

## Education

- Ph.D. **Applied Entomology.** ETH Zurich (Swiss Federal Institute of Technology), Switzerland, 2005.
- M.Sc. **Ecology (major), Zoology, Microbiology, Environmental Sciences (minors).** Friedrich-Schiller-University, Jena, Germany, 2000.
- B.Sc. **Biology.** Friedrich-Schiller-University, Jena, Germany, 1996.

## Professional Experience

- WSU-DAS Manager/Educator & Postdoctoral Research Associate 2009-present  
Tree Fruit Research & Extension Center, Washington State University
- Management, development, and stakeholder education for the WSU Decision Aid System (DAS) for IPM in Washington Tree Fruits – <http://das.wsu.edu>.
  - Evaluation of environmental data used for IPM models.
  - Validation of new phenology models for natural enemies, aphids and mites.
  - Outreach for Specialty Crop Research Initiative “Enhancing Biological Control in Western Orchards” (short course, workshops, online course development).
  - Development of OPENED (Orchard Pesticide Effects on Natural Enemies Database) – <http://enhancedbiocontrol/opened>.
- Postdoctoral Research Associate 2007-2009  
Dept. of Horticulture, Oregon State University  
Research advisor: Dr. V.M. Walton
- Development of alternative IPM strategies for insect pests in hazelnuts, such as entomopathogenic nematodes, cultural practices, precision and softer spray programs, and mating disruption.
  - Monitoring of filbertworm, aphids, and aphid parasitoids in hazelnut orchards. Investigation of temperature-dependent emergence of filbertworm to improve the current phenology model.
  - Outreach activities for growers (field days, workshops, grower meetings).
  - Determination of the economic impact of, and control strategies for, black vine weevil on blueberries.
- Research and Teaching Assistant 2000-2005  
Dept. of Agricultural and Food Sciences, Inst. of Plant Sciences/Applied Entomology, ETH Zurich  
Research advisors: Prof. Dr. S. Dorn, Dr. J. Samietz
- PhD thesis: The impact of apple plant architecture, hail nets and thermoregulation on the phenology of the codling moth, *Cydia pomonella* (L.).
  - Field study of the impact of plant architecture and hail nets on codling moth habitat temperatures and solar radiation in traditional and dwarf apple trees.
  - Investigation of thermoregulation behavior of different codling moth stages in temperature gradient experiments.
  - Theoretical analysis of the impact of plant architecture, hail nets and thermoregulation behavior on codling moth development in phenology model.
- Research Assistant 1998-2000  
Inst. of Ecology, Friedrich-Schiller University Jena, Germany  
Research advisors: Prof. Dr. S. Halle, Prof. Dr. W.W. Weisser, Dr. J. Samietz
- Diploma thesis: Analysis of behavioural mechanisms of thermoregulation of the African Locust, *Locusta migratoria* L.
- Teaching Assistant 1995-1996  
Inst. of Systematic Zoology and Evolutionary Biology, Friedrich-Schiller University Jena, Germany

## Extension Education Interests

- Develop and conduct engaging outreach/extension activities for stakeholders (e.g. hands-on workshops, online courses, field days, etc.).
- Develop decision support systems and tools for IPM.
- Communicate stakeholder needs to inform research efforts.

## Research Interests

- Enhancing conservation biological control through phenology models, monitoring, and pesticide selection.
- Development and validation of integrated management strategies for insect and mite pests.
- Impact of temperature and thermoregulation behavior on insect development and implementation in phenology models.

## Professional Development/Education

- POGIL (Process Oriented Guided Inquiry Learning) workshop, WSU Pullman 2011
- Teaching Without Borders workshop for development of distance delivery courses, WSU Pullman 2010
- Survival skills for instructors new to teaching & Collaborative learning follow-up workshops, Center for Teaching & Learning, Oregon State University Corvallis 2009

## Awards

- Washington State University College of Agricultural, Human, and Natural Resource Sciences Team Interdisciplinary Award for WSU Decision Aid System 2013
- Women's Leadership in Science Award, Washington State Horticultural Association 2012

## Research Support

- Jones, V. & U. Chambers. *Development and validation of pest and natural enemy models*. Proposal to WA Tree Fruit Research Commission - \$234,599 2014-2016
- Brunner, J., Chambers, U. & A. Gadino. *Promoting Biological Control Through Hands-On and Web-Based Training Course, Mobile Apps, and Assisted Technology Transfer*. Proposal to WSDA Specialty Crop Block Grant Program - \$155,743 2013-2015
- Jones, V., Chambers, U. & T.R. Unruh. *Developing new natural enemy and pest models for WSU-DAS*. Proposal to WA Tree Fruit Research Commission - \$151,887 2013-2014
- Jones, V., Chambers, U. & J. Brunner. *Enhancing tree fruit IPM decision making through advances on WSU-DAS and training of growers and pest management advisors*. Proposal to WSDA Specialty Crop Block Grant Program - \$214,215 2011-2014
- Jones, V. & U. Chambers. *Enhancing biological control in apples: how do conventional and organic systems differ?* Proposal to WA Tree Fruit Research Commission - \$303,858 2011-2014
- Jones, V., Chambers, U. & G. Grove. *Evaluation of environmental data used for IPM models*. Proposal to WA Tree Fruit Research Commission - \$146,731 2010-2013
- Chambers, U. & V.M. Walton. *Economic impact and control of black vine weevil, Otiorhynchus sulcatus, on blueberries*. Proposal to the Oregon Blueberry Commission - \$14,303 2009-2010
- Walton, V.M. & U. Chambers. *Economic impact and control of black vine weevil, Otiorhynchus sulcatus, on blueberries*. Proposal to Agricultural Research Foundation Oregon - \$12,500 2009-2010
- Walton, V.M. & U. Chambers. *Development of Integrated Hazelnut Pest Management Strategies*. Proposal to the Agricultural Research Foundation – Oregon Hazelnut Commission - \$100,000 2007-2009

## Peer-Reviewed Publications

- Chambers, U., Walton, V.W. & S.A. Mehlenbacher, 2011. Susceptibility of hazelnut cultivars to filbertworm, *Cydia latiferreana*. HortScience 46:1377-1380.
- Chambers, U., Bruck, D. J., Olsen, J. & V. M. Walton, 2010. Control of overwintering filbertworm (*Cydia latiferreana*) (Lepidoptera: Tortricidae) larvae with *Steinernema carpocapsae*. Journal of Economic Entomology 103: 416-422.
- Walton, V. M., Dreves, A. J., Gent, D. H., James, D. G., Martin, R. R., Chambers, U., & P. A. Skinkis, 2007. Relationship between rust mites *Calepitrimerus vitis* (Nalepa), bud mites *Colomerusvitis* (Pagenstecher) (Acari: Eriophyidae) and short shoot syndrome in Oregon vineyards. International Journal of Acarology 33: 307-318.
- Kühr, U., Samietz, J. & S. Dorn, 2006. Thermoregulation behaviour in adult codling moths. Physiological Entomology 31: 80-88.
- Kühr, U., Samietz, J. & S. Dorn, 2006. Effect of plant architecture and hail nets on temperature of codling moth habitats in apple orchards. Entomologia Experimentalis et Applicata 118: 245-259.
- Kühr, U., Samietz, J., Höhn, H. & S. Dorn, 2006. Modelling the phenology of codling moth: influence of habitat and thermoregulation. Agriculture, Ecosystems & Environment 117: 29-38.
- Kühr, U., Samietz, J. & S. Dorn, 2005. Thermoregulation behaviour in codling moth larvae. Physiological Entomology 30: 54-61.
- Tschudi-Rein, K., Brand, N., Kühr, U. & S. Dorn, 2004. First record of *Hyssopus pallidus* (Askew, 1964) for Switzerland (Hymenoptera: Eulophidae). Revue Suisse de Zoologie 111: 671-672.

## Non-Peer-Reviewed Publications

- Chambers U., Petit, B. & V.P. Jones. 2015. WSU-DAS – The online pest management support systems for tree fruits in Washington State. Acta Horticulturae 1068: 27-34.
- Jones V.P. & U. Chambers. 2015. Evaluating the US national digital forecast database for use as virtual weather stations to drive the WSU-Decision Aid System Acta Horticulturae 1068: 19-26.
- Hedstrom, C.S., Olson, J., Walton, V.M. & U. Chambers. 2014. Pheromone mating disruption of filbertworm moth (*Cydia latiferreana*) in commercial hazelnut orchards. Acta Horticulturae 1052: 253-262.
- Walton, V.M., Chambers, U. & J. Olsen, 2009. The current status of the newly invasive hazelnut aphid in Oregon hazelnut orchards. Acta Horticulturae 845: 479-486.
- Kühr, U., Samietz, J. & S. Dorn, 2006. Plant architecture, hail nets and thermal behaviour influencing developmental rate and modelling of the codling moth. Acta Horticulturae 707: 197-203.

## Extension Publications

- Jones, W., Gadino, A., Chambers, U. & J. Brunner, 2013. Outreach: The final goal – Promoting biocontrol by engaging stakeholders. Good Fruit Grower, May 15<sup>th</sup> 2013 issue.
- Chambers, U., Mills, N., Beers, B., Unruh, T., Shearer, P., Brunner, J., Amarasekare K. & V. Jones, 2013. Your management program matters. Good Fruit Grower, April 15<sup>th</sup> 2013 issue.
- Chambers, U., Jones, V., Gadino, A., Jones, W., Mills, N. & J. Brunner, 2013. Enhancing biocontrol. Good Fruit Grower, February 1<sup>st</sup> 2013 issue.
- Chambers, U., Jones, V. & B. Petit, 2010. WSU Decision Aid System. Online video at GrowingProduce.com.
- Chambers, U., Jones, V., Petit, B., Brunner, J. & G. Grove, 2010. Decision Aid System update. Good Fruit Grower, March 1<sup>st</sup> 2010 issue.
- Walton, V., Chambers, U. & J. Olsen, 2009. Hazelnut pest and beneficial insects – An identification guide, Oregon State Extension Service EM 8979-E.
- Walton, V. M., Chambers, U. & J. Olsen, 2009. Hazelnut pest management news. Oregon State Extension Service Newsletter. <http://hort.oregonstate.edu/files/Newsletters/HazelnutNewsletterSpring2009.pdf>.
- Walton, V., Chambers, U., Olsen, J. & D. Bruck, 2009. Researchers Unravel Behavior and Control of Filbertworm. Pacific Nut Producer 15 (7): 28.
- Walton, V. M., Chambers, U., Olsen, J. & M. Reitmajer, 2008. Hazelnut pest management news. Oregon State Extension Service Newsletter.
- Reitmajer, M., Walton V. M., Skinkis, P., & U. Chambers, 2007. Seasonal Phenology and Symptoms of Rust mite infestations in Oregon vineyards. Pacific Entomology Branch Meeting, Portland, Oregon.
- Walton, V. M., Chambers, U., Dreves, A. J., Bruck, D. J. & J. Olsen, 2007. Identification of Invasive and Reemerging Pests on Hazelnuts. Oregon State Extension Service. <http://extension.oregonstate.edu/catalog/pdf/em/em8946-e.pdf>.

## Presentations

- Using Decision Support Tools to Enhance Biological Control. Chambers, U., Jackson, C., Jones, W., Jones, V., Brunner, J. & A. Gadino. Orchard Pest and Disease Management Conference, Portland, OR. 14-16 January 2015.

*Making new information accessible to the stakeholders through websites, decision support systems and smartphone apps.* Chambers, U., Brunner, J.F., Jones, W., Gadino, A. & V.P. Jones, Member Symposium: Progress Towards Integration of Conservation Biological Control in Western Apple, Pear and Walnut Orchards. Pacific Branch Entomological Society of America 98<sup>th</sup> Annual Meeting, Tucson, AZ. 6-9 April 2014.

*Effects of tree density, over-tree evaporative cooling, and temperature data source on the accuracy of insect prediction models in apple.* Chambers, U. & V. Jones, Pacific Branch Entomological Society of America 98<sup>th</sup> Annual Meeting, Tucson, AZ. 6-9 April 2014.

*Contributing knowledge to a worldwide challenge: Codling moth—how is it affected by orchard systems?* Chambers, U. Member Symposium: Strengthening the Connection between Continents – A Symposium Honoring Silvia Dorn’s Impact on Applied Entomological Research. Annual Meeting of the Entomological Society of America, Austin, TX. 10-13 November 2013.

*Evaluation of environmental data used for IPM models.* Chambers, U. & V. Jones. Western Orchard Pest and Disease Management Conference, Portland, OR. 9-11 January 2013.

*Evaluation of environmental data used for IPM models.* Chambers, U., Jones, V. & G. Grove. ESA Pacific Branch Annual Meeting, Portland, OR. 25-28 March 2012.

*Evaluation of environmental data used for IPM models.* Chambers, U., Jones, V. & G. Grove. Western Orchard Pest and Diseases Management Conference, Portland, OR. 11-13 January 2012.

*WSU-DAS – The online pest management support system for tree fruits in Washington State.* Chambers, U., Petit, B. & V.P. Jones. IX International Symposium on Modelling in Fruit Research and Orchard Management, Saint-Jean-sur-Richelieu, Canada. 19-23 June 2011.

*Decision support systems as a method to enhance adoption of biological control.* Chambers, U., Jones, V., Brunner, J. & B. Petit. Annual Meeting of the Entomological Society of America, San Diego, CA. 12-15 December 2010.

*Virtual weather stations in WSU-DAS.* Chambers, U., Jones, V. & G. Grove. Western Orchard Pest and Diseases Management Conference, Portland, OR. 13-15 January 2010.

*Biological control of filbertworm with entomopathogenic nematodes.* Chambers, U., Bruck, D. J., Dreves, A. J. & V. M. Walton, Western Orchard Pest and Disease Management Conference, Portland, OR. January 2008.

*Modelling the influence of plant architecture and hail nets on the phenology of the codling moth.* Kührt, U., Samietz, J. & S. Dorn, Swiss Entomological Society National Conference, Basel, Switzerland. March 2005.

*Plant architecture, hail nets and thermal behaviour influencing development rate and modelling in the codling moth.* Kührt, U., Samietz, J. & S. Dorn, 7th International Symposium on Computer Modelling in Fruit Research and Orchard Management, Copenhagen, Denmark. June 2004.

## Poster Presentations

*WSU-Decision Aid System Updates.* Chambers, U., Petit, B., Jackson, C. & V. Jones, WA State Horticultural Association Annual Meeting, Wenatchee, WA. 1-3 December 2014.

*Effect of pre-diapause temperature exposure on the emergence of codling moth.* Chambers, U. & V. Jones, WA State Horticultural Association Annual Meeting, Wenatchee, WA. 2-4 December 2013.

*OPENED – A new resource for pesticide effects on natural enemies in orchards.* Chambers, U., Jackson, C., Petit, B., Brunner, J. & V. Jones, WA State Horticultural Association Annual Meeting, Wenatchee, WA. 2-4 December 2013.

*New features on DAS: Alerts and orchard-specific user data entry.* Chambers, U., Petit, B., Jackson, C. & V. Jones, WA State Horticultural Association Annual Meeting, Wenatchee, WA. 2-4 December 2013.

*Effect of pre-diapause temperature exposure on the emergence of codling moth.* Chambers, U. & V. Jones, Annual Meeting of the Entomological Society of America, Austin, TX. 10-13 November 2013.

*WSU-DAS: The online pest management support system for tree fruits in Washington (updated).* Chambers, U., Petit, B. & V. Jones, 7<sup>th</sup> International IPM Symposium, Memphis, TN, 27-29 March 2012.

*Enhancing biological control to stabilize Western orchard IPM systems.* Jones VP, JF Brunner, EH Beers, J Goldberger, K Gallardo, NJ Mills, DR Horton, TR Unruh, PW Shearer, S. Castagnoli, K Amarasekare, U Chambers, A Gadino, A Bixby-Brosi, N Lehrer, WE Jones. WSU Sunrise Field Day, Wenatchee, WA. 16 August 2011

*WSU-DAS: The online pest management support system for tree fruits in Washington (updated).* Chambers, U., Petit, B. & V. Jones, 3<sup>rd</sup> Annual WSU Sunrise Orchard Field Day, Wenatchee, WA. 16 August 2011.

*Virtual weather stations on DAS.* Chambers, U., Jones, V. & B. Petit. Annual Pacific Branch Entomological Society of America Meeting, Waikoloa, HI. 27-30 March 2011.

*Virtual weather stations on DAS.* Chambers, U., Jones, V. & B. Petit. Western Orchard Pest and Disease Management Conference, Portland, OR. 12-14 January 2011.

*WSU-DAS: The online pest management support system for tree fruits in Washington.* Chambers, U., Petit, B. & V. Jones, 2<sup>nd</sup> Annual WSU Sunrise Orchard Field Day, Wenatchee, WA. 29 July 2010.

*WSU-DAS: The online pest management support system for tree fruits in Washington.* Chambers, U., Petit, B. & V. Jones, Pacific Branch Entomological Society of America 94<sup>th</sup> Annual Meeting, Boise, ID. 12-14 April 2010.

*Enhancing Biological Control to Stabilize Western Orchard IPM Systems.* Jones VP, S Steffan, JF Brunner, EH Beers, J Goldberger, K Gallardo, U Chambers, NJ Mills, D Horton, T Unruh, PW Shearer and S Castagnoli. WSU Academic Showcase. March 2010.

*What’s new on WSU-DAS.* Chambers, U., Petit, B. & V. Jones, WA State Horticultural Association Annual Meeting, Wenatchee, WA. 7-9 December 2009.

- Hazelnut cultivar susceptibility to filbertworm and seasonal nut infestation pattern in Oregon.* Chambers, U., Walton, V.M., Miller, B. & J. Olsen. Pacific Branch Entomological Society of America 93<sup>rd</sup> Annual Meeting, San Diego, CA. March 2009.
- IPM of filbertworm in hazelnut orchards in Oregon.* Chambers, U., Walton, V.M., Bruck, D.J. & J. Olsen, Sixth International IPM Symposium, Portland, OR. 24-26 March 2009.
- Seasonal flight activity of filbertworm and nut infestation patterns in hazelnut orchards in Oregon.* Chambers, U., Miller, B., Olsen, J. & V.M. Walton, Western Orchard Pest and Disease Management Conference, Portland, OR. 14-16 January 2009.
- Seasonal flight activity of filbertworm and nut infestation patterns in hazelnut orchards in Oregon.* Chambers, U., Miller, B., Olsen, J. & V.M. Walton, Nut Growers' Society Meeting, Portland, OR. Jan 2009.

## Extension and Outreach

### Presentations (Invited Talks)

- Review of WSU-DAS: What's New in 2015.* Chambers, U., Petit, B., Jackson, C. & V. Jones. Northwest Wholesale Organic Grower Meeting, Chelan, WA. 10 February 2015. (50 attendees)
- Utilizing the WSU-DAS Version of the Spray Guide.* Chambers, U. 80<sup>th</sup> Okanogan County Horticultural Association Annual Meeting, Omak, WA. 4 February 2015. (180 attendees)
- Review of WSU-DAS: What's New in 2015.* Chambers, U., Petit, B., Jackson, C. & V. Jones. Northwest Wholesale Grower Meeting, Oroville, WA. 27 January 2015. (60 attendees)
- Utilizing the WSU-DAS Version of the Spray Guide.* Chambers, U. North Central Washington Apple Day, Wenatchee, WA. 22 January 2015. (250 attendees)
- Utilizing the WSU-DAS Version of the Spray Guide.* Chambers, U. 70<sup>th</sup> Annual Lake Chelan Horticultural Day, Chelan, WA. 19 January 2015. (150 attendees)
- Review of WSU-DAS: What's New in 2015.* Chambers, U., Petit, B., Jackson, C. & V. Jones. GS Long Grower Meeting, Chelan, WA. 12 December 2014. (70 attendees)
- WSU-Decision Aid System Pest and Disease Models.* Chambers, U., Petit, B., Jackson, C. & V. Jones. Okanogan Horticultural Association and Washington Tractor Pesticide Recertification Meeting, Okanogan, WA. 10 December 2014. (50 attendees)
- Utilizing the WSU-DAS Version of the Spray Guide.* Chambers, U. WA State Horticultural Association Annual Meeting, Tri-Cities, WA. 1-3 December 2014. (300 attendees)
- A Peek Into The Orchard.* Chambers, U. WSU Global Connections Webinar. 30 June 2014.
- Updates to WSU-DAS: alerts and orchard specific user entries.* Chambers, U., Petit, B., Jackson, C. & V. Jones. Northwest Wholesale Pesticide Recertification Class, Pateros, WA. 20 February 2014. (50 attendees)
- Review of the current status of monitoring and control of spotted-wing drosophila (SWD) and brown-marmorated stink bug (BMSB).* Beers, E., Wiman, N. & U. Chambers. Northwest Wholesale Organic Grower Meeting, Chelan, WA. 11 February 2014. (50 attendees)
- WSU-Decision Aid System Updates.* Chambers, U., Petit, B., Jackson, C. & V. Jones. Northwest Wholesale Organic Grower Meeting, Chelan, WA. 11 February 2014. (50 attendees)
- Enhancing biological control in western orchards (Mejoramiento del control biológico en huertos del oeste).* Chambers, U. & L. Garcia. WA State Horticultural Association Annual Meeting, Wenatchee, WA. 2-4 December 2013. (300 attendees)
- WSU-Decision Aid System Update: Optimizing Management Timing and Pesticide Choice.* Chambers, U., Petit, B. & V. Jones. 78<sup>th</sup> Okanogan County Horticultural Association Annual Meeting, Omak, WA. 7 February 2013. (80 attendees)
- WSU-Decision Aid System Update: Optimizing Management Timing and Pesticide Choice.* Chambers, U., Petit, B. & V. Jones. North Central Washington Pear Day, Wenatchee, WA. 23 January 2013. (100 attendees)
- WSU-Decision Aid System Update: Optimizing Management Timing and Pesticide Choice.* Chambers, U., Petit, B. & V. Jones. North Central Washington Apple Day, Wenatchee, WA. 22 January 2013. (250 attendees)
- WSU-Decision Aid System Update: Optimizing Management Timing and Pesticide Choice.* Chambers, U., Petit, B. & V. Jones. 67<sup>th</sup> Annual Lake Chelan Horticultural Day, Chelan, WA. 21 January 2013. (150 attendees)
- DAS Update/ Novedades en el Sistema de Ayuda de Decisiones.* Chambers, U. & V. Bueno. WA State Horticultural Association Annual Meeting, Yakima, WA. 3-5 December 2012. (300 attendees)
- Como Usar el Sistema de Ayuda de Decisiones (DAS) para el Manejo y Control de Plagas.* Chambers, U. Rural Community Development Meeting, Wenatchee, WA. 11 December 2012. (12 attendees)
- WSU-DAS' latest addition – MRLs.* Chambers, U., Petit, B. & V. Jones. Pateros Pesticide Recertification Class, Pateros, WA. 16 February 2012. (60 attendees)
- Enhancing Biological Control In Western Orchards.* Interactive Short Course. Wenatchee (WA), Pasco (WA) & Hood River (OR), 7-8 February 2012. **Presentations:** *Web resources for biological control*, Chambers, U., Castagnoli, S. & A. Gadino; *Windows of opportunity*, Chambers, U. & V. Jones; *Microbial control in orchard systems: prospects and problems*, Bixby-Brosi, A., Brunner, J. & U. Chambers. (70 attendees)
- Optimizing pesticide effectiveness and timing with the use of the WSU Decision Aid System.* Chambers, U., Petit, B. & V. Jones. Annual Blue Bird Grower Meeting, Wenatchee, WA. 4 January 2012. (80 attendees)

*Biological Control and Decision Aid System.* Chambers, U. & V.P. Jones. WA State Horticultural Association Annual Meeting, Wenatchee, WA. 5-7 December 2011. (190 attendees)

*Using the Decision Aid System (DAS) for Accurate Pest Management and Control – Como Usar el Sistema de Ayuda de Decisiones para El Manejo y Control.* Chambers, U. & L. Garcia. WA State Horticultural Association Annual Meeting, Wenatchee, WA. 5-7 December 2011. (300 attendees)

*Updates on the WSU-DAS project.* Chambers, U., Petit, B. & V. Jones. WSU ASF 201 class “Systems Skills Development”, Pullman, WA. 22 February 2011. (43 students)

*Updates on the WSU-DAS project.* Chambers, U., Petit, B. & V. Jones. Green Bluff Grower Association, Spokane, WA. 4 May 2011. (25 attendees)

*IPM in Oregon hazelnuts & WSU-Decision Aid System – IPM tool in Washington tree fruits.* U. Chambers. Primera Expo Frutícola del Sur de Chile, INIA, Temuco, Chile. 14-16 April 2011. (50 attendees)

*Weather input and updates on DAS.* Chambers, U., Petit, B. & V. Jones. NCW Fieldmen Association, Wenatchee, WA. 15 March 2011. (30 attendees)

*WSU-DAS – Organic matrix.* Chambers, U., Petit, B. & V. Jones. G.S. Long Annual Organic Grower’s Meeting, Yakima, WA. 6 January 2011. (120 attendees)

*WSU-DAS’ latest addition – MRLs.* Chambers, U., Petit, B. & V. Jones. GRAS2P Orchard Sustainability Workshop, Yakima, WA. 8 December 2010.

*WSU-DAS for Cherry Growers.* Chambers, U., Petit, B. & V. Jones. Cherry Grower Tour, Wenatchee, WA. 23 June 2010.

*Updates on WSU-DAS.* Brunner, J., Granger, K., Chambers, U., & N. Lehrer. Pest Management Transition Program Implementation Unit Meetings, WA. 5 May 2010.

*Update on the WSU-DAS project.* Chambers, U., Petit, B. & V. Jones. Wilbur Ellis Recertification Meeting, Tonasket, WA. 2 March 2010.

*Update on the WSU-DAS project.* Chambers, U., Petit, B. & V. Jones. Chelan Fruit Growers Day, Okanogan, WA. 24 February 2010.

*Update on the WSU-DAS project.* Chambers, U., Petit, B. & V. Jones. Northwest Wholesale Recertification Meeting, Brewster, WA. 17 February 2010.

*Current trends in tree fruit insect management.* Chambers, U., Petit, B. & V. Jones. WSU Pesticide Education Program, Wenatchee, WA. 28 January 2010.

*Are you digitally connected to pest and disease management advice? Update on the WSU-DAS project.* Chambers, U., Petit, B. & V. Jones. Annual Okanogan Horticultural Meeting, Okanogan, WA. 26 January 2010.

*Are you digitally connected to pest and disease management advice? Update on the WSU-DAS project.* Chambers, U., Petit, B. & V. Jones. North Central Washington Stone Fruit Day, Wenatchee, WA. 21 January 2010.

*Are you digitally connected to pest and disease management advice? Update on the WSU-DAS project.* Chambers, U., Petit, B. & V. Jones. North Central Washington Apple Day, Wenatchee, WA. 19 January 2010.

*Updates on WSU-DAS.* Granger, K., Chambers, U., Brunner, J. & N. Lehrer. Pest Management Transition Program Implementation Unit Meetings, WA. Nov. 2009.

*IPM of filbertworm and other pest insects in hazelnuts.* Nut Growers’ Summer Tour, Corvallis, OR. August 2009.

*IPM of filbertworm in hazelnuts.* Chambers, U., Walton, V. M. & D. J. Bruck, Entomology Program Seminar, OSU Corvallis, OR. February 2009.

*Insect and mite management in hazelnuts.* Nut Growers’ Summer Tour, Salem and Mt. Angel, OR. August 2008.

*Aphids in hazelnuts & Biological control of filbertworm with nematodes.* Chambers, U., Walton, V. M., Bruck, D. J., & A. J. Dreves, Nut Growers’ Society Meeting, Portland, OR. January 2008.

*Management of filbertworm and other pest insects in hazelnuts.* Nut Growers’ Summer Tour, Newberg, OR. August 2007.

## **Workshops**

*How to use WSU-DAS.* Chambers, U. 2 training workshops, WA. Mar 2014. (16 attendees)

*Biological Control Basics & Natural Enemy ID.* Gadino, A., Chambers, U. & W. Jones. 5 training workshops, WA. Feb & Mar 2014. (67 attendees)

*Identification of natural enemies in tree fruit orchards.* Chambers, U., Bixby-Brosi, A., Smith, T. W. Jones. Training workshop – Annual WSU Sunrise Research Orchard Field Day, Wenatchee, WA. 7 August 2013. (9 attendees)

*Biological Control Basics & Natural Enemy ID.* Gadino, A., Chambers, U., Jones, W. & J. Brunner. 9 training workshops, WA. Jan-July 2013. (166 attendees)

*Identification of natural enemies in tree fruit orchards.* Gadino, A., Jones, W., Chambers, U. & A. Bixby-Brosi. 2 training workshops, Wenatchee, WA. Aug 2012. (24 attendees)

*How to use WSU-DAS.* Chambers, U. & N. Lehrer. Training workshops, WA. Feb-Apr 2012. (45 attendees)

*How to use WSU-DAS.* Chambers, U., Jones, W. & N. Lehrer. Training workshops at WA State Horticultural Association Annual Meeting, Yakima, WA. 7 December 2010. (16 attendees)

*How to use WSU-DAS.* Chambers, U., Petit, B. & N. Lehrer. Training workshops, WA. Feb-Jun 2010. (51 attendees)

*Filbertworm and aphid management.* OSU Extension Service Hazelnut Short Course on IPM, Roseburg, OR. May 2009 & Amity and McMinneville, OR. June 2008.

## Miscellaneous

*Orchard Pesticide Effects on Natural Enemies Database*. Chambers, U., Jackson, C., Brunner, J. & V. Jones. 2014 (<http://enhancedbiocontrol.org/opened>).

Video interviews with orchard managers and consultants. Chambers, U., Jones, W., Gadino A. & J. Brunner. 2013 (<http://enhancedbiocontrol.org> > Videos > “Cooperator Perspectives: monitoring lacewing adults with HIPV lures” and “Consultant Perspectives: Mike Robinson on enhancing biocontrol”) & 2015 (videos are being edited for publication).

*Enhancing biological control in orchards*. Chambers, U., Jones, W. & A. Gadino. Information booth at WA State Horticultural Association Annual Meeting, WA. Dec 2012, 2013, 2014.

*Evaluation of environmental data used for IPM models*. Chambers, U. & V. Jones. WSU Tree Fruit Research & Extension Center Seminar Series, Wenatchee, WA. 19 December 2013.

WSU-Decision Aid System feature for maximum residue levels (MRLs) featured in *Good Fruit Grower* 63(6), 2012: *Easier access to MRLs – Visit the DAS website*.

Co-organizer of 2-day Interactive Short Course *Enhancing Biological Control In Western Orchards*. Simulcast at three locations: Wenatchee (WA), Pasco (WA) & Hood River (OR), 7-8 February 2012.

Writing and editing extension information for WSU-DAS story page (>50 articles) (<http://das.wsu.edu>).

Creation of video tutorials for WSU-DAS help page (15 videos) (<http://das.wsu.edu>).

*Awesome Apple Adventures* for the Wenatchee School District (2<sup>nd</sup> grade) at the WSU Tree Fruit Research and Extension Center, Wenatchee, WA. Sept 2010 & 2011.

*What's new on WSU-DAS*. Chambers, U., Petit, B. & V. Jones. Information booth at WA State Horticultural Association Annual Meeting, Yakima, WA. Dec 2009 & 2010.

## Academic Service

- Ad-hoc reviewer: *Environmental Entomology*; *Journal of Economic Entomology*; *Journal of Insect Science*; *Entomologia Experimentalis et Applicata*; *CAB Reviews*
- Volunteer entomology presentations at local elementary schools
- Graduate committee member, WSU Tree Fruit Research & Extension Center, Wenatchee, 2011-2012.
- PhD paper judge at Annual Pacific Branch Entomological Society Meeting, 2011 & 2014
- Work group member in the development of the Pest Management Strategic Plan for Christmas Trees in OR, WA, ID, 2009.
- Entomology Program Seminar Committee at OSU, Corvallis, OR, 2008 – 2009.
- Organizing Committee of the “Challenges in Plant Sciences” Symposium, Zurich, Switzerland, 2004.

## Professional Membership

- Entomological Society of America
- Pacific Branch Entomological Society of America