeting of the Entomological Society of America. Portland, Oregon. 2014.
- Symposium Co-Organizer (with Dr. Anne Nielsen). "Are We Winning the Battle against Invasive Pests? The Brown Marmorated Stink Bug and Spotted Wing Drosophila". Eastern Branch Annual Meeting. Williamsburg, Virginia. 2014.
- Symposium Co-Organizer (with Dr. Sunil Tewari). "Pushing, Pulling, and Confusing: The Many Ways to Manipulate Insect Behavior in IPM". Eastern Branch Annual Meeting. Williamsburg, Virginia. 2014.
- Program symposium Co-organizer (with Drs. Roxina Soler and Raul Medina). "Plant-mediated Interactions among Multiple Players: Making Connections between Ecological Processes and Mechanisms". Entomological Society of America. 61<sup>st</sup> Annual Meeting, Austin, Texas. 2013.
- Symposium Co-Organizer (with Mr. Dean Polk). "Status of the Spotted Wing Drosophila in the US". Eastern Branch Annual Meeting. Hartford, Connecticut. 2012.
- Section Symposium Co-Organizer (with Dr. Ian Kaplan). "Host Plant Volatiles: Identifying New Approaches for Insect Pest Management". Entomological Society of America. 59<sup>th</sup> Annual Meeting, Reno, Nevada. 2011.
- Symposium Organizer. "Current Advances in Small Fruit Entomology". Entomological Society of America, Eastern Branch. 80<sup>th</sup> Annual Meeting, Harrisburg, Pennsylvania. 2009.
- Symposium Co-Organizer (with Dr. Arthur Agnello). "The Food Quality Protection Act: The Fruit Industry View 10 Years Later". Entomological Society of America, Eastern Branch. 79<sup>th</sup> Annual Meeting, Syracuse/Liverpool, New York. 2008.

#### Judging Duties

- Judge for the Early Career Innovation Award and the Nan-Yao Su Award for Innovation and Creativity in Entomology for the Entomological Society of America. 2018.
- Judge for the student poster competition at the Entomological Society of America, Annual Meeting. Denver, Colorado. 2017.
- Judge for the Entomological Society of America Student Award Monsanto Research Grant Award. 2015.
- Judge for the student oral competition at the Entomological Society of America, Annual Meeting. Portland, Oregon. 2014.
- Judge for the student oral competition at the Entomological Society of America, Eastern Branch Annual Meeting. Hartford, Connecticut. 2012.
- Judge for the student poster competition at the Entomological Society of America, Eastern Branch Annual Meeting. Harrisburg, Pennsylvania. 2011.
- Judge for the student oral competition at the Entomological Society of America, Eastern Branch Annual Meeting. Annapolis, Maryland. 2010.
- Judge for the student oral competition at the Entomological Society of America, Annual Meeting. San Diego, California. 2007.
- Moderator, Oral Session: Insect Population and Community Ecology, Ecological Society of America. 2002.

# Panelist

- Proposal review panelist for USDA Agriculture and Food Research Initiative (AFRI) Foundational Program: Pests and Beneficial Species in Agricultural Production Systems. December 2017.
- Proposal review panelist for USDA Agriculture and Food Research Initiative (AFRI) Foundational Program: Pests and Beneficial Species in Agricultural Production Systems. January 2017.
- Proposal review panelist for USDA Crop Protection and Pest Management Extension Implementation Program (EIP) and Regional Coordination Program (RCP) Program. 2014.
- Proposal review panelist for USDA Pest Management Alternatives Program (PMAP). 2011.
- Proposal review panelist for USDA Risk Avoidance and Mitigation Program (RAMP)/Crops At Risk (CAR). 2010.
- Proposal reviewer for the Pierce's Disease Research. 2010, 2011.
- Proposal review panelist for USDA Southern IPM. 2010, 2011.
- Proposal review panelist for the National Research Council of the National Academies. 2008, 2009, 2010, & 2011.
- Ad hoc reviewer for the NSF Integrative Ecological Physiology (IEP) Program. 2019.
- Ad hoc reviewer for USDA Small Business Initiative Research (SBIR). 2011, 2013, 2015, 2016.

## Others

• Member of the NE IPM Advisory Council. 2015-2019.

## Statewide Level:

- Member of the Board of Directors of the American Cranberry Growers' Association. 2007-present.
- Organizer of the American Cranberry Grower Association Winter and Summer meetings. 2009present.
- IR-4 State Liaison. 2009-2017.
- Judge for the Michigan Science Olympiad State Tournament. 2005.
- Judge for the California State Science Fair. Los Angeles. 1999.
- Entomology Graduate Student Council, UC Riverside. 1996-1998.
- UCR Entomology Outreach Program. Orange County and Orange Blossom Fairs, California. 1996-1998.

## Public Service Level:

- Outreach Lectures to Mullica Township School 5<sup>th</sup> Grade Class and Cedar Creek High School (Chatsworth, NJ). 2006-2017.
- Judge for the Folsom Elementary School Science Fair. Folsom, New Jersey. 2006, 2007, 2008.
- Judge for the Riverside Unified School District Science Fair. University of California, Riverside. 1997.
- Volunteer at the Michigan Arbor Day Alliance. 2005.
- Volunteer at the Entomology Museum Day. Oregon State University. 1994.
- UCR Outreach Lectures at local elementary and high schools. 1997, 1998, 1999.
- UCR Minority Outreach Lectures (Spanish language presentations to local high school students on entomology). 1997,1998.

## University Services:

Entomology

- Chair of the Appointments and Promotions Committee (2019-2020)
- Chair of the Curriculum Committee (2019-2020)
- Chair of the Graduate Student Status Committee, Entomology, Rutgers University (2017-2018).
- Chair of Dr. Anne Nielsen (Fruit Entomologist) Mentoring Committee. 2012-2017.
- Member of the Appointments and Promotions Committee (2017-present) and Curriculum Committee (2018-present), Entomology, Rutgers University.
- Member of the Strategic Plan Committee, Entomology, Rutgers University (2015-2016).
- Member of the Graduate Program Student Acceptance Committee, Entomology, Rutgers University (2015-2016).
- Member of the Graduate Program Resource Maintenance and Development Committee, Entomology Department, Rutgers University (2014-2015).

- Member of the Graduate Program Acceptance Committee, Entomology Department, Rutgers University (2009-2012).
- Member of the Student Status Committee, Entomology Department, Rutgers University (2008-2009).
- Organizer of the Entomology Graduate Student Colloquium (2013-present).

# Ecology

• Member of the Graduate Program Acceptance Committee, Department of Ecology & Evolution, Rutgers University (2007-2010).

## SEBS College

• Member of the Appointments and Promotions Committee (2018-present), Rutgers University.

# Search and Award Committees

- Chair of the Awards Committee, Rutgers Cooperative Extension (2011-present).
- Member of Search Committee for Assistant Professor in Microbiology/Virology (2016).
- Member of Search Committee for Fruit IPM Program Associate II (2014; 2016).
- Member of Search Committee for Extension Specialist in Nursery (2013).
- Member of Search Committee for Assistant Professor in Fruit Entomology (2011).
- Member of Search Committee for Assistant Professor in Pollination Ecology (2007).

# SCIENTIFIC MEETINGS AND CONVENTIONS ATTENDED

- Asia-Pacific Chemical Ecology Conference. 2011, 2015, 2019.
- Convención Nacional de Entomología (Peru). 1988, 1989.
- Eastern Branch. Entomological Society of America. 2006, 2007, 2009-2014, 2016-2018.
- Ecological Society of America. Annual Meeting. 2000, 2002, 2010, 2015.
- Entomological Society of America. Annual Meeting. 1995, 1997-2000, 2002-2003, 2005-2019.
- Entomological Society of Canada. Annual Meeting. 2001.
- Entomological Society of Ontario (Canada). Annual Meeting. 2003.
- Gordon Research Conference. Floral & Vegetative Volatiles. 2007, 2012, 2016.
- Gordon Research Conference. Plant Herbivore Interaction. 1998, 2001, 2017.
- International Congress of Entomology. 1996 (Italy), 2008 (South Africa), 2012 (South Korea), 2016 (USA).
- International Society of Chemical Ecology. 2008, 2014, 2016, 2018, 2019.
- New Jersey Agribusiness Association. Annual Conference. 2005-2009.
- North Central Branch. Entomological Society of America. 2005.
- Ontario Ecology and Ethology Colloquium (Canada). Annual Meeting. 2004.
- Pacific Brach. Entomological Society of America. Annual Meeting. 1993, 1995-1999.
- Southwestern Branch. Entomological Society of America. 2004.

# WORKSHOPS AND TRAINING COURSES ATTENDED

- Geospatial Technology Workshop. Michigan State University. East Lansing, Michigan. 2005.
- Breeding for resistance to insects and mites. 8<sup>th</sup> Meeting of the IOBC/Eucarpia Working Group. Dundee, Scotland. 1998.
- International plant resistance to insects. 13<sup>th</sup> Biennial Workshop. Memphis, Tennessee. 1998.
- Manejo de la fertilidad de los suelos para incrementar la produccion de cosechas (Management of soil fertility to increase crop productivity). Universidad Nacional Agraria, La Molina. Lima, Perú.1991.
- El uso de feromonas en el control de plagas agrícolas (The use of pheromones for control of agricultural pests). Centro de Estudios Biológicos. Lima, Perú. 1990.
- Técnicas de colecta y preservación de especímenes biológicos (Techniques for collection and preservation of biological specimens). Universidad Nacional Mayor de San Marcos, Facultad de Ciencias Biologicas. Lima, Perú. 1989.

# PROFESSIONAL AFFILIATIONS

• Arizona Biological Control Working Group (1999-2001)

- Asia-Pacific Association of Chemical Ecologists (2011-2012)
- Ecological Society of America (1998-present)
- Entomological Society of America (1992-present)
- Entomological Society of Canada (2003-2008)
- Entomological Society of Peru (1987-1997)
- Gamma Sigma Delta (1998-1999)
- International Organization of Biological Control (2006-present)
- International Society of Chemical Ecology (2004-present)
- New Jersey Agribusiness Association (2005-2010)
- Sigma Xi (1996-1999)
- The American Entomological Society (2006-2010)

# SPECIAL SKILLS

- Certified Commercial Pesticide Applicator in New Jersey (categories 1A & 10).
- Expertise in the use of biological assays to study insect behavior and performance and chemical assays involving techniques in analytical chemistry to measure headspace volatile emissions and secondary compounds in plants.
- Experience with antennal electrophysiological techniques (EAG, GC-EAD).
- Experience in the use of low-pressure liquid chromatography, thin layer chromatography, UV spectroscopy, high-pressure liquid chromatography, gas chromatography, gas chromatography-mass spectroscopy, and nuclear magnetic resonance to isolate and identify plant compounds.
- Experience in analyses of proteinase inhibitor activity, peroxidases, polyphenol oxidases, glucosinolates, and total proteins in plants.
- Experience with molecular tools in isolation of RNA and qPCR.
- Experience in maintaining laboratory colonies of several herbivores, predators, and parasitoids.
- Skilled in several computer packages including Microsoft word, Excel, and PowerPoint, as well as statistical packages such as Systat, Minitab, SigmaPlot, and SigmaStat.
- Fluent in Spanish and English.