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## EDUCATION AND EMPLOYMENT INFORMATION

### Education

Ph.D., Entomology, University of Stellenbosch, South Africa, 2003  
M.Sc., Integrated Pest Management, University of Stellenbosch, 1998  
H.E.D. (Teaching Higher Education Diploma), University of Stellenbosch, 1993  
B.Sc., Botany and Zoology, University of Stellenbosch, 1992

### Employment History

2012 –Present. Associate Professor, Department of Horticulture, Oregon State University  
2006-2012. Assistant Professor, Department of Horticulture, Oregon State University, Corvallis, Oregon  
2003-2005. Postdoctoral Researcher, Department of Environmental Science, Policy, and Management, University of California, Berkeley, California  
2003–2005. Research Associate, Department of Conservation Ecology & Entomology, University of Stellenbosch.  
1999-2003. Research and Extension Entomologist, ARC

## PUBLICATIONS

### i. Peer refereed

- Miller B, Anfora G, Buffington M, Daane KM, Dalton DT, Hoelmer KM, Stacconi MV, Grassi A, Ioriatti C, Loni A, Miller JC, M'bark Quantar, X. Wang, Nik G. Wiman, Vaughn M. Walton 2015. Seasonal occurrence of resident parasitoids associated with *Drosophila suzukii* in two small fruit production regions of Italy and the USA. *Bulletin of Insectology* 68(2): 255-63.
- Lee, Jana C., Daniel T. Dalton, Katharine A. Swoboda-Bhattarai, Denny J. Bruck, Hannah J. Burrack, Bernadine C. Strik, J. Megan Woltz, and Vaughn M. Walton 2015. Characterization and manipulation of fruit susceptibility to *Drosophila suzukii*. *Journal of Pest Science* 10.1007/s10340-015-0692-9.
- Mark K Asplen, Gianfranco Anfora, Antonio Biondi, Deuk-Soo Choi, Dong Chu, Kent M Daane, Patricia Gibert, Andrew P Gutierrez, Kim A Hoelmer, William D Hutchison, Rufus Isaacs, Zhi-Lin Jiang, Zsolt Kárpáti, Masahito T Kimura, Marta Pascual, Christopher R Philips, Christophe Plantamp, Luigi Ponti, Gábor Véték, Heidrun Vogt, Vaughn M Walton, Yi Yu, Lucia Zappalà, Nicolas Desneux 2015. Invasion biology of spotted wing *Drosophila*

- (*Drosophila suzukii*): a global perspective and future priorities. *Journal of Pest Science* 88 3: 469-494.
- Tochen S, Woltz JM, Dalton DT, Lee JC, Wiman NG, Walton VM 2015. Humidity affects populations of *Drosophila suzukii* (Diptera: Drosophilidae) in blueberry. *Journal of Applied Entomology*. doi: 10.1111/jen.12247.
- Ioriatti, C., Walton, V., Dalton, D., Anfora, G., Grassi, A., Maistri, S. and Mazzoni, V., 2015. *Drosophila suzukii* (Diptera: Drosophilidae) and its potential impact to wine grapes during harvest in two cool climate wine grape production regions. *Journal of economic entomology*, p.tov042.
- Klick J, Yang W, Walton V, Dalton D, Hagler J, Dreves A, Lee J, Bruck D. 2015. Distribution and movement of *Drosophila suzukii* into fruiting raspberry. *Journal of Applied Entomology* 10: 2014-0311.
- Wiman, N. G., Parker, J. E., Rodriguez-Saona, C., & Walton, V. M. 2015. Characterizing Damage of Brown Marmorated Stink Bug (Hemiptera: Pentatomidae) in Blueberries. *Journal of economic entomology*, tov036.
- M.Valerio Rossi Stacconi, M. Buffington, K. M. Daane, D. T. Dalton, A. Grassi, G. Kaçar, B. Miller, J. C. Miller, N. Baser, C. Ioriatti, V. M. Walton, N. Wiman, X. Wang, G. Anfora 2015. Host stage preference, efficacy and fecundity of parasitoids attacking *Drosophila suzukii* in newly invaded areas. *Biological Control* 84: 28-35.
- Murphy K.A., T. R. Unruh, L. M. Zhou, F. G. Zalom, P. W. Shearer, E. H. Beers, V. M. Walton, B. Miller, J. C. Chiu 2015. Using comparative genomics to develop a molecular diagnostic for the identification of an emerging pest *Drosophila suzukii*. Accepted for publication, *Bulletin of Entomological Research* 105(03), 364-372.
- Wiman N. G., VM Walton, DT Dalton, G Anfora, HJ Burrack, JC Chiu, ...2014. Integrating temperature-dependent life table data into a matrix projection model for *Drosophila suzukii* population estimation *PloS one* 9 (9), e106909.
- Hedstrom C.S., PW Shearer, JC Miller, VM Walton 2014. The Effects of Kernel Feeding by *Halyomorpha halys* (Hemiptera: Pentatomidae) on Commercial Hazelnuts. *Journal of Economic Entomology* 107 (5), 1858-1865.
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- Wiman, N.G., V.M. Walton, P.W. Shearer, S.I. Rondon, and J.C. Lee. 2014. Factors affecting flight capacity of brown marmorated stink bug, *Halyomorpha halys* (Hemiptera: Pentatomidae). *J. Pest Sci.* DOI:10.1007/s10340-014-0582-6.
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- Gadino A. N., Walton V. M. and J. C. Lee, 2012. Evaluation of methyl salicylate lures on populations of *Typhlodromus pyri* (Acari: Phytoseiidae) and other natural enemies in western Oregon vineyards. *Biological Control*, 63, 1: 48-55.
- Lee J. C., Burrack H. J., Barrantes L. D., Beers E. H., Dreves A. J., Hamby K., Haviland D. R., Isaacs R., Richardson T., Shearer P., Stanley C.A., Walsh D. B., Walton V. M. and F. G. Zalom 2012. Evaluation of monitoring traps for *Drosophila suzukii* (Diptera: Drosophilidae) in North America. *J. Econ Entomol.* 2012, 105, 4, pp 1350-1357.
- Miller B., Bruck D. J., Walton, V. M., 2012. Relationship of Black Vine Weevil Egg Density and Damage to Two Cranberry Cultivars. *HortSci* 47(5): 1–7.
- Gadino A. N, Walton V. M., 2012. Temperature-related development and population parameters for *Typhlodromus pyri* (Acari: Phytoseiidae) found in Oregon vineyards. *Exp Appl Acarol* 2012, 58, 1, pp 1-10.
- Chambers U., Walton V.M. and S. A. Mehlenbacher 2011. Susceptibility of Hazelnut Cultivars to Filbertworm, *Cydia latiferreana*. *HortSci* 46: 1377-1380.  
*Role:* Co-Authored paper; co-author edited earlier and final drafts.
- Gadino A. N., Walton V. M. and J. Lee. 2011. Olfactory response of the predatory mite *Typhlodromus pyri* (Acari: Phytoseiidae) to methyl salicylate in laboratory bioassays. *J Appl Entomol* 10, 1439-0418; .DOI 10.1111/j.1439-0418.2011.01670.x
- Daane K. M., Middleton, M. C., Sforza, R., Cooper, M. L., Walton, V. M., Walsh, D. B., Zaveio, T., and R.P.P. Almeida. 2011. Development of a multiplex to distinguish mealybug species found in North American vineyards. *Environ Entomol.* 40 (6), 1595-1603.
- Dalton D.T., Walton V.M., Shearer, P.W., Walsh, D.B., Caprile J. and R. Isaacs. 2011. Laboratory survival of *Drosophila suzukii* under simulated winter conditions of the Pacific Northwest and seasonal field trapping in five primary regions of small and stone fruit production in the United States. *Pest Manag Sci* 67(11): 1368-1374.
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- Walton V.M., Krüger K., Saccaggi D.L., Millar I.M. 2009. A survey of scale insects (Sternorrhyncha: Coccoidea) occurring on table grapes in South Africa. *J Insect Sci* 9: 47.
- Wang X. G., Nadel, H., Johnson, M. W., Daane, K. M., Hoelmer, K., Walton, V. M., Pickett, C. H., and Sime, K. R. 2009. Crop domestication relaxes both top-down and bottom-up effects on a specialist herbivore. *Basic Appl Ecol* 10(3): 216-227.
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- Gutierrez A. P., Daane, K. M., Ponti, L., Walton, V. M. and C. K. Ellis. 2008. Prospective evaluation of the biological control of vine mealybug: refuge effects and climate. *J Appl Ecol* 45: 524-536.
- Walton V. M., A. J. Dreves, D. H. Gent, D. G., James, R. R. Martin, U. Chambers\* and P. A. Skinkis. 2007. Relationship between rust mites, *Calepitrimerus vitis* (Acari: Eriophyidae), bud mites *Colomerus vitis* (Acari: Eriophyidae) and short shoot syndrome in Oregon vineyards. *Int J Acarol* 33(4): 307-318.
- Bruck D. J., and V.M. Walton. 2007. Susceptibility of the Filbertworm (*Cydia latiferreana*, Lepidoptera: Tortricidae) and Filbert Weevil (*Curculio occidentalis*, Coleoptera: Curculionidae) to Entomopathogenic Nematodes. *J Invert Path* 96: 93-96.
- Walton V. M., Daane, K. M., Bentley, W. J., Millar, J. G., Larsen, T. E., and R. Malakar-Kuenin. 2006. Pheromone-based Mating Disruption of *Planococcus ficus* (Hemiptera: Pseudococcidae) in California Vineyards. *J Econ Entomol* 99(4): 1280-1290.
- Walton V.M. and K.L. Pringle. 2005. Developmental biology of vine mealybug, *Planococcus ficus* (Signoret) (Homoptera: Pseudococcidae), and its parasitoid *Coccidoxenoides perminutus* (Timberlake) (Hymenoptera: Encyrtidae). *African Entomol* 13(1): 143-147.
- Walton V.M., Daane, K.M. and K.L. Pringle. 2004. Monitoring *Planococcus ficus* in South African vineyards with sex pheromone-baited traps. *Crop Protect* 23: 1089-1096.
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- Walton V.M. and K. L. Pringle. 2004. A Survey of Mealybugs and Associated Natural enemies in Vineyards in the Western Cape Province, South Africa. *S Afr J Enol Vitic* 25(1): 23-25.
- Walton, V.M., 2003. Development of an integrated pest management system for vine mealybug, *Planococcus ficus* (Signoret), in vineyards in the western Cape Province, South Africa. Thesis PhD. University of Stellenbosch, South Africa.
- Walton V.M. and K.L. Pringle 2001. The effects of pesticides and fungicides used on Grapevines on the mealybug predatory beetle *Nephus boschianus* (Coccinellidae, Scymnini). *S Afr J Enol Vitic*, 22, 2.; 107-110.
- Walton V.M. and K.L. Pringle 1999. Effects of pesticides used on table grapes on the mealybug parasitoid, *Coccidoxenoides peregrinus* (Timberlake) (Hymenoptera: Encyrtidae). *S Afr J Enol Vitic* 20, 31 – 34.
- Walton V.M. 1998. Evaluation of the effects of pesticides, used on table grapes, on the mealybug parasite, *Coccidoxenoides peregrinus* (Timberlake) (Hymenoptera : Encyrtidae). M.Sc. Entomology, University of Stellenbosch.

## ii. Book Chapters

- Walton V. M., 2015. Compendium of Grape Diseases, Disorders, and Pests, Second Edition Edited by Wayne F. Wilcox, Walter D. Gubler, and Jerry K. Uyemoto In Part II. Mites and Insects that Cause Diseaselike Symptoms in Grapes. APS Press.  
*Contributed portion pertaining to mites and edited the final manuscript*
- Walton V.M., Daane, K.M. and P. Addison. 2012. Principles of Biological Control in Vineyards. In: *Vineyard Pest Management*, Bostanian and Isaacs (Eds.) Elsevier press.
- Daane K.M., Walton, V.M., Sforza, R., and R. Ripa. 2012. Mealybugs. In: *Vineyard Pest Management*, Bostanian and Isaacs (Eds.) Elsevier press.

## iii. Peer Reviewed

- Pia Addison, Vaughn Walton and Kate Mitchell, 2015. New Fruit Pest? WineLand Technical, 2015 <http://www.wineland.co.za/technical/new-fruit-pest>.
- Pscheidt J. W., Peachey E. and V. Walton 2015. Walnut 2015 Pest Management Guide for the Willamette Valley. Oregon State University Extension Service, EM 8421. 192 (466).
- Pscheidt J. W., Peachey E. and V. Walton 2015. Hazelnut 2015 Pest Management Guide for the Willamette Valley. Oregon State University Extension Service, EM 8328. 370 (532)
- Skinkis P., Pscheidt J., Walton V.M., Dreves A.J. , Peachey E., Allen N., and J. Sanchez. 2007-2016. Pest Management Guide for Wine Grapes in Oregon. OSU Extension Service EM8413E. (updated annually) 3861 (438=4299)
- Wiman, N., Shearer, P.; Miller J.; Hedstrom, C. S., Walton, V. M., Brewer, L. J. 2014. How to recognize brown marmorated stink bug damage in commercial hazelnuts. EM 9102 (422).

- Dalton, D. T., Daane, K. Kaiser, C. Hilton, R. Walton, V. M., Brewer, L. J. 2014. Distribution and monitoring of grape mealybug: a key vector of grapevine leafroll disease in Oregon. Oregon State University. Extension Service; EM9092 232 (399)
- Gadino, A. N. Walton, V. M., Dreves, A. J., Jones, G. V.; Brewer, L. J. 2014. Evaluating compatibility of horticultural oils and sulfur with vineyard IPM . Oregon State University. Extension Service. EM9095 617 (177= 793)
- Olsen J., J. W. Pscheidt and V. Walton 2013. Growing hazelnuts in the Pacific Northwest, Integrated Pest Management. Oregon State University Extension Service, EM9081. 577 (1029)
- Hedstrom C., Wiman N., Walton V., Shearer P., Rondon S. and J., Lee 2013. Brown Marmorated Stink bug, *Halyomorpha halys*, Oregon state University Extension Service, EM9054. (Also available in Spanish EM 9054 S) 746 232 (929 +290)
- Grafton-Cardwell E., Carroll D., Bentley W., J., Haviland D. R., and V. M. Walton 2013. Pomegranate: UCIPM Pest Management Guidelines Publication 3474.  
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- Walton V. and Dalton, D., 2013. Mealybugs In Section 3, Insect and Mite Management. Field Guide for Integrated Pest Management in Pacific Northwest Vineyards, A PNW Extension Publication, PNW644. (M. Moyer, S O'Neal Eds).
- Co- author the portion pertaining to mealybugs in vineyard*
- Walton V.M. Lee, J. Bruck D. and A. J. Dreves. 2010. Recognizing Fruit Damaged by Spotted Wing Drosophila (SWD), *Drosophila suzukii*. EM 9021 5485 (7380)
- Dreves A.J. and V.M. Walton. 2010. Trapping and identifying mealybugs in Oregon vineyards. EM 8998. 2201 (2430)
- James D., Skinkis, P., and V. M. Walton. 2007-2014. "Grape Pests" *In*: Pacific Northwest Insect Pest Management Handbook. Pacific Northwest Extension Publication. (updated annually)
- Dreves A.J. Walton V.M., and G. Fisher. 2009. Spotted Wing Drosophila: *Drosophila suzukii* (Matsumura). A new pest attacking healthy ripening fruit in Oregon. EM 8911. 9014 (9460)
- Skinkis P., Walton V. M., and C. Kaiser. 2009. Phylloxera: Strategies for Management in Oregon's Vineyards EC 1463-E. 1385 (1783)
- Walton V. M., Chambers, U, and J. Olsen. 2009. Hazelnut Pest and Beneficial Insects: An Identification Guide EM 8979-E. 639 (891)
- Walton V.M., P. Skinkis, A.J. Dreves, and C. Kaiser. 2009. Grapevine Growth Distortions: A guide to identifying symptoms. Oregon State University Extension Bulletin EM 8975-E. 1283 (2984)
- Skinkis P., A.J. Dreves, V.M. Walton, and R.R. Martin. 2009. Monitoring for Grapevine Leafroll Virus and Mealybug in Pacific Northwest Vineyards. OSU Extension Bulletin EM 8985. 3981 1799 4325 (598 S)
- Walton V.M., Dreves A. J. , Skinkis P., Kaiser C., Buchanan M., Hilton R., Martin R.R., Castagnoli S., and S. Renquist 2009. Prevention and Management of Grapevine Leafroll Virus and Mealybugs in Oregon Vineyards. OSU Extension Bulletin EM 8990. 3098 (3257)

- Kaiser C., Pscheidt, J.W., Walton, V. M., and P. Skinkis. 2008. How to Reduce the Risk of Pesticide Resistance in Winegrape Pests in Oregon. EM 8968. (1092)
- Daane K.M., Cooper, M.L. Triapytsyn S.V., Walton, V.M., Yokota G.Y., Haviland, D.R., Bentley, W.J., Godfrey, K.E. and L.R. Wunderlich. 2008. Vineyard managers and researchers seek sustainable solutions for mealybugs, a changing pest complex. California Agriculture. October –December 2008, 167-176.
- Walton V.M., Chambers, U., Dreves, A., Bruck, D.J., and J. Olsen. 2007. Identification of Invasive and Reemerging Pests on Hazelnuts. Extension publication EM 8946-E. 446 (501)
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