

Bradley D. Hanson

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Department of Plant Sciences, MS-4
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Education:

- 2004 Ph.D. Plant Science (Weed Science/Plant Genetics), University of Idaho.
- 1999 M.S. Plant Science (Weed Science), University of Idaho.
- 1996 B.S. Agricultural Studies/Agronomy, Iowa State University.

Research Experience:

- 2009 to Present. Assistant/Associate/Full **Professor of Cooperative Extension**. UC Davis. Statewide weed management research and extension in orchard and vineyard crops, weed science support for agronomic and horticultural crops, and supervision of the UC Davis IR-4 Field Research Center.
- 2005 to 2009. **Research Agronomist**. USDA-ARS, Water Management Unit, Parlier, CA. Methyl bromide alternatives in fruit and nut tree and grapevine nurseries, ornamentals, floriculture, and strawberry. Soil fumigation and integrated techniques to manage weeds and parasitic nematodes.
- 2004 to 2005. **Postdoctoral Research Fellow**. Colorado State University, Fort Collins, CO. Physiology of imazamox injury in single- and two-gene imidazolinone-resistant hexaploid wheat. Evaluation of a proposed allelochemical as a natural herbicide.
- 2001 to 2004. **Graduate Research Assistant**. University of Idaho, Moscow, ID. Gene flow research among wheat cultivars and from wheat to related weed species. Herbicidal weed control in dryland cereal and legume rotations.
- 1999 to 2000. **Faculty Research Assistant**. Oregon State University, Corvallis, OR. Field and greenhouse-based weed control and weed biology research in cereals, grass seed, and oilseed crops.
- 1997 to 1999. **Graduate Research Assistant**. University of Idaho, Moscow, ID. Weed control efficacy and crop safety research in dryland wheat cropping systems.

Professional Societies:

- Weed Science Society of America – 1997 to 2023
 - Associate Editor Weed Technology – 2013-2020
 - Herbicide Handbook Committee – 2012-16, 2019 to 2023
 - Specialty Crops Committee (2020-23)
 - Endangered Species Act Committee (2021-23)
- Western Society of Weed Science – 1997 to 2023
 - Board of Directors – 2010-11, 2012-13, 2016-2019
- California Society of Weed Science – 2006 to 2023
 - Program Committee – 2007 to 2023
 - President 2019-2020, Past President 2020-21

Awards and Honors:

- WSWS Fellow – Western Society of Weed Science. 2023
- Graduate Advising and Mentoring Award – UC Davis Graduate Studies. 2020
- Outstanding New Academic – University of California Division of Agric. and Natural Resources. 2016
- Outstanding Early Career Weed Scientist – Weed Science Society of America. 2014
- Award of Excellence – California Weed Science Society. 2014
- Outstanding Weed Scientist, Early Career – Western Society of Weed Science. 2011

Extension Presentations:

- Delivered (or coauthored with lab members) over 80 extension presentations during 2020-23

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Researchers Supervised (during past 3 years):

- Vulchi, R. 2023-present. Postdoctoral scholar
- Chang, S. 2022-present. MS candidate
- Zhen, T. 2022-present. PhD candidate
- Hosseini, P. 2021-present. Postdoctoral scholar
- Fatino, M. 2019-present. MS and PhD candidate
- Watkins, S. 2012-present. IR-4 Field Research Director and Staff Research Associate
- Laguerre, G. 2021-2023. MS candidate
- Contreras, A. 2020-2023. MS candidate
- Kyser, G. 2016-2022. IR-4 Field Research Director and Support Scientist
- Haring, S. 2017-2022. PhD candidate
- Martin, K. 2016-2022. PhD candidate
- Osipitan, A. 2018-2021. Postdoctoral scholar (with M. Mesgaran)
- Wolter, D. 2018-2020. MS candidate.

Recent peer-reviewed publications and book chapters (2020-2023):

- Bean, T., S. Stoddard, L. Sosnoskie, A. Osipitan, P. Devkota, G. Kyser, B.D. Hanson. 2023. Herbicide screening for weed control and crop safety in California melon production. *Weed Technol.*
<https://doi.org/10.1017/wet.2023.30>
- Martin K. and B.D. Hanson. 2023. Determining how almond (*Prunus dulcis*) harvest and processing contributes to low levels of glyphosate and glufosinate residues in almonds. *Weed Sci.*
<https://doi.org/10.1017/wsc.2022.67>
- Wolter, D.A., G.B. Kyser, and B.D. Hanson. 2023. Herbicide management of threespike goosegrass in California orchards. *HortTechnol* 33:176-180 <https://doi.org/10.21273/HORTTECH05159-22>
- Wauters, V.M., K. Jarvis-Shean, N. Williams, A. Hodson, B.D. Hanson, S. Haring, H. Wilson, A. Westphal, S. Sandoval, K. Daane, J. Mitchell, and A. Gaudin. 2023. Developing cover crop systems for California almonds: Current knowledge and uncertainties. *J. Soil Water Conserv.* 78:5-11.
<https://doi:10.2489/jswc.2023.1109A>
- Haring, S.C. and B.D. Hanson. 2022. Agronomic cover crop management supports weed suppression and competition in California orchards. *Weed Sci.* doi: 10.1017/wsc.2022.48
- Martin, K. and B.D. Hanson 2022. Evaluating the effects of extended preharvest intervals on glyphosate and glufosinate residues in almonds. *Weed Sci* 70:361-368
- Fatino, M. and B.D. Hanson. 2022. Evaluating branched broomrape (*Phelipanche ramosa*) management strategies in California processing tomato (*Solanum lycopersicum*). *Plants* <https://doi.org/10.3390/plants11030438>
- Haring, S.C., J. Ou, K. Al-Khatib, and B.D. Hanson. 2022. Grapevine injury and fruit yield response to simulated auxin herbicide drift. *HortScience* 57:384-388. <https://doi.org/10.21273/HORTSCI116317-21>
- Osipitan, O.A., M.B. Mesgaran, B.D. Hanson, and J.D. Fernandez-Bayo. 2022. Leveraging tomato crop residues and pomace for biosolarization to deplete weed seedbank in tomato fields. *Ag Sci Technol.*
<https://doi.org/10.1021/acsagscitech.1c00074>
- Duan, Y., S. Gao, B. Hanson. 2021. Effects of biochar and fertilizer sources on nitrogen uptake by chili pepper plants under Mediterranean climate. *Soil Use and Management*: 10.1111/sum.12759
- Osipitan, O.A., B.D. Hanson, Y. Goldwasser, M. Fatino, M.B. Mesgaran. 2021. The potential threat of branched broomrape for California processing tomato: a review. *Calif Agric* 75:64-73.
<https://doi.org/10.3733/ca.2021a0012>
- Moretti, M.L., Bobadilla, L.K., and B.D. Hanson. 2021. Cross resistance to diquat in glyphosate-paraquat-resistant *Conyza bonariensis* and *Conyza canadensis*. *Weed Technol.* doi:10.1017/wet.2021.11
- Osipitan, O.A., B. Yildiz-Kutman, S. Watkins, P.H. Brown., B.D. Hanson. 2020. Impacts of repeated glyphosate use on growth of orchard crops. *Weed Technol.* <https://doi.org/10.1017/wet.2020.8>
- Brunharo, C.A.C.G., S. Watkins, B.D. Hanson. 2020. Season-long weed control with sequential herbicide programs in California tree nut crops. *Weed Technol.* doi: 10.1017/wet.2020.70