

## JHALENDRA P. RIJAL

### Cooperative Extension IPM Advisor & Associate Director

University of California Agriculture and Natural Resources & Statewide IPM Program

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#### EDUCATION

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##### **Doctor of Philosophy, Entomology;** 2014

Virginia Tech, Blacksburg, VA, USA

*Dissertation:* Environmental and behavioral factors associated with the infestation of commercial vineyards by larvae of grape root borer, *Vitacea polistiformis* (Harris)

##### **Master of Science, Entomology;** 2006

Tribhuvan University, Chitwan, Nepal

*Thesis:* Monitoring and management of *Helicoverpa armigera* Hubner with native isolates of insect pathogenic fungi, *Metarhizium anisopliae*, and *Beauveria bassiana*

##### **Bachelor of Science, Agriculture;** June 2004

Tribhuvan University, Chitwan, Nepal

#### RESEARCH GRANTS (2016-25) (Total grants ~2 million USD)

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<b>Year</b>	<b>Project</b>	<b>Role</b>	<b>Funding (for Rijal)</b>
2025-26	New Monitoring and Management Strategies for the Invasive Carpophilus Beetle– <i>US Department of Agriculture APHIS</i>	Co-PI	\$38,169
2023-25	Ecology, Monitoring and Management of Invasive Carpophilus Beetle ( <i>C. truncatus</i> ) in Nut Crops – <i>California Almond Board/CA Pistachio Research Board</i>	Co-PI	\$98,350
2022-24	Integrating Artificial Intelligence and Computer Learning into the SolaRid Monitoring	Co-PI	\$58,333
2021-23	Granular Chlorpyrifos Quarterly Report Analysis of Pesticide Use Trends - <i>CA Dept. of Pesticide</i>	PI	\$149,999
2020-24	Flatheaded Borer Management in Specialty Crops <i>USDA-NIFA Speciality Crop Research Initiative</i>	Co-PI	\$414,000
2021-25	Biology, monitoring, and management of native and invasive stink bugs in almonds - <i>Almond Board of CA</i>	PI	\$370,296
2022-24	Biology and Management of Walnut Husk Fly in Walnuts using Biologicals & Local Applied Research	PI	\$71,275
2019-22	Refining Sustainable Navel Orangeworm Management in California Almond – <i>CA Dept. Food and Agriculture</i>	PI	\$115,000
2021-23	Exploring Innovative solutions for managing invasive spotted wing drosophila in cherry orchards	PI	\$61,411
2017-19	Biology and Control of Brown Marmorated Stink Bug in Almonds- <i>Almond Board of CA</i>	PI	\$80,474
2016-19	Monitoring of Brown Marmorated Stink Bug in Peach Orchards in the Northern San Joaquin Valley- <i>CA Cling Peach Board</i>	PI	\$42,000

2019-20	Monitoring of Brown Marmorated Stink Bug in Pear Orchards - <i>CA Pear Research Advisory Committee</i>	Co-PI	\$5,000
2016-17	San Jose Scale Control in Cherries- <i>CA Cherry Board</i>	PI	\$10,000
2016-18,	Oviposition Deterrents and Insecticides for Spotted Wing Drosophila Control- <i>California Cherry Board</i>	PI	\$28,490
2016-18	Developing Sampling Methods for Pre-Season Mite Detection and Implementing Management Decisions in Almonds - <i>Almond Board of CA</i>	PI	\$53,486
2016-19	Source, Monitoring and Management of Lepidoptera Pests in Walnuts- <i>CA Walnut Board</i>	Co-PI	\$71,083
2019-20	Biology and Control of Pacific Flatheaded Borer - <i>CA Walnut Board</i>	PI	\$14, 877
2016-18	Overwintering Biology, Emergence, and Seasonal Activity of Walnut Husk Fly- <i>CA Walnut Board</i>	Co-PI	\$14,995
2016-19	Management of Brown Marmorated Stink Bug in US Specialty Crops- NIFA- <i>USDA SCRI</i>	Co-PI	\$55, 913
2016-19	Demonstration and Implementation of IPM in Almonds <i>CA Dept. of Pesticide Regulation (DPR)</i>	Co-PI	\$76,545
2016	Improving Leaffooted Bug Management in Pistachio by Bettering Monitoring Tools and Reducing Overwintering Populations Using Insecticides - <i>CA Pistachio Board</i>	Co-PI	\$13,546
2016-17	Monitoring Beet Leafhopper Populations in Vegetation on the Floor of the Northern San Joaquin Valley - <i>CA Tomato Research Institute</i>	Co-PI	\$12,000 (for 2 PIs)
2016-20	Local Area Walnut Pest Management Project - <i>CA Walnut Board</i>	PI	\$21,000
2016-20	Local Area Almond Pest Management Project - <i>Almond Board of CA</i>	PI	\$26000
2016-19	Industry Sources	PI	>\$150,000

## RESEARCH AND EXTENSION EXPERIENCE

**July 2015 – Present:** *Area Integrated Pest Management Advisor & Associate Director for Agricultural IPM-UC Statewide IPM Program, University of California Agriculture and Natural Resources*

- Managed more than 12 collaborative research projects (~ 2 million dollars) on arthropod pests of permanent and field cropping systems in the Central Valley, California
- Involved in research and extension of pest detection, spread and control of invasive pests such as brown marmorated stink bug, and other endemic invertebrate pests
- Provided expertise in several multi-state research activities focusing on the use of spatial and temporal distribution, risk factors and climate change models on invertebrate pests
- Collaborated with commodity boards, and private industries for the adoption of IPM practices for the sustainability and profitability of the industries
- Actively involved in conducting need assessment, project prioritization, seeking funding, and reporting of the outcomes in the form of reports, extension, and research publications
- Supervised part/full-time staff: technicians (3), student interns (3), junior specialist (3), Master-level assistant specialist (1), and Ph.D.-level associate specialist (2)

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- Provided leadership to the UC Statewide IPM Program as an Associate Director to help adoption of IPM activities in California
  - Contributed to policy fronts by participating in invited discussions and delegations.

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**March 2014 – June 2015:** *Postdoctoral Scholar, University of California-Davis*

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- Coordinated and conducted 2 IPM research projects on field (peppermint) and vegetable crop pests:

*Project 1:* Biology of *Bagrada* bug in the Central Coast region of California

- Initiated *Bagrada* bug wild host survey in 9 different locations of Salinas Valley and identified the plant species that support *Bagrada* bug population in the winter.
- Prepared reports for the California Department of Food and Agriculture (CDFA) and other publications

*Project 2:* Management of arthropod pests in peppermint in northern California

- Used geospatial models to develop spider mites sampling plan for mint growers
- Evaluated and suggested reduced-risk and bio-pesticides against mint root borer and spider mites
- Published 1 peer-reviewed and 1 editor-reviewed article, prepared 3 reports

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**Aug. 2009 – Feb. 2014:** *Graduate Research Assistant, Virginia Tech*

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- Conducted intensive grape root borer pupal exuviae sampling in 50 blocks from 20 vineyards statewide in Virginia
  - Identified risk factors and developed a risk prediction model to assess grape root borer infestation in vineyards for IPM-based management of pests in vineyards.
  - Characterized the spatial distribution (using variograms, SADIE) and developed a sampling technique for grape root borer sampling in vineyards
  - Discovered that grape root borer neonates are attracted to the grape root volatiles based on a series of behavioral studies and bioassays
  - Collaborated with the Virginia Vineyard Association and interacted with grape growers and managers for site selection and sampling
  - Gave 4 extension talks; Contributed to prepare 6 technical reports for funding agency Virginia Wine Board
  - Trained and supervised 16 summer students (over 4 years period)

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**Jul. 2006 – Jul. 2009:** *Plant Protection Officer  
Department of Agriculture, Govt. of Nepal*

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- Organized and conducted IPM farmer field schools, and extension meetings for growers to address local pest management-related issues
  - Monitored and enforced the pesticide distribution and use
  - Participated in government-mandated administrative activities (e.g., assisting with national elections)

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**Jun. 2004 – Jul. 2006:** *Graduate Research Assistant  
Tribhuvan University, Department of Entomology, Nepal*

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- Conducted research focusing on the biocontrol of *Helicoverpa armigera* in chickpea
  - Isolated insect pathogenic fungi, *Metarhizium anisopliae*, and *Beauveria bassiana*, from the soil and field-collected white grubs and tested against *H. armigera* larvae

- Conducted field experiments evaluating the efficacy of insect pathogenic fungal isolates against larval *H. armigera*
- Prepared progress reports to the funding agency, HELVETAS/SSMP Swiss Intercooperation. Published 2 journal articles.

## AWARDS AND HONORS

- 2025** Entomology Outstanding Recent Graduate Alumni Award, Virginia Tech
- 2020** Integrated Pest Management Team Award, Plant-Insect Ecosystem (PI-E) Section, Entomological Soc. Am.
- 2020** Entomology Team Work Award, Entomological Soc. Am. Pacific Branch
- 2020** IPM Achievement Award (Team Award), CA Dept. of Pesticide Regulation
- 2019** UC Entomology Extension Award (Team Award), Western Extension Directors Association Award of Excellence
- 2018** Professional Society Travel Award, UC ANR Academic Assembly Council
- 2014** Honor for outstanding leadership—plaque presented by Society of Overseas Nepalese Entomologists (SONE) in the annual business meeting of SONE, 18 November 2014, Portland, OR
- 2014** Friends of IPM Graduate Student (Ph.D.) Award, Southern IPM Center (\$3000)
- 2012** President’s Prize Award, 60<sup>th</sup> ESA-annual meeting, Knoxville, TN
- 2012** Cyrus McCormick Scholarship, Virginia Tech (\$1500)
- 2012** Sigma-Xi Ph.D. Research Grant (\$2000)
- 2011** Gamma Sigma Delta Award
- 2011** Entomological Society of America-SYP Award
- 2009** Chancellor Gold Medal, &  
Ram Prasad Manandhar Gold Medal, Tribhuvan University
- 2008** Nepal *Vidya Bhushan* Award  
(Received from the President of Nepal for securing the first position in the class in MSc. Agriculture)
- 2000-04** Undergraduate Merit Tuition Scholarship

## PUBLICATIONS

### *Refereed*

1. Takata, M., S. Gyawaly, **J. P. Rijal**, R. Van Steenwyk, and H. Kahl. 2025. Biology, ecology, and management of walnut husk fly (Diptera: Tephritidae). *Journal of Integrated Pest Management*, 16(1), pmafo43. <https://doi.org/10.1093/jipm/pmafo43>
2. Bansal, R., **J. P. Rijal**, D. R. Haviland, S. Gyawaly and H. Wilson. 2025. A low cost and labor-efficient method for rearing an invasive beetle, *Carpophilus truncatus* (Coleoptera: Nitidulidae). *Journal of Economic Entomology*, toae290. <https://doi.org/10.1093/jee/toae290>
3. Rijal, J.P. and S. Gyawaly. 2025. Efficacy and persistence of the entomopathogenic fungi and nematodes on walnut husk fly (*Rhagoletis completa*) in California. *Acta Hort.* 1420, 267-274. DOI: 10.17660/ActaHortic.2025.1420.36
4. Gyawaly, S. and **J. P. Rijal**. 2025. Understanding emergence phenology and developing monitoring tools for Pacific flatheaded borer in walnut orchards in California. *Acta Hort.* 1420, 319-326. DOI: 10.17660/ActaHortic.2025.1420.41
5. Rijal, J.P. and A. Schellman. 2025. UC IPM Pest Notes: Squash Bugs. UC ANR Publication 74144. Oakland, CA.
6. Van Steenwyk, R.A., Walse, S.S., Kuzmich, D., Thayer, M.R. and **J. P. Rijal**. 2025. Preliminary findings on the improved monitoring of walnut husk fly (*Rhagoletis completa*) through a new pheromone lure. *Acta Hort.* 1420, 309-318. DOI: 10.17660/ActaHortic.2025.1420.40.

7. Ikendi, S., N. Pinzón, V. Koundinya, N. Taku-Forchu, L.M. Roche, S.M. Ostoja, L.E. Parker, D. Zaccaria, M. H. Cooper, H. N. Diaz-Ramirez, S. Brodt, M. Battany, **J. P. Rijal**, and T. B. Pathak. 2024. Climate-smart agriculture: assessing needs and perceptions of California's farmers. *Frontiers in Sustainable Food Systems*, 8, p.1395547.
8. Rijal, J.P., R. Bansal, and S. Gyawaly, S. 2024. Edge effects of invasive brown marmorated stink bug, *Halyomorpha halys*, infestation, and damage in almond orchards. *Acta Hort.* 1406, 367-376. DOI: 10.17660/ActaHortic.2024.1406.52
9. Rijal, J.P. 2024. Brown marmorated stink bug UCIPM Guidelines. In: Hasey, J.K., K. R. Day, J. P. Rijal and K. E. Tollerup. Revised continuously (latest 2024). *UC IPM Pest Management Guidelines: Peach*. UC ANR Publication 3454. Davis, CA.
10. Gyawaly, S. and **J. P. Rijal**. 2024. Effect of winter flooding on navel orangeworm and spider mites in almond orchard. *Acta Hort.* 1406, 395-402. DOI: 10.17660/ActaHortic.2024.1406.56
11. Day, K.R., K. E. Tollerup, R.A. Duncan, **J. P. Rijal**, J. A. Roncoroni, B. B., Westerdahl, J. E. Adaskaveg, J. K. Hasey, and S. D. Wright. Revised continuously (latest 2024). *UC IPM Pest Management Guidelines: Peach*. UC ANR Publication 3454. Davis, CA.
12. Jha, P. K., N. Zhang, **J.P. Rijal**, L. E. Parker, S. Ostoja, and T. B. Pathak. 2023. Climate change impacts on insect pests for high value specialty crops in California. *Science of The Total Environment*, 906, 167605.
13. **Rijal, J.P. 2022**. Spotted Wing Drosophila UCIPM Guidelines. In: Grant, J.A., J.L. Caprile, W.W. Coates, R.A. Van Steenwyk, K.M. Daane. and **J.P. Rijal** (Revised continuously). *UC IPM Pest Management Guidelines: Cherry*. Publication 3440, University of California Agriculture and Natural Resources. Oakland, CA.
14. Illán, Javier Gutiérrez, et al., **J.P. Rijal**. 2022. Evaluating invasion risk and population dynamics of the brown marmorated stink bug across the contiguous United States. *Pest Management Science*.
15. Gyawaly, S., and **J. P. Rijal**. 2022. Neem-Based Insecticides Deter Oviposition Activity in Spotted Wing Drosophila (Diptera: Drosophilidae) in Sweet Cherries. *Journal of Economic Entomology*. May 2022.
16. Nepal, A., J.B. DeShields, A. D. Levin, R. Hilton, and **J.P. Rijal. 2022**. Epidemiology of Grapevine Red Blotch Disease Progression in Southern Oregon Vineyards. *American Journal of Enology and Viticulture*. 73: 116-124.
17. **Rijal, J.P.**, A.L. Joyce, and S. Gyawaly. 2021. Biology, Ecology, and Management of Hemipteran Pests in Almonds Orchard Systems in the United States. *Journal of Integrated Pest Management* 12.1; 24.
18. Gireesh, M., **J.P. Rijal**, and S.V. Joseph. 2021. Spatial Distribution of Hunting Billbugs (Coleoptera: Curculionidae) in Sod Farms. *Insects* **2021**, 12(5), 402.
19. Gyawaly, S., **J.P. Rijal**, and S.V. Joseph. 2021. *Bagrada hilaris* (Bagrada bug or Painted Bug). In: *CABI Invasive Species Compendium*. CAB International.
20. Haviland, D.R., **J.P. Rijal**, S. M. Rill, B. S. Higbee, C. S. Burks, and C. A. Gordon. 2021. Management of Navel Orangeworm (Lepidoptera: Pyralidae) Using Four Commercial Mating Disruption Systems in California Almonds. *Journal of Economic Entomology*.
21. Fisher, J.J, **J. P. Rijal**, and F. G. Zalom. 2020. Temperature and humidity interact to influence brown marmorated stink bug (Hemiptera: Pentatomidae), survival. *Environmental Entomology*. 50(2), 390-398.
22. Pathak, T.B., **J. P. Rijal**, and M. Maskey. 2021. Impact of Climate Change on Navel Orangeworm, a Major Pest of Tree Nuts in California. *Science of the Total Environment*.
23. Shrestha\*, G., J.P. Rijal\*, and G. Reddy. 2020. Characterization of the spatial distribution of alfalfa weevil, *Hypera postica*, and its natural enemies, using geospatial models. *Pest Management Science*. (\* = equal contribution)
24. **Rijal, J.P.**, and F.G. Zalom. 2020. Provisional guidelines for brown marmorated stink bug control in almond. (UCIPM peer-reviewed).

25. Fisher, J., **J. P. Rijal**, and F. G. Zalom. 2020. Temperature and humidity interact to influence brown marmorated stink bug, *Halyomorpha halys* (Hemiptera: Pentatomidae), survival. *Environmental Entomology* (*in press*).
26. Joseph, S.V., and J. P. Rijal. 2019. Walking capacity of *Lygus hesperus* (Hemiptera: Miridae) fifth instars in the laboratory and outdoors. *Southwestern Entomologist*, 44(2): 403-408.
27. Rijal, J. P., and S. Gyawaly. 2018. Characterizing brown marmorated stink bug injury in almond, a new host crop in California. *Insects*. 9(4), 126.  
<https://doi.org/10.3390/insects9040126>.
28. Baspinar, H., D. Doll, and J. P. Rijal. 2018. Pest management in organic almonds. *In: The handbook of pest Management in organic farming* (Eds. Vincenzo Vacante and Serge Kreiter). pp. 328-347.
29. Rijal, J.P., R. Regmi, R. Ghimire, K.D. Puri, S. Gyawaly, S. Poudel. 2018. Farmers' knowledge on pesticide safety and pest management practices: a case study of vegetable growers in Chitwan, Nepal. *Agriculture*. 8, 16.
30. Rijal, J. P., and L. D. Godfrey. 2018. Efficacy of selected bio-and reduced-risk insecticides on mint root borer. *Arth. Manag. Tests (Editor reviewed)*. 43(1), 1 January 2018, tsx134.
31. Rijal, J. P., and R. Duncan. 2017. First report of an established brown marmorated stink bug (Hemiptera: Pentatomidae) population in California agricultural crops. *J. Entomol. Sci.* 52 (4): 450-454.
32. Rijal, J.P., and J. C. Bergh. 2017. Grape Root Borer (Lepidoptera: Sesiidae): An economic pest of commercial vineyards in the eastern United States. *J. Integr. Pest Manag.* Published on 13 December, <https://doi.org/10.1093/jipm/pmx027>.
33. Rijal, J. P., R. Wilson, and L. D. Godfrey. 2016. Characterization of spatial distribution of *Tetranychus urticae* in peppermint in California and implication for improving sampling plan. *Exp. Appl. Acarol.* 68: 155-171.
34. Rijal, J. P., and J. C. Bergh. 2016. Food-finding capability of grape root borer (Lepidoptera: Sesiidae) neonates in soil column bioassays. *J. Entomol. Sci.* 51: 54-68.
35. Rijal, J. P., C. C. Brewster, and J. C. Bergh. 2014. Effects of biotic and abiotic factors on grape root borer (Lepidoptera: Sesiidae) infestations in commercial vineyards in Virginia. *Environ. Entomol.* 43: 1198-1208.
36. Rijal, J. P., C. C. Brewster, and J. C. Bergh. 2014. Spatial distribution of grape root borer (Lepidoptera: Sesiidae) infestations in Virginia vineyards and implications for sampling. *Environ. Entomol.* 43: 716-728.
37. Gresham, S. D., J. P. Rijal, L. C. Vieira, and J. Bova. 2014. What is the best individual solution to meeting the world's growing energy demand? Solar energy technologies [ESA Student Debate-2012]. *In: J. L. Peterson and C. Minteer (eds.). Student's perspectives on scientific tools to solve global issues.* *Am. Entomol.* 60: 212-222.
38. Rijal, J. P., A. Zhang, and J. C. Bergh. 2013. Behavioral response of grape root borer (Lepidoptera: Sesiidae) neonates to grape root volatiles. *Environ. Entomol.* 42: 1338-1347.
39. Subedi, S., Y. D. GC, R. B. Thapa, and **J. P. Rijal**. 2009. Rice weevil (*Sitophilus oryzae* L.) host preference of selected stored grains in Chitwan, Nepal. *J. Inst. Agric. Anim. Sci.* 30: 151-158.
40. Rijal, J. P., Y. D. GC, R. B. Thapa, and L. N. Kafle. 2008. Virulence of native isolates of *Metarhizium anisopliae* and *Beauveria bassiana* against *Helicoverpa armigera* in Nepal. *Formosan Entomol.* 28: 21-29.
41. Rijal, J. P., Y. D. GC, R. B. Thapa, and L. N. Kafle. 2008. Comparative efficacy of insect pathogenic fungi (*Metarhizium anisopliae* and *Beauveria bassiana*) to *Helicoverpa armigera* in chickpea under field condition of Nepal. *Formosan Entomol.* 28: 249-258.
42. Rijal, J. P., Y. D. G.C., and R. B. Thapa. 2008. Yield loss assessment and monitoring of *Helicoverpa armigera* Hubner in chickpea under Chitwan condition. *J. Plant Prot. Soc. Nepal.* 1: 90-98.
43. Rawat, P. R., Y. D. GC, R. B. Thapa, and **J. P. Rijal**. 2008. Evaluation of entomopathogenic fungi with other pesticides against mustard aphid, *Lipaphis erysimi* (Kalt.) under field

condition of Chitwan, Nepal. Proceedings of Workshop of Plant Protection Society of Nepal. 25-26 July, 2008, Kathmandu, Nepal.

44. Rijal, J. P., R. K. Malla, S. Tiwari, P. R. Rawat, and Y. D. GC. 2006. A preliminary study on the practices of insect pest management at Sukranagar VDC, Chitwan. pp 297-307. *In*: G. K. KC, S. Pokhrel, N. S. Upadhaya, S. P. Marahatta, B. D. Bhandari (eds.). Proceedings of a National Workshop on Integrated Pest Management. Plant Protection Society of Nepal. 25-26 August 2006, Kathmandu, Nepal.

### **Extension publications**

1. Rijal, J.P. (2025). Almond orchard tasks for spring. Pacific Nut Producer. Vol. 31, No. 3 (March). pp. 10-13.
2. Rijal, J.P. (2024). Post-season thoughts on almond insect pests. The Scoop of the Fruit and Nuts. UCCE Stanislaus, Fall 2024, Vol. 29, Issue 2.
3. Rijal, J. P., M. Ghimire, H. Wilson, S. Gyawaly, and D. Haviland. (2024). A visual guide to differentiate invasive carpophilus beetle (*Carpophilus truncatus*) and navel orangeworm (*Amyelois transitella*) and their damage in almonds. UC Statewide IPM Project Extension Publication. UCANR, Summer 2024.
4. Sakaki, S., and Rijal, J.P. (2024). Developing monitoring traps for flatheaded borer in walnuts. The Scoop of the Fruit and Nuts. UCCE Stanislaus, Fall 2024, Vol. 29, Issue 2.
5. Haviland, D., H. Wilson and J. Rijal. 2024. A new invasive pest of tree nuts in California. Pacific Nut Producer, January 2024, p. 8-13.
6. Wilson, H., J. P. Rijal and D. Haviland. (2024) Ecology, monitoring and management of carpophilus beetle: a new invasive pest of tree nuts in California. Progressive Crop consultant, Jan/Feb 2024, JCS Marketing, p. 22-27.
7. Rijal, J.P. , and M. Ghimire. (2024). Invasive Carpophilus Beetle: How to Detect Its Infestation in Hull Split Almonds. Field Notes. UCCE San Joaquin, August 2024.
8. Rijal, J. P. (2023). Tackling Pesticide Resistance of Spotted Wing Drosophila in Cherries. Progressive Crop Consultant, JCS Marketing, Inc. May/June Issue. pp. 32-34.
9. Rijal, J.P. (2023). Spring Season Walnut Orchard Tasks-Pest Management. Pacific Nut Producer. April, 2023. pp 26-29.
10. Gyawaly, S., and **J.P. Rijal**. (2023). Prioritizing Sprays When You Can't Afford Them All. Sacramento Valley Orchards Source. <https://www.sacvalleyorchards.com/blog/walnuts-blog/prioritizing-sprays-when-you-cant-afford-them-all/>
11. Wang, Z.; **J. P. Rijal** (2023). Monitoring beet leafhopper and beet curly top virus on processing tomatoes in California's northern San Joaquin Valley. *HortScience*. 58, S95-S96 (Abstract)
12. Rijal, J.P., and R. Van Steenwyk. (2023). Growers Can't Afford Losses to Walnut Husk Fly: Monitoring & Managing This Walnut Pest. Pacific Nut Producer, June 2023.
13. Boyd, V., and **J.P. Rijal**. (2023). Borer insect's appetite grows, damaging older trees. Ag Alert, 16 August, pp. 7-8.
14. Eddy, D., and **J.P. Rijal**. (2023). Tackling the No. 1 Enemy for Almonds — Navel Orangeworm. American Fruit Growers, March, 2023.
15. Nouri, M., and **J. P. Rijal**. (2023). Early Spring Walnut Pests - Monitoring and Management Considerations. Field Notes. UCCE San Joaquin. February, 2023.
16. Eddy, D., and **J.P. Rijal**. (2023). Yes! Biosolutions Do Exist for Pest Issues in Walnuts. 18 April, 2023. <https://www.growingproduce.com/fruits/yes-biosolutions-do-exist-for-pest-issues-in-walnuts/>
17. Rijal, J.P., and T. Charlston. (2023). 4/28/23 – MyAgLife Podcast Episode 167: on ‘True Bug’ Monitoring and Management in Spring, <https://podcasters.spotify.com/pod/show/myaglife/episodes/42823---MyAgLife-Episode-167-RERUN-Interview-with-UCCEs-Jhalendra-Rijal-on-True-Bug-Monitoring-and-Management-in-Spring-e236kmi>

18. Rijal, J.P., and S. Gyawaly. (2023). Navel Orangeworm (NOW) Hull Split Spray Considerations 2023. The Scoop of the Fruit and Nuts. UCCE Stanislaus, Summer 2023, Vol. 28, Issue 1.
19. Zuber, C., and **J. P. Rijal**. (2022). Winter Mummy Nut Sampling in Almond: Additional Insights for Pest Management. UCCE San Joaquin Valley Tree and Vines Blogs, 16 November. <https://www.sjvtandv.com/blog/winter-mummy-nut-sampling-in-almond-additional-insights-for-pest-management>
20. Rijal, J. P., S. Gyawaly, T. Martin (2022). Flatheaded borer re-emerges as a damaging pest of walnut. IPM in Action Highlights. UC Statewide IPM Program. [https://ipm.ucanr.edu/highlights/2021/flatheaded\\_borer\\_reemerges\\_as\\_a\\_damaging\\_pest\\_of\\_walnut/](https://ipm.ucanr.edu/highlights/2021/flatheaded_borer_reemerges_as_a_damaging_pest_of_walnut/)
21. Rijal, J.P. (2022). Lilac Borer, *Podosesia syringae* (Harris), as a New Pest of Commercial Olives in California: Biology and Management. CAPCA Advisor, December 2022. pp 64-67.
22. Vicky, B., J. Roseman, and J. P. Rijal. (2022). Neighborly NOW: Web portal connects neighboring nut growers to create larger blocks for NOW mating disruption. West Coast Nut. February 2023. <https://www.wcngg.com/2023/02/01/neighborly-now/>
23. Gyawaly, S., and **J.P. Rijal**. (2022). In-season-& Post-harvest Management of Navel Orangeworm (NOW). October 2022. Sacramento Valley Orchard Source, <https://www.sacvalleyorchards.com/blog/walnuts-blog/management-navel-orangeworm/>
24. Wang, Z., and **J.P. Rijal** (2022). Beet leafhopper and its vectored beet curly top virus on processing tomato: vector phenology, disease severity, and yield impact. CAPCA Adviser. 25:3, 40-45.
25. Rijal, J.P. and M. Lies. (2022). BMSB on the Rise in Almonds. <https://www.wcngg.com/2022/09/10/bmsb-on-the-rise-in-almonds/>
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39. **Rijal, J. P.**, T. Pathak, and P. Gordon. (2021). Climate change part 5: navel orangeworm. Growing the Valley Podcast. P. Gordon. Published September 7. <https://www.growingthevalleypodcast.com/podcastfeed/2021/8/18/climate-change-part-5-navel-orangeworm>
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44. **Rijal, J. P.** 2020. Reports of Lilac borer infestation in commercial olive orchards in North San Joaquin Valley. UCCE Field Notes Newsletter (May). <https://bit.ly/37ha7cf>
45. **Rijal, J. P.** 2020. Walnut husk fly: understanding the biology, monitoring and management of this common pest in walnut. West Coast Nut. June Issue. pp. 46-48. <https://bit.ly/3mkZPys>
46. **Rijal, J. P.** 2020. How Nut Growers Can Get the Best of Brown Marmorated Stink Bug. <https://bit.ly/2JMWFo>
47. **Rijal, J. P.** 2020. Managing spotted wing drosophila in blueberry and cherry orchards in California. UCCE San Joaquin Valley Tree & Vine Blog, <https://bit.ly/3lfgKu6> (Apr. 16)
48. **Rijal, J. P.**, and S. Seybold. 2019. Pacific flatheaded borer as a resurgent pest of walnuts in California: background, questions, and future research needs. CAPCA Advisor, December, pp. 41-47.
49. **Rijal, J. P.**, 2019. Importance of Integrated Pest Management (IPM) in managing arthropod pests in organic nut production in California. Organic Farmer, Vol. 2, Issue 4. pp 44-46.
50. Haviland, D.R., and **J. P. Rijal**. 2019. Mating disruption for navel orangeworm available for organic nut crops. Organic Farmer, October/November, pp 16-20.
51. **Rijal, J. P.** 2019. Seasonal pest management task: insect monitoring in almond and walnut orchards. West Coast Nut. April Issue. pp. 10-17.
52. Haviland, D., **J. P. Rijal**, E. Symmes. 2019. IPM Advisors demonstrate mating disruption for key almond pests. UC Delivers. Published: June 28, 2019. <https://bit.ly/3lgF81L>
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55. **Rijal, J.P.** 2019. California Almonds, Walnuts: Trapping Options – Quick Overview. AgFax News (March 3), <https://bit.ly/39qdVe3>
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57. **Rijal, J. P.** 2019. Invasive pests to watch out for in the vines in 2019. A special newsletter issue published for the 67<sup>th</sup> Annual Grape Day. Lodi Grape Growers and Lodi Wine Commission (February).

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59. **Rijal, J.P.** 2018. California Walnuts: “Concerning” – Pacific Flatheaded Borer Activity. AgFax News (November 19). <https://bit.ly/2HMPV9G>
60. **Rijal, J. P.** 2018. Old pest-new problem: Infestation of pacific flatheaded borer in walnuts in the northern San Joaquin Valley. Field Notes Newsletter (November).
61. **Rijal, J. P.** (2018). Understanding the Overwintering Biology of the Husk Fly—A Research Update. Field Notes Newsletter (August).
62. **Rijal, J. P.** (2018). California almonds: what to expect from third now flight in upper SJV. August 13, <https://bit.ly/3q7rCV9>
63. **Rijal, J. P.** (2018). New Pest of Almond: The knowns and unknowns of brown marmorated stink bug in California. Progressive Crop Consultant (July/August).
64. Martin, T., and **P. Rijal.** (2018). Brown marmorated stink bug moving into agriculture. The IPM Corner Blog (June).
65. **Rijal, J.** (2018). Mating disruption and navel orangeworm. UCCE Stanislaus Walnut News (Spring).
66. **Rijal, J. P.,** and D. Haviland. (2018). Integration of mating disruption into management programs for navel orangeworm. West Coast Nut (June).
67. Burks, C., E. Symmes, and **P. Rijal.** (2018). Monitoring and treatment of navel orangeworm (NOW) in walnuts: research update. Progressive Crop Consultant (March/April).
68. **Rijal, J. P.** (2018). Insect pest monitoring for tree crops (Bloom-Spring). Field Notes Newsletter (February).
69. Haviland, D., E. Symmes, **P. Rijal,** and K. Tollerup. (2017). Evaluation of the role of chlorpyrifos in almond production systems. CAPCA Adviser (December).
70. **Rijal, J. P.** (2017). Brown Marmorated Stink Bug Becomes Established in Stanislaus County Orchards. 2016-Stanislaus County Crop Report. 17p.
71. **Rijal, J. P.** (2017). Mating disruption: An effective IPM tool for navel orangeworm. Progressive Crop Consultant. Vol. 2, Issue 3 (May-June), pp. 30-34.
72. **Rijal, J. P. (2017).** Invasion of brown marmorated stink bug (BMSB): Orchard pest update-peach growers beware. Vol. 34 (September/October, Issue 4). pp. 8-11.
73. **Rijal, J. P.,** and R. Duncan. (2017). Brown marmorated stink bug spread to peach growing areas in the northern San Joaquin Valley. CAPCA Newsletter (August). pp. 32-35.
74. **Rijal, J. P.** (2017). Updates on Brown Marmorated Stink Bug (BMSB) Monitoring-2017. Field Notes Newsletter (August).
75. **Rijal, J. P.,** and R. Duncan. (2017). Brown Marmorated Stink Bug Survey in Cling Peach Orchard. The IPM Corner (March).
76. **Rijal, J. P.** (2017). Insect pest monitoring in almonds and walnuts. The IPM Corner (March).
77. **Rijal, J. P.,** and J. Caprile. (2017). San Jose scale and it's biological control activity in North San Joaquin Valley. Field Notes Newsletter (February).
78. McGowen, S. (2016). A booklet on ‘Safe use and handling of pesticides for commercial vegetable growers in Nepal’ (**Editor: Jhalendra Rijal**). Horticulture Innovation Lab/CARD-Nepal
79. Godfrey, L.D., S. V. Joseph, **J. P. Rijal,** I. Grettenberger. (2016). Bagrada bug moves into central and northern California. Bagrada Bug News, Issue I (March). California Certified Organic Farmers
80. **Rijal, J. P.** (2016). Summary of insect monitoring in nut and fruit crops: summer update. The Scoop (of fruit and nuts in Stanislaus County). Vol 22.1 (July)

81. **Rijal, J. P.** (2016). Research to better understand spider mite migration timing. Nuts 'n' Bolts section, Pacific Nut Producer Newsletter Vol. 22, No. 6 (June)
82. **Rijal, J. P.** (2016). Research to better understand spider mite migration timing. Nuts 'n' Bolts section, Pacific Nut Producer Newsletter Vol. 22, No. 6 (June)
83. **Rijal, J. P.** (2016). Sampling and management of spider mites in almonds. Pacific Nut Producer Newsletter Vol. 22, No. 6 (June)
84. **Rijal, J. P.** (2016). Taking nut samples at harvest for insect damage evaluation. Field Notes Newsletter (August)
85. **Rijal, J. P.** (2016). Spider mites in almonds: monitoring and management. Field Notes Newsletter (May)
86. **Rijal, J. P.** (2016). Spotted Wing Drosophila in California Cherries: understanding the issue and options for management. California Fresh Fruit 33 (2): pp. 8-9.
87. **Rijal, J. P.** (2016). IPM of Spider mites in almonds: exploring the new sampling techniques. CAPCA Adviser Vol. 19, No. 4 (August)
88. **Rijal, J.P.** (2016). Brown Marmorated Stink Bug (BMSB) and its spread in California. Field Notes Newsletter, February.
89. **Rijal, J.P.** (2016). Monitoring and management of San Jose scale and other insect pests during the dormant season. The Almond Doctor.
90. **Rijal, J. P.** (2015). New IPM Advisor: an introduction. Field Notes Newsletter, August.
91. **Rijal, J. P.** (2015). Obscure mealybug found on almond trees for the first time in California. Entomology Today, Entomol. Soc. Am.
92. **Rijal, J.P.** (2015). Role of Winter Sanitation for Navel Orangeworm Management. The Almond Doctor
93. **Rijal, J. P.** (2015). Spotted wing Drosophila in California cherries. Field Notes Newsletter- November.

## **POLICY ENGAGEMENT AND CONTRIBUTIONS**

<b>2022-Present</b>	Member, Agricultural Pest Control Advisory Committee (APCAC), CA Dept. of Pesticide Regulation
<b>2025</b>	Invited to present on impacts of abandoned orchards on nearby orchards as a part of the California Assembly Bill 2745 discussion
<b>2023</b>	Invited to contribute as a panelist to California's Fifth Climate Change Assessment.
<b>2022- Present</b>	Assisted in developing guidelines for NRCS's 595 incentive program for small- to medium-sized growers in multiple pests and crops (navel orangeworm in almond, pistachio, walnut; spotted wing drosophila in cherry; vine mealybug in grape)
<b>2018-Present</b>	Advisory Committee Member, West Coast Nut magazine
<b>2018-Present</b>	Member, Farm Bureau/Ag Commissioner organized Spray Safe programs – San Joaquin; Stanislaus
<b>2022</b>	ANR Virtual tour for UC's President Drake, Regents of the University of California
<b>2022</b>	ANR Virtual tour for California's state and Congress Legislatures
<b>2022</b>	Invited by Google's X, the moonshot factory, to discuss with their tech team on almond pest monitoring tool and its field implications
<b>2020</b>	Joined ANR's delegation led by ANR VP Humiston to Washington D.C. for the CARET/AHS meeting, sharing extension impacts with lawmakers
<b>2019</b>	Participated in tour stop for the Americas Competitiveness Exchange (ACE 10) tour led by ANR VP Humiston

## PROFESSIONAL ENGAGEMENT AND COMPETENCE

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- **External Reviewer.** Served as an external reviewer for the tenure package of an academic/University of Hawaii
- **Mentor** for new academics (2022 & 2023)
- **Grant Reviewer**, California Department of Food and Agriculture (CDFA), Sacramento, California; UC ANR Competitive Grant, Davis, CA; CDFA's Pierce's Disease and Glassy-winged Sharpshooter Board (2019, 2020); California Cherry Board Research Proposals (2019, 2020)
- **Editor:** Guest Editor for the special issue of *Insects* journal  
[https://www.mdpi.com/journal/insects/special\\_issues/invasive\\_insect\\_management](https://www.mdpi.com/journal/insects/special_issues/invasive_insect_management))
- Guest Editor for a special issue in *Sustainability* journal; Editor for a pesticide manual, *Safe Use and Handling of Pesticides for Commercial Vegetable Growers in Nepal* (Author: S. McGowen)
- **Ad-hoc Reviewer** for journals: 1)Frontiers in Biological Science, 2)California Agriculture Journal, 3)Experimental and Applied Acarology, 4)Environmental Entomology, 5)Pest Management Science, 6)Crop Protection, 7)Insect Science, 8)Phytoparasitica, 9)HortTechnology, 10)Sustainability, 11)Sindh University Research Journal (Pakistan), 12)Journal of Plant Protection Society of Nepal, 13)American Journal of Agricultural and Biological Sciences, 14)International Journal of Pest Management, 15) Journal of Maize Research and Development, 16)UCIPM Strawberry Guidelines, 17) Archives of Phytopathology and Plant Protection, 18) Journal of Economic Entomology
- **Book chapter reviewer:** Integrated Management of Insect Pests on Canola and other Brassica Oil Seed Crops (Editor: G.V. Reddy)
- **Award Reviewer,**
  - IPM Awards (3 years in a row)
  - Award Chair and Reviewers: Reviewed award package submitted for SONE Graduate Student Contest, 2015, 2016, 2017
- **Abstract Reviewer:**
  - Posters, 9<sup>th</sup> International IPM Symposium, Baltimore, MD
  - Postdoctoral Research Symposium-2015, University of California Davis
  - Graduate Research Symposium-2013, Virginia Tech, Blacksburg, VA
- **Judge:**
  - 2017 Entomological Society of America meeting, Denver, Colorado
  - Interdisciplinary Graduate and Professional Student Symposium (IGPS), 3-4 April 2014, University of California-Davis
  - FFA Agricultural Pest Context 2016-19, Merced College, Merced, California
- **Expert Opinion:**
  - Developing economic pest phenology models, Google's Moonshot factory headquarter, Mountain View, CA
  - State agencies: CA Dept. of Pesticide Regulations, CA Dept of Food and Agriculture

## LEADERSHIP & PROFESSIONAL ACTIVITIES

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<b>2020-Present</b>	Associate Director for Agricultural IPM, University of California Statewide IPM Program, Davis, CA
<b>2022-Present</b>	Member, Agricultural Pest Control Advisory Committee (APCAC), CA Dept. of Pesticide Regulation
<b>2021-22</b>	Chair, 2022 Walnut Research Conference, Walnut Research Board/UCANR
<b>2018-Present</b>	Member, Farm Bureau/Ag Commissioner organized Spray Safe programs – San Joaquin; Stanislaus
<b>2022-2023</b>	Chair, Cooperative Extension Academic Advisors Representative Committee
<b>2020-Present</b>	Member, Research Advisory Board, California Cherry Board
<b>2019-22</b>	Co-Chair, International Committee, 10 <sup>th</sup> International IPM Symposium-2021, Denver, CO
<b>2020</b>	Organizer/Moderator, Symposium on Advancement in Natural and Biological-based Insecticide Research, Annual Meeting of Ent. Soc. Am.
<b>2017-2022</b>	Co-Chair, UC-ANR Entomology Workgroup, UC Cooperative Extension
<b>2018-Present</b>	Crop Team Leader, Cherry Pest Management Guidelines, UC IPM Program
<b>2016-2018</b>	Pacific Branch representative of the Early Career Professional (ECP), Entomological Society of America
<b>2017</b>	Poster Committee, 9 <sup>th</sup> International IPM Symposium, Baltimore, MD
<b>2017</b>	Co-Organizer, Organized meeting of the Society of Overseas Nepalese Entomologists at the ESA-2017, Denver.
<b>2017</b>	Organizer, Career Symposium for Students and Early Career Professionals, ESA-Pacific Branch Meeting
<b>2016</b>	Organizer, Symposium on Integrated Pest Management Around the World, International Congress of Entomology, Orlando, CA
<b>2016</b>	Moderator, Bee Basics Session, Pomology Extension Continuing Conference, UC Davis, California
<b>2016</b>	Moderator, Entomology Session, Walnut Research Conference, Bodega Bay, CA
<b>2015</b>	Organizer, Symposium on Current Research on Vegetable Insect Pests in the Western United States, ESA-Pacific Branch Meeting
<b>2015-Current</b>	President (Founder Member), Center for Agricultural Research and Development (CARD-Nepal) Reviewer, Friends of IPM Awards, Southern Region IPM Center
<b>2013-2014</b>	President, Society of Overseas Nepalese Entomologists
<b>2013, 2014</b>	Organizer, Society of Overseas Nepalese Entomologists symposium in the ESA annual meetings
<b>2013</b>	Secretary, Society of Overseas Nepalese Entomologists
<b>2012</b>	ESA-EB representative, WB Alwood Society, Virginia Tech
<b>2008-2010</b>	Executive Member, Plant Protection Society of Nepal
<b>2004-2006</b>	Executive Member, Graduate Student Association, Tribhuvan University/Institute of Agriculture and Animal Sciences

## PUBLIC OUTREACH AND COMMUNITY ENGAGEMENT

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- Provided insect identification service to the urban and agricultural clientele
- Regularly acted as an expert to resolve insect pest-related complaints reported to the Ag Commissioner Offices
- Regularly provided expertise to support local high school, local community college, California State University-Stanislaus by providing informational sessions, guest lab, and lectures, trained UC Masters Gardeners

- Member of ‘Spray Safe’ Committee-Stanislaus County, California
- Website Creator: Society of Overseas Nepalese Entomologists (SONE) website, [www.nepaloverseasento.info](http://www.nepaloverseasento.info); CARD-Nepal ([cardnepal.org](http://cardnepal.org)); IPM Corner ([IPMcorner.com](http://IPMcorner.com))
- Involved in educating Master Gardeners in several CA counties
- Judged ‘2016 FFA Field Day, Ag. Pest Control Contest, Merced College, Merced
- Participated in entomological tours/expos for public school children at Virginia Tech and Tribhuvan University
- Participated in ‘Big Event’ at Virginia Tech
- Participated in ‘Apple Harvest Festival, Winchester, VA
- Facilitated a season-long training “Organic pest management in vegetable crops” organized by *ECOSCENTRE* for vegetable growers in Fulbari VDC, Nepal
- Co-organizer of ‘Agriculture Expo-2007’ in Sankhuwasava District, Nepal
- Assisted campaign during ‘World Food Day’ organized by the District Agriculture Development Office in Sankhuwasava District (2006-2008), Nepal
- Student Volunteer: Eastern Branch ESA meetings-2011, 2012, 2013
  - Student Debate at ESA Annual Meeting on the topic “What is the best individual solution to address the challenge of growing global energy demand”-2012
  - Student Representative from Virginia Tech to ESA-Eastern branch-2012

## PROFESSIONAL MEMBERSHIPS

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Since 2015	Association of Applied IPM Ecologists (AAIE)
Since 2009	Entomological Society of America (ESA)
Since 2020	International Society of Horticultural Sciences (ISHS)

## PRESENTATIONS

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### ***Selected Invited Professional Talks***

1. Rijal, J.P. 2025. Spatial and tree height impacts on carpophilus beetle in nut crops. 2025 Pacific Branch Entomological Society American meeting, April 1, 2025, Salt Lake City, UT.
2. Rijal, J.P. 2025. Impacts of Climate Change & Drought on High-Value Tree Nut Pests in California. 11<sup>th</sup> International IPM Symposium, 3-6 March, 2025, San Diego, CA.
3. Rijal, J.P. 2025. Heat Waves, Drought, and the Impact on Specialty Crop Pests. Pesticide Safety Education Program, Oregon State University, 6 February, 2025, *Webinar*.
4. Rijal, J.P. 2025. Carpophilus Beetle Status as a Pest of California Nut Crops. 2025 Statewide Pistachio Day, January 17, 2025, Visalia, CA.
5. Rijal, J.P. 2025. Brown Spots in Almonds and IPM Implications. Annual Conference of AAIE (Association of Applied IPM Ecologists) Annual Conference, 3-4 February, Modesto, CA.
6. Rijal, J.P. 2024. Insect and Mite Pests of Prune and Their Management. UCANR Prune Short Course, 29-30 October, 2024, Davis, CA.
7. Rijal, J.P. 2024. Invasion of Carpophilus Beetle in California’s Nut Crops: Pest Status, Biology, and Management Tools. Annual meeting of California Association of Pest Control Advisors (CAPCA), 13-15 October, 2024, Anaheim, CA.

8. Rijal, J.P. 2024. Insect Vectors of Plant Pathogens. Pesticide Safety Education Program, Oregon State University, 30 October, 2024, *Webinar*.
9. Rijal, J.P., M. Ghimire, H. Wilson, S. Gyawaly and D. Haviland. 2024. Invasive *Carpophilus truncatus* infestations in California's nut crops – damage characterization & overwintering ecology. Pacific Branch Entomological Society of American annual meeting, 14-17 April, 2024. Hilo, HI.
10. Rijal, J.P. 2024. Tree and Nut Crops IPM: What's Working – What's Not. California Chapter Plant and Soil Conference, 6-7 February, 2024, Fresno, CA.
11. Rijal, J.P. 2023. Developing IPM strategies for managing flatheaded borer - a reemergent pest of California's walnut at the Entomological Society of America- Pacific Branch meeting, April 4, Seattle, WA.
12. Rijal, J.P. 2023. Old pest, but the new problem - flatheaded borer concerns in California walnuts & Efforts in Developing IPM Strategies. Ag Experts Talk, UC Statewide IPM Program, May 31, virtual.
13. Rijal, J.P. 2022. From the 1960s to Present: Progress in Adopting Integrated Pest Management (IPM) in California Agriculture. 2022 Entomological Society of America, Vancouver, Canada, November 15, 2022.
14. Rijal, J.P. 2022. Updates on Brown Marmorated Stink Bug (BMSB) Invasion in Agricultural Crops in California, for a delegation of high-ranked government officials of the country of Georgia. The delegation tour "National Food Agency of Georgia - California Study Tour" was hosted by California State University, Fresno, January 19.
15. Rijal, J. P. 2020. Integrated pest management (IPM) and its implementation in managing pests in nut crops in California. Modesto Junior College Fall Seminar Series Speaker, Oct. 7, 2020.
16. Rijal, J. P., J. Fisher, and F. Zalom. 2020. Seasonal and orchard-related factors affecting BMSB activity and damage to almonds. BMSB SCRI Stakeholder Meeting, Feb. 20-21, Davis, CA.
17. Rijal, J.P. 2020. Integrated pest management (IPM) and it's implications for the sustainability of commercial agriculture. Environmental Law Symposium, UC Davis Law School, Mar. 6, Davis, CA.
18. Rijal, J. P. 2020. Brown Marmorated Stink Bug: What Do We Know about the Pest and Infestation in CA Agriculture. Annual meeting of Ecological Farming Association, Jan. 22-25, Pacific Grove, CA
19. Rijal, J. P., J. C. Bergh, L. Godfrey, C. Brewster, G. Shrestha, and G. Reddy. 2019. Use of spatial distribution knowledge in monitoring and management of arthropod pests and natural enemies. The annual meeting of Entomological Society of America, 17-20 Nov., St Louis, MO.
20. Rijal, J. P., J. Fisher, and F. Zalom. 2019. Infestation history of brown marmorated stink bug in California almond and peach. The annual meeting of Agronomy Society of American-California Chapter, 5-6 Feb., Fresno, CA.
21. Rijal, J. P. 2018. Major arthropod pests of almonds and their organic control. Association of Applied IPM Ecologists (AAIE) Conference, 28-30 Nov., Visalia, CA.
22. Rijal, J. P. 2018. Managing codling moth, navel orangeworm, and other minor worm and borer pests of walnuts. Walnut Short Course organized by UC Davis and UC ANR, 5-7 Nov, Davis, CA

23. Rijal, J. P. 2018. Navel orangeworm mating disruption and brown marmorated stink bug updates. Almond Board of California Conference, 3-5 Dec., Sacramento, CA.
24. Rijal, J.P., J. Fisher, and F. Zalom. 2018. Story of BMSB invasion in California crops including almond- a five billion-dollar crop. The annual meeting of Entomological Society of America, 9-15 Nov., Vancouver, Canada.
25. Rijal, J.P. 2018. Codling moth, navel orangeworm, and other minor worm and borer pests of walnuts. Walnut Short Course, Nov. 5-7, UC Davis, Davis, CA.
26. Rijal, J. P. 2018. Updates on brown marmorated stink bug infestation in almond and peach & spotted lanternfly. IPM Advisor's Fall Meeting, Oct. 30-31, Modesto, CA.
27. Rijal, J.P. 2017. Navel Orangeworm, mites and brown marmorated stink bug. Almond Board of California Annual Conference, Dec. 5-7, Sacramento, CA.
28. Rijal, J. P., and J. Grant. 2017. Spotted wing drosophila management in cherries. The annual meeting of Entomological Society of America-Pacific Branch, 2-5 April, Portland, OR.
29. Rijal, J. P. 2016. Invasive species on our doorstep: potential threat of *Tuta absoluta* and *Helicoverpa armigera* to California agriculture. UCANR Entomology Workgroup Meeting, 15 November, Davis, CA.
30. Gyawaly, S., J. P. Rijal. R. Regmi, K. Puri. R. Ghimire, N. Bhattarai, R. Ghimire. 2016. Current status of IPM-based practices in commercial vegetable productions in Nepal. International Congress of Entomology (ICE) meeting, Orlando, FL.
31. Rijal, J. P., J. C. Bergh, K. E. Tollerup, and L. D. Godfrey. 2015. Behavioral and ecological factors associated with root feeding insects and implications for IPM-based pest management. The annual meeting of Entomological Society of America, 15-18 November, Minneapolis, MN.
32. Godfrey, L.D., **J. P. Rijal**, and K. E. Tollerup. 2015. Refined management of arthropod pests of mint to improve sustainability and protect water quality. The annual meeting of Entomological Society of America, 15-18 November, Minneapolis, MN.
33. Godfrey, L.D, **J. P. Rijal**, K. E. Tollerup, and M. Amir-Aghaee. 2015. Impacts of Invasive Pests on IPM of Field Crops in the Sacramento Valley and Intermountain Region of California. The annual meeting of Entomological Society of America-Pacific Branch, 12-15 April, Coeur d'Alene, ID.

### ***Professional Meeting Talks***

1. Rijal, J.P., M. Ghimire, H. Wilson, S. Gyawaly and D. Haviland. 2025. Invasive *Carpophilus truncatus*: Pest status, spatial and within-tree distributions in tree nut orchards. 99<sup>th</sup> Annual Orchard Pest and Disease Conference, 15-17, January, Portland, OR.
2. Rijal, J.P., S. Sakaki, and S. Gyawaly. 2025. Entomopathogenic Fungus and Nematodes on Walnut Husk Fly (*Rhagoletis completa*) Control. 29-31 January, 2025, Bodega Bay, CA.
3. Rijal, J.P., S. Sakaki, and S. Gyawaly. 2025. Efficacy of Entomopathogenic Fungus and Nematodes on Walnut Husk Fly (*Rhagoletis completa*). 99<sup>th</sup> Annual Orchard Pest and Disease Conference, 15-17, January, Portland, OR.
4. Rijal, J.P., M. Maskey, P. Jha, and T. Pathak. 2024. Climate Change and Pests: Emerging Threats to California's Tree Crops. Entomological Society of American annual meeting, 9-13 November, 2024, Phoenix, AZ.
5. Rijal, J.P. 2024. Developing IPM tools for Invasive Brown Marmorated Stink Bug, *Halyomorpha halys*, in California Almonds. International Congress of Entomology meeting, 25-30 August, 2024, Kyoto, Japan.

6. Rijal, J.P., S. Sakaki, S. Gyawaly. 2024. Effects of Entomopathogenic Fungus and Nematodes for Walnut Husk Fly (*Rhagoletis completa*) Control. 98th Annual Orchard Pest and Disease Conference, 10-12, January, Portland, OR.
7. Rijal, J.P. 2022. Successes and Lesson-learned from the Integrated Pest Management Farmer's Field School in Tackling Pests and Pesticide Issues. 10th International IPM Symposium, 2-6 March, 2022, Denver, CO.
8. Rijal, J.P., Sudan Gyawaly, and C. Vue. 2022. Understanding Phenology and Exploring Monitoring Tools for Pacific Flatheaded Borer in California Walnuts. Pacific Branch Entomological Society of America annual meeting, 10-13 April, 2022, Santa Rosa, CA.
9. Rijal, J.P. 2022. Invasion of Brown Marmorated Stink Bug in California Crops: What are the Risks to the Almond and other Crop Industries. International Congress of Entomology meeting, 17-23 July, 2022.
10. **Rijal, J.P.**, M. Maskey. T. Pathak. 2020. Impact of Climate Change on Navel Orangeworm, *Amyelois transitella* (Walker), Population Dynamics in Nut Crops in California. The annual meeting of Entomological Society of America, Nov. 16-19 (*Virtual*).
11. \*Gyawaly, S.G., and **J. P. Rijal**. 2020. Seasonal distribution of Brown Marmorated Stink Bug, *Halyomorpha halys* (Hemiptera: Pentatomidae), in almond and peach orchards in upper San Joaquin Valley in California. The annual meeting of Entomological Society of America, Nov. 16-19 (*Virtual*).
12. **Rijal, J.P.**, J. Fisher, and F. Zalom. 2019. Characterization of brown marmorated stink bug feeding damage in California almonds. 93<sup>rd</sup> Orchard Pest and Disease Management Conference, 9-11 January 2019, Portland, OR.
13. Rijal, J.P. 2018. Demonstration of navel orangeworm mating disruption in almonds. Almond Board of California annual meeting, 4-6 Dec, Sacramento, CA
14. **Rijal, J.P.**, R. Duncan, J. Fisher, and F. Zalom. 2018. Seasonal phenology and characterization of BMSB damage in almonds and cling peaches in California. The annual meeting of Entomological Society of America-Pacific Branch, 10-13 June, Reno, NV.
15. **Rijal, J. P.** 2018. Monitoring of brown marmorated stink bug in the northern San Joaquin Valley peach orchards. CA Cling Peach Research Meeting, 18 January, Davis, CA
16. **Rijal, J.P.**, K. Tollerup, F. Zalom, and N. Nicole. 2018. Developing sampling methods for pre-season mite detection in almonds. 92<sup>nd</sup> Annual meeting of the Orchard Pest and Disease Management Conference (OPDMC), 10-12 January, Portland, OR.
17. **Rijal, J.P.**, and R. Duncan. 2018. An update on brown marmorated stink bug infestation in the northern San Joaquin Valley-California. 92<sup>nd</sup> Annual meeting of the Orchard Pest and Disease Management Conference (OPDMC), 10-12 January, Portland, OR.
18. \*Pickett, C., R. Lara, M. Hoddle, E. Grafton-Cardwell, D. Lightle, **J. P. Rijal**. 2018. Biological control of brown marmorated stink bug, an update. BMSB IPM Working Group Meeting, Nov. 29, Winchester, Virginia.
19. **Rijal, J.P.**, and K. Tollerup. 2017. Developing sampling methods for pre-season mite detection in almonds, Almond Board of California Annual Conference, 5-7 December, Sacramento, CA
20. **Rijal, J.P.** 2017. Phenology and infestation of brown marmorated stink bug in fruit and nut crops in the northern San Joaquin Valley, California. Annual meeting of Entomological Society of America, 5-9 November, Denver, CO.
21. **Rijal, J. P.** 2017. Development of a method to extract husk fly pupae from the soil. UCANR Walnut Entomology PRAC meeting. 20 November, San Joaquin Ag Center, Stockton, CA.

22. **Rijal, J.P.**, and R. Duncan. 2017. First evidence of finding brown marmorated stink bug in agricultural area in California. International Heteroptera Symposium, 18-20 April, Monterey, CA.
23. **Rijal, J.P.**, and R. Duncan. 2017. Detection survey of brown marmorated stink bug in peach orchards in San Joaquin Valley, California. 91<sup>st</sup> Annual meeting of the Orchard Pest and Disease Management Conference (OPMDC), 11-13 January, Portland, OR.
24. **Rijal, J. P.** 2017. Walnut Insect Pest Monitoring in the North San Joaquin Valley. Walnut Board Research Conference-2017, 25-27 January, Bodega Bay, CA
25. \*Grettenberger, I. M., **J. P. Rijal**, S. V. Joseph, and L.D. Godfrey. 2015. Plants outside the field matter: Interactions between *Bagrada hilaris* and non-crop hosts. International Congress of Entomology (ICE) meeting, Orlando, FL.
26. \*Grettenberger, I. M., **J. P. Rijal**, R. Smith, S. V. Joseph, and L.D. Godfrey. 2015. Seasonal dynamics of *Bagrada hilaris* on non-cultivated hosts in the Salinas Valley of California. The annual meeting of Entomological Society of America, 15-18 November, Minneapolis, MN.
27. \*Aghaee, M., **J. P. Rijal**, and L. D. Godfrey. 2015. The effect of brown marmorated stink bugs, *Halyomorpha halys*, on California Rice. The annual meeting of Entomological Society of America, 15-18 November, Minneapolis, MN.
28. \*Bloese, J. B., L. Espino, **J. P. Rijal**, and K. Goding, and L. D. Godfrey. 2015. Developing integrated pest management practices for tadpole shrimp, *Triops longicaudatus*, in California rice fields. The annual meeting of Entomological Society of America, 15-18 November, Minneapolis, MN.
29. **Rijal, J.P.**, R. Wilson, and L. D. Godfrey. 2015. Within-field distribution of twospotted spider mites in peppermint: implications for sampling. The annual meeting of Entomological Society of America-Pacific Branch, 12-15 April, Coeur d'Alene, ID.
30. \*Aghaee, M-A, L. D. Godfrey, and **J. P. Rijal**. 2015. Brown marmorated stink bug (*Halyomorpha halys*) may pose a threat to California rice. The annual meeting of Entomological Society of America-Pacific Branch, 12-15 April, Coeur d'Alene, ID.

\* *J. Rijal was not a presenting author*

#### **Poster Presentation (8-last 5 years)**

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1. Rijal, J. P. M. Ghimire, S. Gyawaly, R. Lara, R. Bansal and T. Michailides. 2024. Improving Integrated Pest Management Practices of Major Hemipteran Pests in Almond Orchards. The Almond Conference. 10-12 December, 2024, Sacramento, CA.
2. Rijal, J. P. M. Ghimire, S. Gyawaly, A. Joyce, R. Bansal. 2023. Biology, Monitoring, and Management of Native and Invasive Stink Bugs in Almond Orchards. The Almond Conference. 5-7 December, 2023, Sacramento, CA.
3. Rijal, J. P. S. Gyawaly, A. Joyce, R. Bansal. 2022. Biology, Monitoring, and Management of Native and Invasive Stink Bugs in Almond Orchards. The Almond Conference. 6-8 December, 2022, Sacramento, CA.
4. Rijal, J. P., A. Medina, R. Gomez, and D. Rivers. 2019. Measuring the depth of overwintering pupae of the walnut husk fly, *Rhagoletis completa* in walnut orchard floor. The annual meeting of Entomological Society of America-Pacific Branch, Mar 31-April 1, San Diego, CA.

5. Rijal, J.P., J. Fisher, and F. Zalom. 2018. Biology, monitoring, and management of brown marmorated stink bug in almond orchards. Almond Board of California Annual Conference, 3-5 December, Sacramento, CA.
6. Rijal, J.P. 2018. Invasion of brown marmorated stink bug (BMSB) in California crops. UCANR Statewide Conference, 9-12 April, Lancaster, CA.
7. Rijal, J.P. 2017. New Pest Update: Reports of brown marmorated stink bug (BMSB) infestation in peach and almond orchards in California. Almond Board of California Annual Conference, 5-7 December, Sacramento, CA.
8. **Rijal, J.P.**, and K. Tollerup. 2017. Developing sampling methods for pre-season mite detection in almonds. Almond Board of California Annual Conference, 5-7 December, Sacramento, CA.
9. **Rijal, J. P.** 2016. Effect of winter flooding on spider mites and navel orangeworm infestation in an almond orchard. Almond Board Conference, 6-8 December, Sacramento, CA.
10. **Rijal, J.P.**, and R. Duncan. 2016. Monitoring of brown marmorated stink bug in the northern San Joaquin Valley. International Congress of Entomology meeting, 25-30 September, Orlando, FL.
11. **Rijal, J. P.**, and K. E. Tollerup. 2016. Developing sampling methods for pre-season mite detection and implementing management decisions. Almond Board Conference, 6-8 December, Sacramento, CA.

### ***Extension Talks (last 5 years)***

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#### **Year 2025**

- 9 January 2025. How to Best Control New and Emerging Pests and Threats in a Changing Environment. California Walnut Conference, Yuba City, CA
- 10 January 2025. Emerging Issue of Brown Spots in Almonds and IPM Implications. CAPCA Central Valley Seminar, Modesto, CA
- 21 January 2025. Invasive Carpophilus Beetle Infestation Status in Almonds. North San Joaquin Valley Almond Day, Modesto, CA
- 22 January 2025. Invasive Carpophilus Beetle Status as a Pest of California Nut Crops. Statewide Pistachio Day, Visalia, CA
- 23 January 2025. 2024 Season Pest Issue Review. Salida Ag Meeting, Salida, CA
- 28 January 2025. Brown Spots in Almonds and IPM Implications. Nuveen Natural Extension Meeting, Fresno, CA
- 30 January 2025. IPM Activities in the Northern San Joaquin Valley Walnut Orchards. Walnut Research Conference, Bodega Bay, CA
- 30 January 2025. Entomopathogenic Fungus and Nematodes on Walnut Husk Fly (*Rhagoletis completa*) Control. Walnut Research Conference, Bodega Bay, CA
- 4 February 2025. Updates on Invasive Carpophilus Beetle. Madera County Almond Day, Madera, CA
- 6 February 2025. IPM of Major Peach Pests – Oriental Fruit Moth, Thrips, Stink Bugs. North San Joaquin Valley Peach Day, Merced, CA
- 12 March 2025. Seasonal Pest Monitoring as a Part of the Integrated Pest Management (IPM) in Almonds. Almond Board of California ID Workshop, Modesto, CA
- 13 March 2025. Insect Monitoring: Basis for Integrated Pest Management (IPM) in Tree Crops. UCCE Merced Spring CE Seminar, Merced, CA
- 18 March 2025. Research Updates on Carpophilus Beetle, Flatheaded Borer, and Walnut Husk Fly. Quad County Walnut Institute Meeting, Stockton, CA

- 18 February 2025. Research Update on Pesticide Resistance in Spotted Wing Drosophila. California Cherry Grower Meeting, Stockton, CA

### **Year 2024**

- 3 January 2024. Pest status of invasive *Carpophilus* beetle in California's tree nut orchards. Grower's Choice Breakfast Meeting, Escalon, CA
- 17 January 2024. Updates on navel orangeworm and *Carpophilus* beetle. Central Valley CAPCA Meeting, Modesto, CA
- 7 March 2024. Effect of climate change and variability on agricultural pests & potential risk management. Workshop on Adapting Fruit and Nut Production Practices to Climate Change, Tulare, CA
- 13 March 2024. Updates on invasive *Carpophilus* beetle in California's tree nuts. New and Emerging Pests Workshop (organized by Almond Board of California), Modesto, CA
- 21 March 2024. Addressing the increasing problem of flatheaded borer in walnut orchards. 2024 Lake County Walnut Day, Lake County (remote presentation)
- 4 April 2024. Updates on *Carpophilus* beetle infestation in almonds. North San Joaquin Valley Almond Day, Modesto, CA
- 18 May 2024. New invasive nut crop pest – *Carpophilus* beetle. Punjabi American Growers Group (PAGG) Annual Meeting, Madera, CA
- 11 July 2024. New invasive nut crop pest – *Carpophilus* beetle. Helena Research Field Day, Merced, CA
- 2 October 2024. Updates on new invasive nut crop pest – *Carpophilus* beetle. SJ County Ag Commissioner Fall-Winter CE Pest Meeting, Stockton, CA
- 15 October 2024. Invasion of *Carpophilus* Beetle in California's Nut Crops: Pest Status, Biology, and Management Tools. CAPCA Annual Meeting, Anaheim, CA
- 22 October 2024. Postseason Update on Navel Orangeworm and *Carpophilus* Beetle in Almonds. UCCE Merced Fall CE Seminar, Merced, CA
- 6 November 2024. *Carpophilus* Beetle in California's Nut Crops: Biology, Monitoring and Management Tools. Helena Research Meeting, Merced, CA
- 7 November 2024. *Carpophilus* Beetle: Management Strategy in Nut Orchards. South Valley Conference, Tulare, CA
- 14 November 2024. *Carpophilus* Beetle Update: Biology, Monitoring and Management Tools. South Valley Farm Meeting, Bakersfield, CA
- 3 December 2024. Almond Pests IPM: Mites, Tree Bugs, Navel Orangeworm and Invasive *Carpophilus* Beetle. Stanislaus Ag CE Seminar, Modesto, CA
- 8 December 2024. Reflections on NOW in 2023 and *Carpophilus* update. Madera County Almond Day, Madera, CA

### **Year 2023**

- 12 January 2023. A multi-faceted approach of navel orangeworm management. North San Joaquin Valley Almond Day, Modesto, CA
- 30–31 January 2023. Navel orangeworm IPM. Semios Growers Meeting, Woodland, CA; Turlock, CA
- 2 February 2023. Brown spot & navel orangeworm issues in almonds. Merced Farm Bureau Ed Seminar, Merced, CA
- 1 March–21 June 2023. IPM updates on major nut crop pests and degree-days. Tree & Vine IPM Breakfast Meetings (8 events), Modesto, CA
- 23 March 2023. Navel orangeworm management in nuts. Madera County Almond Day, Madera, CA
- 31 May 2023. Navel orangeworm and mating disruption effectiveness. Cortez Grower Association Meeting, Cortez, CA
- 2 August 2023. Seasonal pest monitoring update. Cortez Growers IPM Meeting, Cortez, CA

22 March 2023. Effect of climate change on agricultural pests and future management implications. Climate Smart Ag Workshop, Merced, CA

- 7 February 2023. IPM updates on major nut crop pests. AAIE Roundtable, Lodi, CA
- 16 October 2023. Managing insecticide resistance in spotted wing drosophila using integrated approach. California Association of PCAs (CAPCA) Annual Meeting, Reno, NV
- 22 November 2023. Invasive *Carpophilus* beetle update. Cortez Growers Association Meeting, Cortez, CA
- 9 November 2023. Post-harvest review and reflection of almond and walnut insect pests & their management. Merced County Fall CE Seminar, Merced, CA

## **Year 2022**

- 3 November 2022. Increased stink bug pressure & what to do about it. California Tree Nut Conference, Tulare, CA
- 16 November 2022. Brown spot issue in almonds. Blue Diamond Grower Meeting, Modesto, CA
- 17 November 2022. Integrated management of insect pests of tree crops. Bay Area–Central Coast Regional Tree Crop Workshop, Virtual
- 30 January 2022. Biology and IPM of brown marmorated stink bug in almond and peach orchards. Stanislaus Farm Supply, Modesto, CA
- 18 January 2022. Managing navel orangeworm in almond and walnut orchards. Yuba City Spray Safe Meeting, Yuba City, CA
- 27 January 2022. Seasonal pest monitoring and IPM activities in the Northern San Joaquin Valley. Walnut Research Conference, Virtual
- 22 February 2022. Research updates on codling moth, navel orangeworm, and walnut husk fly. Statewide Walnut Extension Meeting, Virtual
- 10 May 2022. Navel orangeworm and codling moth control in walnuts. Nickels Soil Lab Annual Meeting, Arbuckle, CA
- 2 February 2022. Multi-pronged approach to manage spotted wing drosophila in soft fruits and berries. CAPCA Spring Summit, Napa, CA
- 8 February 2022. Brown spots on almonds – Major causes and mitigation measures. North San Joaquin Valley Almond Day, Modesto, CA
- 20 April 2022. Spotted lanternfly? A serious invasive pest to watch out for. Clarksburg Wine Growers & Vintners Association Annual Meeting, Clarksburg, CA
- 19 October 2022. Managing navel orangeworm in almond and walnut orchards. UCCE Merced CE Seminar, Merced, CA
- 16 November 2022. Navel orangeworm and neighborhood mating disruption. Blue Diamond Annual Grower Meeting, Modesto, CA

## **Year 2021**

- 14 January 2021. Monitoring and management of plant and stink bugs in almonds. San Joaquin Valley Almond Day, Virtual
- 21 January 2021. Biology, monitoring & management of walnut husk fly. West Coast Nut / California Walnut Board Meeting, Virtual
- 26 January 2021. Insecticide resistance management of SWD in cherry. Cherry Grower Annual Meeting, Virtual
- 25 February 2021. BMSB in peach orchards: biology, monitoring, and management. Statewide Cling Peach Day, Virtual
- 19 May 2021. Managing leaffooted and stink bugs in almonds. Farm Bureau & Ag Commissioner Ed Seminar, Virtual
- 10 June 2021. Spotted wing drosophila update. Orchard Management Workshop Series, Virtual
- 26 June 2021. Use of mating disruption in NOW IPM in almonds. Almond Board Webinar, Virtual
- 7 July 2021. BMSB infestation status in California. PAPA Seminar, Virtual
- 12 July 2021. Effect of climate change on NOW population dynamics. Pistachio Workgroup

Meeting, Virtual

- 12 August 2021. Pest pressure in orchards under shrinking water availability. Ag Commissioner's CE Seminar, Virtual
- 8 November 2021. Managing walnut husk fly. PNP Tree and Vine Conference & Expo, Turlock, CA
- 18 November 2021. Brown spots in almonds – Potential causes. Blue Diamond Growers Annual Meeting, Virtual

### **Year 2020**

- 10 January 2020. Pacific flatheaded borer: a new problem? Walnut Board/West Coast Nut Walnut Meeting, Yuba City, CA
- 21 January 2020. Integrated approach of navel orangeworm management. Semios Navel Orangeworm Workshop, Modesto, CA
- 24 January 2020. BMSB: What do we know about the pest and infestation in CA agriculture? EcoFarm Conference, Pacific Grove, CA
- 29 January 2020. Biology and control of Pacific flatheaded borer in walnuts. Walnut Research Conference, Bodega Bay, CA
- 31 January 2020. Biology and integrated management of NOW in almonds. North San Joaquin Valley Almond Day, Modesto, CA
- 2 February 2020. Integration of mating disruption in controlling NOW in almonds. CAPCA Educational Seminar, Tracy, CA
- 4 February 2020. BMSB in peach orchards: ID, biology, monitoring, and management. Sacramento Valley Peach Day, Yuba City, CA
- 9 March 2020. Updates on flatheaded borer and walnut scale. Quad County Walnut Extension Meeting, Stockton, CA
- 19 March 2020. Use of NOW mating disruption in almond IPM. Almond Board and NRCS Collaboration Meeting, Modesto, CA
- 29 April 2020. Use of mating disruption in NOW IPM. Almond Board of California CASP Meeting, Virtual
- 20 May 2020. Managing mites in almond orchards with IPM. Almond Board CASP Meeting, Virtual
- 9 June 2020. NOW mating disruption, BMSB, flatheaded borer. Wilbur-Ellis PCA Meeting, Virtual
- 13 October 2020. Biology and management of plant and stink bugs in almonds and pistachios. Merced County CE Seminar, Virtual
- 10 November 2020. Managing NOW in almond and walnut orchards. Tree and Vine Expo, Virtual
- 15 December 2020. Managing hemipteran bugs in almonds and pistachios. Madera County Farm Bureau Educational Meeting, Virtual

### **GUEST CLASSES**

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|--------------------|--|
| <b>Spring 2025</b> | <b>Guest Lecture (March 6): Modesto Junior College, Modesto, CA</b><br><b>Topic:</b> Concept of Integrated pest management and its implications in tree crops                            |
| <b>Spring 2025</b> | <b>Guest Lecture (March 19): Delta College, Manteca, CA</b><br><b>Topic:</b> Hands on activities and identifications of insects and its damage; integrated pest management in tree crops |
| <b>Spring 2024</b> | <b>Guest Class (March 24): University of California Merced, Merced, CA</b>   |

**Topic:** Integrated pest management and its utility in modern day agriculture

**Spring 2018,  
2019**

**Guest Lecture:** Merced College, Merced, CA  
**Title (April 24):** Implementing IPM practices: degree days, monitoring, and use of mating disruption

**Spring 2018**

**Guest Lecture:** California State University-Stanislaus, CA

**Class 1 (March 23):** Insect pheromone-based communication and navel orangeworm mating disruption

**Class 2 (April 13):** Brown marmorated stink bug: biology and monitoring

**Lab 1:** Familiarity of insect monitoring tools and navel orangeworm mating disruption products

**Spring 2017**

**Guest Lecture:** California State University-Stanislaus, CA

**Class 1:** Pest Management Research in Tree Fruits

**Class 2:** Insect Pheromone-based Communication and Mating Disruption: Principles and Practices

**Lab 1:** Familiarity with insect monitoring traps and tools

**Feb 16, 2017**

**Guest Lecture:** Liberty Ranch High School, Galt, CA

**Title:** Concept of IPM, Entomology Research, and Careers in the Pest Management Industry

**Fall 2016**

**Guest Lecture-**Merced College, Merced, CA

**Title:** Implementation of IPM practices in orchard crops

**Spring 2016**

**Guest Lecture-**California State University-Stanislaus, CA

**Title:** Concept of IPM and its implementations in crop protection

**Fall 2015:**

**Guest Lecture-**California State University-Stanislaus, CA

**Title:** Implications of entomological studies for pest management

**Fall 2012:**

**Guest Lecture-**Dept. of Biology, Virginia Tech

**Lecture title-**Chemical ecology and behavior involved in food finding by root-feeding insects

**Spring 2011:**

**Teaching Assistant-**Dept. of Entomology, Virginia Tech

Professor: Dr. Sally L. Paulson

Course: Medical & Veterinary Entomology Lab (ENT 3264)

- Delivered lab lectures, assisted with insect identification
- Designed and proctored quizzes and final exams and graded exams

**Jul. 2005 –  
Jun. 2006:**

**Lecturer** (part-time)- Tribhuvan University

Institute of Agriculture and Animal Sciences, Nepal

Course: Introductory Entomology (Lecture & Lab) (ENT 211)

- Developed syllabus and overall course structure for lectures and laboratory
- Delivered lectures and labs, designed and proctored quizzes, mid-term and final exams and graded exams

## IN THE NEWS & INTERVIEW

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- Mar 17, 2025. Almond Day Updates Growers on New Pest, Disease in California. <https://pacificnutproducer.com/2025/03/17/almond-day-updates-growers-on-new-pest-disease-in-california/>
- Feb 3, 2025. UC Cooperative Extension advisers organize educational event in north San Joaquin Valley. <https://www.farmprogress.com/tree-nuts/almond-day-updates-growers-on-new-pest-disease>
- Aug 19, 2024. UCCE releases Carpophilus beetle identification guide. <https://nationalnutgrower.com/news/ucce-releases-carpophilus-beetle-identification-guide/>
- Jun 7, 2024. New beetle emerging threat to nut crops. <https://fruitgrowersnews.com/news/new-beetle-emerging-threat-to-nut-crops/>
- Feb 23, 2024. California's almond crop under attack by invasive beetles. <https://www.abc10.com/article/news/local/californias-invasive-beetles-almonds/103-7ae994d3-dffc-48be-9174-dfb9a2080e57>
- Feb 22, 2024. Invasive beetles threaten California almond crop: "One thing we know about this bug is we don't know anything. <https://www.cbsnews.com/sacramento/news/invasive-beetles-threatening-californias-almond-crop/>
- Nov 29, 2023. Climate Change to Drive Surge in Insects that Attack Almonds, Peaches, Walnuts. <https://news.ucmerced.edu/news/2023/climate-change-drive-surge-insects-attack-almonds-peaches-walnuts>
- Oct 1, 2021 – Sep 30, 2023. Managed the IPM Corner Blog ([www.IPMCorner.com](http://www.IPMCorner.com)) with >900 visitors and 267 subscribers. Provided biweekly seasonal insect trapping updates, pest counts, and downloadable degree-day info for almond, peach, and walnut crops.
- Oct 1, 2021 – Sep 30, 2023. Maintained social media presence through LinkedIn (over 1,800 followers) to disseminate pest updates, meeting notices, and other alerts.
- Jun 13, 2023. Featured guest on *UCCE Growing the Valley Podcast* hosted by Phoebe Gordon, discussing Pacific flatheaded borer issues in walnut orchards. [Listen here](#)
- 23 January 2023. *Growers Limited to Insecticides for Control of Walnut Husk Fly* – Featured in CaliforniaAgNet YouTube Video (subscribers >6,500). [Watch here](#)
- Oct 6, 2022. Served as a panelist representing agriculture/pest management to discuss California-specific knowledge gaps and research priorities for California's Fifth Climate Change Assessment. Organized by the Governor's Office of Planning and Research in partnership with the California Council on Science & Technology (CCST).
- Jan 18, 2022. *UC ANR scientists receive \$1.5M NIFA grant for climate-smart agriculture*. [Article link](#)
- 1 October 2022 – 30 September 2023. *UCANR Virtual Tour: Engaging in California Agriculture* – Contributed segment on Nut Trees and the Navel Orangeworm. [View StoryMap](#)
- 1 October 2021 – 30 September 2023. Seasonal insect trapping updates, pest counts, and degree-day information for almonds, peaches, and walnuts. Regular biweekly blog posts during the growing season. IPM Corner Blog ([www.IPMCorner.com](http://www.IPMCorner.com))
- Oct. 2020. UCANR Green Blog. A hike in navel orangeworm pressure is expected later this century due to climate change. <https://ucanr.edu/News/?routeName=newsstory&postnum=44034>
- Sept. 2020. UCANR Green Blog. New \$1 million research project to test mating disruption for pest control in walnuts. <https://ucanr.edu/blogs/blogcore/postdetail.cfm?postnum=43565&sharing=yes>
- Jun. 2020. [My Ag Life podcast](#). Walnut Husk Fly: Biology, monitoring and management
- Growing the Valley podcast: 1) Spotted wing drosophila (5/12/2020), 2) Pacific flatheaded borer (12/3/2019), 3) Brown marmorated stink bug (8/19/2019). <https://www.growingthevalleypodcast.com/>

- Dec. 2018. Effective use of Mating Disruption in Navel Orangeworm Control Program. Interview with Pacific Nut Producer Magazine (video).
- Nov. 2018. Sanitation is the Foundation of Navel Orangeworm Control. <https://www.westernfarmpress.com/print/46914>
- Oct. 2018. Growing the Valley Podcast on Brown marmorated stink bug, <https://www.growingthevalleypodcast.com/podcastfeed/2018/10/19/brown-marmorated-stink-bug-with-dr-jhalendra-rijal>
- Oct. 2018. Mating Disruption, an Effective Tool against Navel Orangeworm. Western Farm Press. <https://www.farmprogress.com/tree-nuts/mating-disruption-effective-tool-against-navel-orangeworm>
- Sept. 2018. Farm Advisors Study Pacific Flathead Borer Infestation in Walnuts. <https://www.westernfarmpress.com/print/45805>
- Jun. 2018. Brown Marmorated Stink Bug Officially Deemed Pest of California Almonds. Growing Produce. <https://www.growingproduce.com/nuts/brown-marmorated-stink-bug-officially-deemed-pest-california-almonds/>
- June-August. 2018. Contributed to 6 updates on tree crop insect pests and their management for <https://agfax.com/>.
- Building an IPM program to fight fruit flies. Published by David Eddy <https://www.growingproduce.com/fruits/building-ipm-program-fight-fruit-flies/>
- Mar. 2018. Best Management Practices of NOW in Pistachio. West Coast Nut (Contributing Writer: Cecelia Parsons).
- Jan. 22, 2018. Growing Produce. Almond Growers Should Take a New Look at Bts. <https://www.growingproduce.com/crop-protection/almond-growers-take-new-look-bts/>
- Dec. 2017. Mating Disruption Spells Trouble for Navel Orangeworm, Delivers Value for Growers. <http://newsroom.almonds.com/content/mating-disruption-spells-trouble-for-navel-orangeworm-delivers-value-for-growers>
- Nov. 2017. Winter sanitation is key to combating navel orangeworm. Outlook-Newsletter of Almond Board of California. <https://newsroom.almonds.com/content/winter-sanitation-key-to-combating-navel-orangeworm>
- Nov. 2017. Western Farm Press. Winter Sanitation Key to Combating Navel Orangeworm. <https://www.farmprogress.com/tree-nuts/winter-sanitation-key-combating-navel-orangeworm>
- Oct. 2017. Youtube video produced by San Joaquin Sustainable Project covering a field meeting talk on almond dormant period pest management, Los Banos, CA
- Interview: Aug. 2017: American Fruit Grower and Western Fruit Grower. Almond, peach growers on alert: stink bug threatens high dollar crops. <http://www.growingproduce.com/nuts/stink-bug-threatens-high-dollar-crops-in-california/>
- Jul. 2017: West Coast Nut magazine. Describing my contribution to Almond Pest ID Workshop, organized by the Almond Board of California.
- May. 2017. Youtube video produced by Pacific Nut Producer Magazine on walnut husk fly management.
- Jan. 2017. Almond Facts magazine described navel orangeworm monitoring and management-related articles based on my presentation at the Blue Diamond Grower-annual meeting.
- Dec. 2016. Article published by Pacific Nut Producer Magazine. Describing my talk and contribution to Tree & Vine Expo, Turlock, CA.
- Aug. 2016: Brown marmorated stink bug (BMSB) USDA-Funding <http://ucanr.edu/blogs/blogcore/postdetail.cfm?postnum=21820>
- Oct. 2015. Youtube video produced by Pacific Nut Producer Magazine about almond IPM.
- Sept. 2015. Youtube video produced by San Joaquin Sustainable Project covering the field meeting talk on dormant period pest management in almonds, Los Banos, CA.

- Aug. 2015: Modesto Bee article about brown marmorated stink bug (BMSB). <http://www.modbee.com/news/article30007908.html>
- Aug. 2015: KCRA TV news about brown marmorated stink bug (BMSB) <http://www.kcra.com/news/stinkbugs-pose-problems-for-area-crops/34563294>
- Oct. 2015: Postharvest pest management, nutrition, and irrigation critical for next year's almond season. Western Farm Press news. <http://westernfarmpress.com/tree-nuts/postharvest-pest-management-nutrition-and-irrigation-critical-next-year-s-almond-season>

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## TECHNICAL SKILLS AND TRAINING

- Observer XT (Ver. 10): Quantitative analysis of animal behavior
- Etho-Vision XT (Ver. 8): Video tracking of insect behavior
- Geostatistics software (GS+ Ver. 9.0-10): Spatial autocorrelation analysis
- Spatial Analysis by Distance Indices (SADIE Ver. 2): Spatial distributions of animals
- Independent study: Design and development of behavioral bioassays for insects (Mentors: Dr. Chris Bergh, Dr. Tracy Leskey, and Dr. Aijun Zhang)

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## RELEVANT CERTIFICATES AND WORKSHOPS

- Leadership and Team Management courses from LinkedIn Learning: Managing Teams; Coaching Skills for Leaders and Managers; Leadership Foundations; Leadership Tips, Tactics, and Advice; Strategic Thinking; Motivating and Engaging Employees; Building Your Team
- Responsible Conduct of Research for Administrators by CITI program/UC Davis
- Project Management Certificate (by Google/Coursera): 1) Foundation of Project Management; 2) Project Planning, 3) Project Initiation, and 4) Project Execution
- 'WebGIS and mobile data collection workshop organized by the University of California ANR GIS team. Learned about some GIS-based tools and mobile apps that can be used to design sampling/surveys for in-field data collection and management, 2018
- Coursera course on *Introduction to Environmental Law and Policy*. Course instructor: Prof. Don Hornstein. University of North Carolina, Chapel Hill. 16 Sept-28 Oct. 2013
- *Laboratory Accreditation & Requirements of ISO 17025: 2005*, organized by Nepal Bureau of Standards and Metrology (NBSM), Govt of Nepal. 20-22 April 2009
- *Pest Survey, Surveillance, and Monitoring*, organized by Plant Protection Directorate, 16-23 March 2009
- *Phytosanitary Certificate and Administrative Procedures*, organized by National Plant Quarantine Program, Govt of Nepal. 30 November - 5 December 2008
- *Sanitary and Phytosanitary Measures (SPS) and Related Laboratory Techniques* (based on ISPMs of IPPC), organized by National Plant Quarantine Program, Govt of Nepal. 2008
- *Helicoverpa Nuclear Polyhedrosis Virus (HNPV) Production and Use in the Field*, organized by National Grain Legume Research Program, 19-20 December 2005