

MARK E. UCHANSKI

Present Position: Assistant Professor of Horticulture, Specialty Crops
 Colorado State University
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Summary

Fifteen years of experience in horticultural education, vegetable crop research, and outreach. My teaching emphasis is in the area of sustainable and organic vegetable production. My major research focus is aimed at developing a deeper understanding of crop physiology and cropping systems to address the many unique challenges faced by vegetable producers in the western United States. I work with small and large producers, and their place in the Colorado and national food system.

Education and Training

Institution	Degree	Date
Univ. of Illinois – Urbana Champaign	Ph.D. in Horticulture-Vegetable Crops	2007
Univ. of Illinois – Urbana Champaign	B.S. in Horticultural Sciences	2002

Professional Experience

Year	Institution	Position
2015-present	Colorado State University (CSU)	Assist. Professor of Specialty Crops
2014-2015	New Mexico State University (NMSU)	Associate Professor w/tenure
2007-2014	New Mexico State University	Assistant Professor of Horticulture
2002-2007	Univ. of Illinois – Urbana Champaign	Graduate Res. & Teaching Assistant

Allocation of Effort (AOE) for Mark Uchanski at CSU 2015-2017.

Calendar year	Teaching (%)	Research (%)	Service and Outreach (%)
2015	45%	45%	10%
2016	45%	45%	10%
2017	45%	45%	10%

Professional Expertise, and Research and Engagement Activities

- Vegetable cropping systems including controlled environment horticulture and protected horticulture (low tunnels, high tunnels, and greenhouses)
- New specialty crop introductions to Colorado
- Organic and sustainable vegetable cropping systems
- Rotational crops and biofumigation
- Food production as it relates to local food systems
- Vegetable physiological disorders

Publications

Peer-Reviewed Publications

1. Fulton, J.C. and M.E. Uchanski. 2017. A review of chile pepper (*Capsicum annuum*) stip: a physiological disorder of peppers. *HortScience* 52(1)1-6.
2. Lynch, H., J.M. Patrick, M. Uchanski, and C. Wharton. 2017. Small farm sustainability in the southwest: challenges, opportunities, and best practices for local farming in Arizona and New Mexico. *Food Studies: An Interdisciplinary Journal*: accepted.
3. Uchanski, M.E., J. Garlich, J.M. Patrick, S. Walker, C. Brown, and D. Clark. 2017. FOOD: A multi-component local food system assessment tool. *Journal of Extension*: under review.
4. Jablonski, B.B.R., M. Carolan, L. Christensen, L. Bellows, A. Bonanno, P. Cabot, A. Jones, P. Meiman, M. Martin, D. Thilmany McFadden, M. Pagliassotti, M. Schipanski, J. Quinn, M. Uchanski, M. Wallenstein, and B. Angelo. 2017. Proposing a multidisciplinary approach to study rural wealth and regional food systems: the Denver Food Plan case. *Regional Studies: special issue on Rural Inequalities Amidst Economic Crisis and Change*: under review.
5. Uchanski, M.E., K. Grover, D. VanLeeuwen, and R. Goss. 2015. Integrating hoop house construction and environmental data interpretation into an undergraduate general education plant science course. *HortTechnology* 25(2):1-6. **American Society for Horticultural Science Outstanding Education Publication Award Winner, 2016.**
6. Rudolph, R.E., C. Sams, R. Steiner, S.H. Thomas, S. Walker, and M.E. Uchanski. 2015. Biofumigation performance of four Brassica crops in a green chile pepper (*Capsicum annuum*) rotation system in southern New Mexico. *HortScience* 50(2)1-7.
7. Schwartz, H. F., Alston, D., Alwang, J., Bartolo, M., Blunt, T., Boateng, C. O., Bunn, B., Cramer, C.S., Cranshaw, W., Davidson, J., Derie, M., Doran, J., Douce, K., Drost, D., du Toit, L. J., Gour, T., Gugino, B., Hammon, B., Hardin, J., Hausbeck, M., Jibilian, G., Lafferty, L., LaForest, J., McMillan, M. S., Mohan, S. K., Morrice, J., Nault, B., Nischwitz, C., Norton, G., Otto, K., Pappu, H. R., Petersen, M., Sampangi, R., Schroeder, B., Secor, W., Szostek, S., Tisserat, N., Uchanski, M.E., VanKirk, J., Waters, T., Wiriyajitsomboon, P., and Wohleb, C. 2014. Onion ipmPIPE: A coordinated effort to improve the management of onion thrips and *Iris yellow spot virus* for onion growers and their industry. *APS Plant Health Progress* 15:172-183.
8. Hecher, E.A.D.S., C.L. Falk, J. Enfield, S.J. Guldan, and M.E. Uchanski. 2014. The economics of low cost high tunnels for winter vegetable production in the southwestern United States. *HortTechnology* 24(1).
9. Uchanski, M.E. 2013. Can we feed ourselves? An exploration of New Mexico agricultural production. *Food Studies: An Interdisciplinary Journal*, 3.
10. Uchanski, M.E. and A. Blalock. 2013. Ethephon improved pigmentation but had no effect on cayenne pepper fruit yield in southern New Mexico. *HortScience* 48(6):738-741.
11. Lillywhite, J.M., J.E. Simonsen, and M.E. Uchanski. 2013. Spicy pepper consumption and preferences in the United States. *HortTechnology* 23(6):868-876.
12. Uchanski, M.E. and A. Rios. 2012. Killed cover crop residue impacts on soil moisture in an irrigated agricultural system. *New Mexico Journal of Science* 46:149-168.
13. Berba, K.J. and M.E. Uchanski. 2012. Post-harvest physiology of microgreens. *Journal of Young Investigators* 24(1):1-5.

Biosketch

14. Uchanski, M.E., S.H. Thomas, and S.J. Walker. 2010. Evaluation of chloropicrin soil fumigants for management of soil-borne pathogens in Chile, 2009. Plant Disease Management Reports. Report 4:V148. The American Phytopathological Society, St. Paul, MN.
15. Uchanski, M.E. 2009. Evaluation of fungicides for management of Phytophthora blight in Chile, 2008. Plant Disease Management Reports. Report 3:V159. DOI:10.1094/PDMR03. The American Phytopathological Society, St. Paul, MN.
16. Coyner, M.R., Skirvin, R.M., Norton, M.A., and M.E. Uchanski. 2008. Assessment of genetic variation among thornless blackberries (*Rubus* spp.) using random amplified polymorphic DNA. Journal of Horticultural Science & Biotechnology 83 (5) 543-548.
17. Díaz-Barrita, A.J., M. Norton, R.A. Martínez-Peniche, M. Uchanski, R. Mulwa, R.M. Skirvin. 2007. The Use of Thermotherapy and *in vitro* Meristem Culture to Produce Virus-Free 'Chancellor' Grapevines. International Journal of Fruit Science 7(3): 15-25.
18. Ozgur, M., A.M. Shehata, R.M. Skirvin, M.A. Norton, R.M.S. Mulwa, M. Uchanski, A.M. Hamblin, and M. Babadoost. 2004. An *In Vitro* Method to Rescue Embryos of Horseradish, a Reputedly Sterile Plant. Journal of Vegetable Crop Production 10(2): 99-105.

Extension and Publications

19. Uchanski, M., M. Bunning, and J. Quinn. 2017. The intersection of the new Food Safety Modernization Act (FSMA) and the National Organic Program (NOP). Colorado State University Extension: <http://farmtotable.colostate.edu/docs/fsma-paper.pdf>
20. Schwartz, H. and M. Uchanski. 2015. Alternative Bean Production Systems: in Common Bean Health Management & Production, 3rd Edition. Schwartz, H.F. and M.A. Brick (eds).
21. Schwartz, H.F. and M.E. Uchanski. Alternative Onion Production Systems in Schwartz, H.F. (ed). 2013. Onion Health Management and Production Bulletin. Onion ipmPIPE and Diagnostic Project. Colorado State University.
22. Walker, S., Uchanski, M.E., and D.D. Jimenez. 2012. Hoop house vegetable production. Guide H-252. aces.nmsu.edu/pubs/_h/H-252.pdf.
23. Walker, S., S. Thomas, and M.E. Uchanski. 2012. Evaluations of chloropicrin fumigants for management of soil-borne pathogens in Chile (*Capsicum annuum* L.). New Mexico Chile Association Report-33. aces.nmsu.edu/pubs/taskforce.
24. Uchanski, M.E. 2008. The Logistics and Economics of Producing Pathogen-Free (PF), Tissue Culture-Derived Horseradish Sets. Horseradish Research Review and Proceedings from the Horseradish Growers School, Jan. 24, 2008. University of Illinois Extension.
25. Skirvin, R.M., M.A. Norton, M. Uchanski, W. Wannarat, A. Shehata, M. Bonar, and K. Wood. 2008. Progress in Horseradish Tissue Culture. Horseradish Research Review and Proceedings from the Horseradish Growers School, Jan. 24, 2008. University of Illinois Extension.

Full Manuscripts in Conference Proceedings

26. Uchanski, M.E. and A. Rios. 2012. Killed cover crop residues for onion moisture management in the desert southwest. Proceedings of the National Allium Research Conference, December 12-14, 2012: Las Cruces, NM.

Biosketch

27. Deb, S.K., Shukla, M.K., Uchanski, M.E., Bosland, P. 2012. Evaluation of compensated root water uptake pattern of greenhouse drip irrigated chile. Proceedings of the ASABE Conference November 2-6, 2012: Orlando, FL.
28. Uchanski, M.E. 2011. Brassica Biofumigation in Arid Agricultural Systems: An Overview. XXXVI Congreso Nacional de la Ciencia del Suelo: Agricultura Organica, Cuarta Parte. Capitulo XVIII, pp. 402-409.
29. Uchanski, M., Skirvin, R.M. and Norton, M.A. 2004. The Use of In Vitro Thermootherapy to Obtain Turnip Mosaic Virus-Free Horseradish Plants. Acta Hort. (ISHS) 631:175-179.

Outreach and Other Publications

30. Uchanski, M.E. (editor). 2016. Topics in Vegetable Production: Volume I- Fact Sheets. Colorado State University. Fort Collins, CO. Pp. 221.
31. Uchanski, M.E. (editor). 2010-2015. Topics in Vegetable Crop Management, Volumes I-VI: A class project prepared by the students of Applied Vegetable Crop Management (HORT 200, 300, 391). New Mexico State University, Las Cruces, NM USA. Ranges from 50-150 pages.
32. Uchanski, M.E. and A. Waugh (eds.) 2010. Proceedings of the 20th International Pepper Conference. New Mexico State University and the Chile Pepper Institute, Las Cruces, NM USA. September 12-14, 2010.
33. Castillo, J.C. and M.E. Uchanski. 2010. New Mexico Chile: A Staple for Small Farmers. Small Farm Digest. USDA/NIFA. Volume 14, Summer 2010.
34. Uchanski, M.E. A Tour of New Mexico's Chile Pepper Tradition: From South to North. The Chile Pepper Institute Newsletter, New Mexico State University: Volume XX Number 2, Summer 2009.
35. Uchanski, M., C. Cramer, S. Walker, and A. Rios. 2009. Effect of Cover Crops: Evaluating onion on-farm irrigation management in Southern New Mexico. Outcomes from the Rio Grande Basin Initiative Newsletter: November 2009, Vol. 8, No. 2:4.

Awards and Recognition

- CSU College of Agricultural Sciences Team Research Award, Food Systems, 2017
- American Society for Horticultural Science Outstanding Education Publication Award Winner, 2016 (see above).
- Organic Educator of the Year- New Mexico Organic Farming Conference, 2013.
- NMSU College of ACES & NACTA Teaching Award, 2012.
- Sigma Alpha Lambda (SAL) National Leadership and Honors Organization honorary membership granted by the Executive Leadership Council.
 - SAL "World's Best Advisor" Award, April 2010.
- Certificate of Appreciation for "outstanding contributions in making the Sixth National Small Farms Conference a success". Awarded by Denis Ebodaghe, National Leader for Small Farms, National Institute of Food and Agriculture. September 2012.
- Granted membership in Gamma Sigma Delta Honorary Society for Agriculture, 2009.