

Chris Reberg-Horton

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Education

Ph.D. North Carolina State University, Raleigh 2002
Horticultural Science. Minor: Statistics.
Dissertation: Development of a new rye cover crop for use in conservation tillage systems.

M.S. University of California, Davis 1997, Agricultural Ecology

B.S. University of North Carolina, Chapel Hill 1994, Environmental Science

Professional Experience

Associate and Assistant Professor of Organic Cropping Systems 2005 – present
Research focus is on organic grain production.

Assistant Professor of Sustainable Agriculture 2002 - 2005.
University of Maine - Research focus was on weed management for organic dairy farms.

Extension Associate February 1998 - February 1999.
Department of Horticultural Science. North Carolina State University, Raleigh, NC.
Co-Instructor for graduate course for extension, "On-Farm Research Methods".

Field Botanist The Nature Conservancy, Chapel Hill, NC. October 1993 - August 1995.
Created wetland restoration plans for mountain bogs, managed volunteers and led field trips for members.

Publications

Peer Reviewed Articles

*Indicates graduate student advisee

1. Phytotoxicity and Benzoxazinone Concentration in Field Grown Cereal Rye (*Secale cereale* L.), C. La Hovary, D. A. Danehower, G. Ma, **C. Reberg-Horton**, J. D. Williamson, S. R. Baerson, and J. D. Burton Volume 2016 (2016), Article ID 6463826, 11 pages, 2016.
doi:10.1155/2016/6463826.
2. *Wells, M.S., Brinton, C. and **Reberg-Horton, S.C.** 2015. Weed suppression and soybean yield in a no-till cover-crop mulched system as influenced by six rye cultivars. *Renewable Agriculture and Food System*. Accepted 29 August 2015. doi:10.1017/S1742170515000344
3. *Wells, M.S., **Reberg-Horton, S.C.**, Mirsky, S.B. 2016. Delayed planting for improved soil water management in cover crop-based no-till corn production. *Agron. J.* 108:1-9 (2016). Accepted: 12 May 2015.

4. *Worthington, M., **S.C. Reberg-Horton**, G. Brown-Guedira, D. Jordan, R. Weisz, and J. P. Murphy. 2015. Morphological Traits Associated with Superior Weed Suppressive Ability of Winter Wheat against Italian Ryegrass. *Crop Science* 55:50-56.
5. *Worthington, M., **S.C. Reberg-Horton**, G. Brown-Guedira, D. Jordan, R. Weisz, and J. P. Murphy. 2015. Relative Contributions of Allelopathy and Competitive Traits to the Weed Suppressive Ability of Winter Wheat Lines against Italian Ryegrass. *Crop Science* 55:57-64.
6. *Wells, M.S., **S.C. Reberg-Horton**, and S.B. Mirsky. 2014. Cultural strategies for managing weeds and soil moisture in cover crop-based no-till soybean production. *Weed Science* 62:501-511
7. Parr, M., J.M. Grossman, **S.C. Reberg-Horton**, C. Brinton, and C.R. Crozier. 2014. Roller-crimper termination for legume cover crops in North Carolina: impacts on nutrient availability to a succeeding corn crop. *Communications in Soil Science and Plant Analysis* 45:1106-1119.
8. Moorman CE, Plush CJ, Orr DB, **Reberg-Horton C**. 2013. Beneficial Insect Borders Provide Northern Bobwhite Brood Habitat. *PLoS ONE* 8(12): e83815. doi:10.1371/journal.pone.0083815
9. *Fox, A., **S.C. Reberg-Horton**, D. Orr and S. Frank. 2013. Crop and field border effects on weed seed predation. *Agriculture, Ecosystems, and Environment* 177: 58-62.
10. *Worthington, M.L. and **S.C. Reberg-Horton**. 2013. Breeding cereal crops for enhanced weed suppression: optimizing allelopathy and competitive ability. *Journal of Chemical Ecology* 39:213-231.
11. *Worthington, M.L., **S.C. Reberg-Horton**, D. Jordan, and J.P. Murphy. 2013. A comparison of methods for evaluating the suppressive ability of winter wheat cultivars against Italian ryegrass (*Lolium perenne*). *Weed Science* 61:491-499.
12. *Wells, M.S., **S. C. Reberg-Horton**, A. N. Smith, and J. M. Grossman. 2013. The reduction of plant-available nitrogen by cover crop mulches and subsequent effects on soybean performance and weed interference. *Agronomy Journal* 105:1-7.
13. Moorman, C. E., C. J. Plush, D. Orr, **C. Reberg-Horton**, and B. Gardner. 2013. Small mammal use of field borders planted as beneficial insect habitat. *Wildlife Society Bulletin* 37:209-215.
14. Plush, C. J., C. E. Moorman, D. Orr, and **C. Reberg-Horton**. 2013. Overwintering sparrow use of field borders planted as beneficial insect habitat. *Journal of Wildlife Management* 77:200-206.
15. Mirsky, S.B., M.R. Ryan, J.R. Teasdale, W.S. Curran, **S.C. Reberg-Horton**, and J.T. Spargo. 2013. Overcoming weed management challenges in cover crop-based organic rotational no-till soybean production in the eastern US. *Weed Technology* 27:193–203.
16. Jemison, J.M., H.M. Darby, and **S.C. Reberg-Horton**. 2012. Winter grain – short season double crop forage production for New England. *Agronomy Journal* 104:256-264.

17. *Brooks, A.M., D.A. Danehower, J.P. Murphy, **S.C. Reberg-Horton**, and J.D. Burton. 2012. Estimation of heritability of benzoxazinoid production in rye (*Secale cereale*) using gas chromatographic analysis. *Plant Breeding* 131:104-109.
18. **Reberg-Horton, S.C.**, J.M. Grossman, T.S. Kornecki, A.D. Meijer, A.J. Price, G.T. Place and T.M. Webster. 2012. Utilizing cover crop mulches to reduce tillage in organic systems in the Southeast. *Renewable Agriculture and Food Systems* 27:41-48.
19. *Place, G.T., **S.C. Reberg-Horton**, D.L. Jordan, T. G. Isleib and G.G. Wilkerson. 2012. Influence of Virginia market type genotype on peanut response to weed interference. *Peanut Science* 39:22-29.
20. *Place, G.T., **S.C. Reberg-Horton**, D.A. Dickey and T.E. Carter. 2011. Identifying soybean traits of interest for weed competition. *Crop Science* 51:2642-2654.
21. *Place, G.T., **S.C. Reberg-Horton**, and T.E. Carter. 2011. Screening tactics for identifying competitive soybean genotypes. *Communications in Soil Science and Plant Analysis* 42:2654-2665.
22. Parr, M., J.M. Grossman, **S.C. Reberg-Horton**, C. Brinton, and C.R. Crozier. 2011. Nitrogen delivery from legume cover crops in no-till organic corn production. *Agronomy Journal* 103:1578-1590.
23. *Smith, A.N., **S.C. Reberg-Horton**, G.T. Place, A.D. Meijer, C. Arellano and J.P. Mueller. 2011. Rolled rye mulch for weed suppression in organic no-tillage soybeans. *Weed Science* 59:224-231.
24. *Place, GT, **SC Reberg-Horton**, TE Carter, AN Smith. 2011. Effects of soybean seed size on weed competition. *Agronomy Journal* 103:175-181.
25. Jemison, J.M, Jr., and **S.C. Reberg-Horton**. 2010. Assessing Bt silage corn in Maine. *Crop Management* doi:10.1094/CM-2010-1022-01-RS.
26. ***Reberg-Horton, S.C.**, J.P. Mueller, S.J. Mellage, N.G. Creamer, C. Brownie, M. Bell and M.G. Burton. 2010. Influence of field margin type on weed species richness and abundance in conventional crop fields. *Renewable Agriculture and Food Systems* 26: doi:10.1017/S174217051000045.
27. *Place, G.T., **S.C. Reberg-Horton**, D.L. Jordan. 2010. Interaction of cultivar, planting pattern, and weed management tactics in peanut. *Weed Science* 58:442-448.
28. Vollmer, E.R., N. Creamer, **C. Reberg-Horton** and G. Hoyt. 2010. Evaluating cover crop mulches for no-till organic production of onions. *HortScience* 45:61-70.
29. *Place, G.T., **S.C. Reberg-Horton**, J.E. Dunphy, and A.N. Smith. 2009. Seeding rate effects on weed control and yield for organic soybean production. *Weed Technology* 23:497-502.
30. *Place, G.T., **S.C. Reberg-Horton**, and M.G. Burton. 2009. Effects of preplant and postplant rotary hoe use on weed control, soybean pod position, and soybean yield. *Weed Science* 57:290-295.

31. *Shearin, A.F., **S.C. Reberg-Horton**, E.R. Gallandt. 2008. Cover cropping and soil disturbance impacts on the invertebrate weed seed predator *Harpalus rufipes* Degeer (Coleoptera:Carabidae). *Weed Science* 56:442-450.
32. *Shearin, A.F., **S.C. Reberg-Horton**, and E.R. Gallandt. 2007. Tillage effects on the activity density of ground beetle (Coleoptera: Carabidae) weed seed predators. *Environmental Entomology* 36:1140-1146.
33. **Reberg-Horton, S.C.**, E.R. Gallandt, and T. Molloy. 2006. Measuring community shifts in a weed seedbank study using distance-based redundancy analysis. *Weed Science* 54:861-866.
34. **Reberg-Horton, S.C.**, J. D. Burton, D. A. Danehower, G. Ma, D. W. Monks, J. P. Murphy, N. N. Ranells, J. D. Williamson, and N. G. Creamer. 2005. Changes over time in the allelochemical content of ten cultivars of rye (*Secale cereale* L.). *Journal of Chemical Ecology* 31:179-193.
35. Long, R.F., A. Corbett, C. Lamb, **C. Reberg-Horton**, J. Chandler, and M. Stimann. 1998. Beneficial insects move from flowering plants to nearby crops. *California Agriculture* 52:23-26.

Peer-reviewed Book Chapter

Creamer, N.G., J.P. Mueller, **S.C. Reberg-Horton**, J. O'Sullivan, M. Schroeder-Moreno, and S. Washburn. 2009. Center for Environmental Farming Systems: Designing and institutionalizing an integrated sustainable and organic program at a land grant university. *In* C.A. Francis et al. (ed.) *Organic Farming: the Ecological System*. ASA, CSSA, and SSSA Book Publishing, Madison, WI.

Extension Publications

1. Atwell, R. **C. Reberg-Horton**, M. Castillo and S. Mirsky. 2016. Identifying regionally adapted winter pea varieties for use as grain, forage, and cover crops. *NC Organic Grains newsletter*.
2. **Reberg-Horton, S.C.** Success with No-Till Organic Soybeans: Getting That Good Weed-Free Stand. 2014. YouTube video produced in collaboration with the University of Georgia.
3. Atwell, R.A. and **S.C. Reberg-Horton**. 2014. Evaluating Starter Fertilizer in Organic No-till Corn.
4. Hamilton, M.N. and **S.C. Reberg-Horton**. *NC Grains for Brewing and Distilling: FAQ*
5. Heiniger, R., **S.C. Reberg-Horton**, and M. Hamilton. 2013. Organic crop production systems. *In* *North Carolina Organic Grain Production Guide*. North Carolina Cooperative Extension Service, AG-660. pp. 4-6
6. Dunphy, J., G. Place, D. Reisig, and **S.C. Reberg-Horton**. 2013. Crop production management – organic soybeans. *In* *North Carolina Organic Grain Production Guide*. North Carolina Cooperative Extension Service, AG-660. pp. 20-24.
7. **Reberg-Horton, S.C.**, R. Weisz, A. York, and G.T. Place, and M. Hamilton. 2013. Weed management. *In* *North Carolina Organic Grain Production Guide*. North Carolina Cooperative Extension Service, AG-660. pp. 32-37.

8. **Reberg-Horton, S.C.**, M.S. Wells and G.T. Place. 2013. Rolled cover crop mulches for organic corn and soybean production. In North Carolina Organic Grain Production Guide. North Carolina Cooperative Extension Service, AG-660. pp. 38-41.
9. Plush, C., C. Moorman, D. Orr and **C. Reberg-Horton**. 2012. Farmland field borders – the relationships between beneficial insects and wildlife. *The Upland Gazette* 17:11-13.
10. **Reberg-Horton, C.** 2011. Canola and spelt. In Organic Grain Project Newsletter. <http://www.organicgrains.ncsu.edu/Newsletters/December2011.htm>
11. **Reberg-Horton, C.**, G. Place, and C. Brinton. 2011 Organic Wheat OVT Results. In Organic Grain Project Newsletter. <http://www.organicgrains.ncsu.edu/Newsletters/September2011.htm>
12. **Reberg-Horton, C.** and C. Brinton. Canola Seeding Rate Trial Update. In Organic Grain Project Newsletter. <http://www.organicgrains.ncsu.edu/Newsletters/September2011.htm>
13. Cowger, C., J. Spargo, and **C. Reberg-Horton**. Organic Grains: Food-Grade Wheat Production. eOrganic webinar recorded live from the Carolina Organic Commodities and Livestock Conference in Rocky Mount, NC. January 12, 2012. <http://www.extension.org/pages/61970/carolina-organic-commodities-and-livestock-conference:-selected-live-broadcasts>
14. Grossman, J. and **C. Reberg-Horton**. 2012. Organic Grains: Variety Trials, Canola Production, Cover Crops. eOrganic webinar recorded live from the Carolina Organic Commodities and Livestock Conference in Rocky Mount, NC. January 13, 2012. <http://www.extension.org/pages/61970/carolina-organic-commodities-and-livestock-conference:-selected-live-broadcasts>
15. Spargo, J. and **C. Reberg-Horton**. eOrganic webinar recorded live from the Carolina Organic Commodities and Livestock Conference in Rocky Mount, NC. January 13, 2012. <http://www.extension.org/pages/61970/carolina-organic-commodities-and-livestock-conference:-selected-live-broadcasts>
16. Place, G. and **C. Reberg-Horton**. 2011. Year 1 Results of Organic Official Variety Trials: Corn and Soybeans. In Organic Grain Project Newsletter. <http://www.organicgrains.ncsu.edu/Newsletters/December2011.htm>
17. **Reberg-Horton, C.**, A. Smith, G. Place, and S. Wells. 2010. Rolled rye mulches for weed control in organic no-till soybeans. *In Organic Grain Project Newsletter*. <http://www.organicgrains.ncsu.edu/Newsletters/December2010.htm>
18. *Hamilton, M., and **C. Reberg-Horton**. 2010. Organic spelt and canola: new crops for NC? *In Organic Grain Project Newsletter*. <http://www.organicgrains.ncsu.edu/Newsletters/December2010.htm>
19. *Fox, A., and **C. Reberg-Horton**. 2010. Field borders and beneficial habitat research. *In Organic Grain Project Newsletter*. <http://www.organicgrains.ncsu.edu/Newsletters/June10.htm>

20. *Place, G. and **C. Reberg-Horton**. 2010. Organic soybean seeding rate. *In* Organic Grain Project Newsletter. <http://www.organicgrains.ncsu.edu/Newsletters/March10.htm>
21. *Hamilton, M. and **C. Reberg-Horton**. 2010. Organic wheat storage and marketing. *In* Organic Grain Project Newsletter. <http://www.organicgrains.ncsu.edu/Newsletters/March10.htm>
22. *Place, GT, **SC Reberg-Horton**, JE Dunphy, AN Smith. 2009. Planting rate recommendations for organic soybean producers. NC State University Cooperative Extension. AG-723.
23. Meijer, A.D., D.L. Hubers, C.R. Crozier, **C. Reberg-Horton**, and M. Hamilton. 2009. Transitioning to organic crop production: can conservation tillage practices be effective? *In* Proceedings from the Southern Conservation Agriculture Systems Conference. Painter, VA.
24. Crozier, C.R., A.D. Meijer, **S.C. Reberg-Horton**, and G. Place. 2009. Overseeding winter annual legume cover crops. Soil Science Society of North Carolina Annual Meeting, Raleigh, NC.
25. *Brinton, C., and **C. Reberg-Horton**. 2009. No-till organic grain production trials. *In* Organic Grain Project Newsletter. <http://www.organicgrains.ncsu.edu/Newsletters/March2009.htm>
26. **Reberg-Horton, C.** and J. Grossman. 2009. No-till organic grain project update. *In* Organic Grain Project Newsletter. <http://www.organicgrains.ncsu.edu/Newsletters/June2009.htm>
27. *Brinton, C., and **C. Reberg-Horton**. 2009. No-till organic grain project update. *In* Organic Grain Project Newsletter. <http://www.organicgrains.ncsu.edu/Newsletters/September2009.htm>
28. *Place, G. and **C. Reberg-Horton**. 2009. New project: organic crop breeding. *In* Organic Grain Project Newsletter. <http://www.organicgrains.ncsu.edu/Newsletters/September2009.htm>
29. *Parr, M, **C. Reberg-Horton**, and J. Grossman. 2009. Fertility and weed control in no-till organic production. *In* Organic Grain Project Newsletter. <http://www.organicgrains.ncsu.edu/Newsletters/Dec2009.htm>
30. *Place, G.T. and **S.C. Reberg-Horton**. 2008. Rotary hoe: a blind cultivation tool for in-row weed control. NC State University Cooperative Extension. AG-706.
31. *Hamilton, M.N., **S.C. Reberg-Horton**, G.T. Place and A. N. Smith. 2008. Out-of-state organic grain bus tour summary. *In* Organic Grain Project Newsletter. <http://www.organicgrains.ncsu.edu/Newsletters/September2008.htm>
32. Crozier, C.R., A.D Meijer, **S. C. Reberg-Horton** and G.T. Place. 2008. Soil fertility and tillage management for organic farming systems. Soil Science Society of North Carolina Proceedings 51: 14-23.

33. *Hamilton, M.N and **S.C. Reberg-Horton**. 2008. How to: organic wheat storage. *In Organic Grain Project Newsletter*.
<http://www.organicgrains.ncsu.edu/Newsletters/June2008.htm>
34. *Place, G.T. and **S.C. Reberg-Horton**. 2008. Update on organic grain production research at NCSU – 2006-2007. *In Organic Grain Project Newsletter*.
<http://www.organicgrains.ncsu.edu/Newsletters/June2008.htm>
35. **Reberg-Horton, S.C.** 2008. Analyzing your on-farm test results: using the ANOVA spreadsheet. *In Organic Grains Project Website*.
<http://www.organicgrains.ncsu.edu/organicresearch/ANOVA.htm>
36. **Reberg-Horton, S.C.** 2008. Analyzing your on-farm test results: using the TTEST spreadsheet. *In Organic Grains Project Website*.
<http://www.organicgrains.ncsu.edu/organicresearch/TTEST.htm>
37. *Hamilton, M., J. Riddle, T. Kleese, A. Griner, M. Fountain, and **C. Reberg-Horton**. 2007. Organic certification for field crops: a guide. NC State University Cooperative Extension. AG-681.
38. **Reberg-Horton, S.C.** 2005. Cropping systems for organic dairies. *In Maine Organic Milk Producers Newsletter*, Spring edition: 6-8.
39. R. Kersbergen and **C. Reberg-Horton**. 2005. The Smooth Bedstraw Invasion--What Are the Options For Control? *Agriculture Today* 6: 5-8.
40. **Reberg-Horton, S.C.** 2004. Organic no-till forages for Maine. *In Maine Organic Milk Producers Newsletter*, Fall edition: 4-6.

Abstracts

1. **Reberg-Horton, S.C.**, T.E. Carter and J.P. Murphy. 2015. Using Organic and Conventional Varietal Tests to Determine Functional Differences Between Systems. *Proc. of Amer. Soc. of Agron.*
2. Ross, N., W. Robarge, **S.C. Reberg-Horton** and J. Grossman. 2015. Development of a Continuous-Flow Chamber Technique to Measure Nitrous Oxide Emissions from Agroecosystems in the Southeast. *Proc. of Amer. Soc. of Agron.*
3. Knight, A. M., W.J. Everman, **S. Reberg-Horton**, and S. Hu, D.L. Jordan and N. Creamer. 2015. Nitrous Oxide Emissions in Long Term Cropping Systems. *Proc. of Amer. Soc. of Agron.*
4. Knight, A. M., W.J. Everman, **S. Reberg-Horton**, and S. Hu, D.L. Jordan and N. Creamer. 2015. Nitrous Oxide Output Based on Weed Management Systems. *Proc. of Weed Sci. Soc. of Amer.* (119).
5. Knight, A. M., W.J. Everman, **S. Reberg-Horton**, and S. Hu, D.L. Jordan and N. Creamer. 2015. Nitrous Oxide Emissions Impacted by Weed Management. *Proc. of South. Weed. Sci. Soc.* (133).

6. Atwell, R.A., S.B. Mirsky, H. Poffenbarger, and **S.C. Reberg-Horton**. (2015). Cover crop mixture proportion and starter fertilizer effects on weed competition and yield in organic rotational no-till maize production. In 2015 annual meeting abstracts. ASA/CSSA/SSSA, Minneapolis, MN. Oral Presentation.
7. Atwell, R.A., **S.C. Reberg-Horton**, S.B. Mirsky, M.S. Castillo, and R.J. McGee. (2015). Identifying regionally adapted winter pea genotypes that maximize grain, forage, and cover crop potential in the southeast USA. In 2015 annual meeting abstracts. ASA/CSSA/SSSA, Minneapolis, MN.
8. Atwell, R.A., **S.C. Reberg-Horton**, A. Azofeifa, and A. Murillo-Williams. (2015). Screening rice genotypes for weed suppressive ability against red rice (*Oryza punctata*) in Costa Rica. In 2015 annual meeting abstracts. ASA/CSSA/SSSA, Minneapolis, MN.
9. A.M. Knight, W.J. Everman, **S. Reberg-Horton**, and S. Hu. 2014. Impact of weed management systems on greenhouse gas emissions. *Proc. Weed Sci. Soc. Amer.* 54:300.
10. A.M. Knight, W.J. Everman, **S. Reberg-Horton**, S. Hu, D.L. Jordan and N. Creamer. 2014. Impact of long-term production systems on greenhouse gas emissions. *Proc. of Amer. Soc. of Agron.*
11. Atwell, R.A., **S.C. Reberg-Horton**, H. Poffenbarger, S. Mirsky, J.W. Moyer, G. Zinati. 2014. Evaluating Starter Fertilizer Sources in Organic No-till Maize Production. *Proc. of Amer. Soc. of Agron.*
12. Wells, M.S., S. Mirsky, **S.C. Reberg-Horton**, S. Hu, and J. Maul. 2014. A Response Surface Study to Explore Nitrogen Immobilization to Rye Surface Residue in a Mulched Cropping Systems. *Proc. of Amer. Soc. of Agron.*
13. Zhang, X., S. Hu, C. Tu, and **S.C. Reberg-Horton**. 2014. Arbuscular mycorrhizal fungi markedly reduce N₂O emissions from an organic soil. *Proc. of Ecological Soc. of Amer.*
14. Wells, M.S., **S.C. Reberg-Horton** and S.B. Mirsky. 2013. Maize performance as determined by planting date in a cover crop-based rotational no-till production system. ASA-CSSA-SSSA International Annual Meetings. Tampa, FL.
15. Worthington, M.L., **S.C. Reberg-Horton**, G. Brown-Guedira, D.L. Jordan and J.P. Murphy. 2013. Breeding winter wheat for increased weed suppressive ability against Italian Ryegrass. ASA-CSSA-SSSA International Annual Meetings. Tampa, FL.
16. Atwell, R.A., C.M. Brinton, and **S.C. Reberg-Horton**. 2013. The effects of row spacing and seeding rate on weed competition and yield in organic canola production. ASA-CSSA-SSSA International Annual Meetings. Tampa, FL.
17. **Reberg-Horton, S.C.**, M.S. Wells, S.B. Mirsky, J. Maul, and S. Hu. 2013. Utilizing 15N to understand rye mulch effects on soybean/weed competition. ASA-CSSA-SSSA International Annual Meetings. Tampa, FL.
18. Atwell, R.A. and **S.C. Reberg-Horton**. 2013. The effects of row spacing and population on weed competition in organic canola production. Weed Science Society of America annual meeting. Baltimore, MD.

19. Wells, M.S., **S.C. Reberg-Horton** and C. Brinton. 2013. Weed suppression and organic soybean performance as influenced by rye cultivars in the roll-killed cover crop system. Weed Science Society of America annual meeting. Baltimore, MD.
20. **Reberg-Horton, S.C.**, T.E. Carter and G.T. Place. 2013. Estimating the heritable variation in early seedling vigor of soybeans for improving weed suppressive ability. Weed Science Society of America annual meeting. Baltimore, MD.
21. Marose, B.H., M. Cavigelli, K. Delate, E. Mallory, C. Shapiro, L. Kolb, **S.C. Reberg-Horton**, J. Maul and S. Mirsky. 2012. Growing the e-Organic Grains CoP. ASA-CSSA-SSSA International Annual Meetings. Cincinnati, OH.
22. Brown, M., J.M. Grossman, **S.C. Reberg-Horton** and W. Shi. 2012. The Influence of Termination Techniques On Plant Available Nitrogen Mineralized From Winter Annual Leguminous Cover Crops. ASA-CSSA-SSSA International Annual Meetings. Cincinnati, OH.
23. Wells, M., **S.C. Reberg-Horton** and C. Brinton. 2012. Weed Suppression and Organic Soybean Performance As Influenced by Rye Cultivars in the "Roll-Killed" Cover-Crop System. ASA-CSSA-SSSA International Annual Meetings. Cincinnati, OH.
24. Fox, A.F., D. Orr, **S.C. Reberg-Horton**, S.D. Frank, and C. Moorman. 2012. Does the red imported fire ant (*Solenopsis invicta*) affect weed seed predation. Annual Meeting of the Entomological Society of America. Knoxville, TN.
25. Fox, A.F., D. Orr, **S.C. Reberg-Horton**, C. Moorman, and G. Balme. 2012. Field border and crop vegetation effects on weed seed predation. Annual Meeting of the Entomological Society of America. Knoxville, TN.
26. Worthington, M., **S.C. Reberg-Horton** and J.P. Murphy. 2012. Breeding Winter Wheat for Increased Weed Suppressive Ability Against Italian Ryegrass (*Lolium perenne*). ASA-CSSA-SSSA International Annual Meetings. Cincinnati, OH.
27. **Reberg-Horton, S.C.**, G.T. Place, A.N. Smith and M.S. Wells. 2012. Evolution of the use of rye mulches in organic soybean production. Annual Meeting of the Southeastern Weed Science Society. Charleston, SC.
28. Wells, M.S., **S.C. Reberg-Horton** and A.N. Smith. 2011. The effect of rye roll-killed mulch on N-immobilization. Annual Meeting of the Northeastern Weed Science Society. Baltimore, MD.
29. **Reberg-Horton, S.C.**, M.S. Wells, A.N. Smith, J.M. Grossman, M.C. Parr, and G.T. Place. 2011. Weed management impacts of roll-killed cover crops for organic corn and soybeans. Annual Meeting of the Northeastern Weed Science Society. Baltimore, MD.
30. Wells, M.S., **S.C. Reberg-Horton** and A.N. Smith. 2010. Nitrogen immobilization in a rye (*Secale cereale* L.) roll-killed system. ASA-CSSA-SSSA International Annual Meetings. Long Beach, CA.
31. **Reberg-Horton, S.C.**, J.M. Grossman, W.C. Johnson, T.S. Kornecki, A. Meijer, A.J. Price, G.T. Place and T.M. Webster. 2010. Utilizing cover crop mulches to reduce tillage in organic systems in the Southeast. ASA-CSSA-SSSA International Annual Meetings. Long Beach, CA.

32. Grossman, J.M., M.C. Parr, T. Sooksanguan, S. Seehaver, and **S.C. Reberg-Horton**. 2010. Diversity of hairy vetch cover crop rhizobia symbionts varies among fields inoculated plants and naturalized populations. ASA-CSSA-SSSA International Annual Meetings. Long Beach, CA.
33. **Reberg-Horton, S.C.**, S. Mirsky, M. Cavigelli, J. Teasdale, R. Heiniger, A. Meijer, A.K. Culbreath, C. Crozier, G.T. Placer, L Grabau, H. Schomberg, J. Grossman, W.C. Johnson and E.G. Cantonwine. 2010. Challenges and opportunities with organic grain production in the Southeast. ASA-CSSA-SSSA International Annual Meetings. Long Beach, CA.
34. Place, G., C. Crozier, **S.C. Reberg-Horton**, C. Brinton and A. Meijer. 2010. Corn yields following different crimson clover establishment methods in North Carolina. ASA-CSSA-SSSA International Annual Meetings. Long Beach, CA.
35. Place, G., **S.C. Reberg-Horton**, T.E. Carter, and D.P.C. Martinez. 2010. The good, the bad, the ugly, and the unexpected of integrating cultural and mechanical tactics for organic soybean weed management. ASA-CSSA-SSSA International Annual Meetings. Long Beach, CA.
36. Place, GT, TE Carter, and **SC Reberg-Horton**. 2009. Improved weed competitiveness in soybean screening tactics and traits of interest. Presented at the Agronomy Society of America conference in Pittsburgh, PA (first place oral presentation). Paper 52135.
37. Place, GT, DL Jordan, and **SC Reberg-Horton**. 2009. Economic return of peanut grown in various row patterns with different herbicide inputs. Presented at the American Peanut Research and Education Society conference in Raleigh, NC (first place oral presentation).
38. Place, GT, TE Carter, and **SC Reberg-Horton**. 2009. Identification of competitive soybean genotypes and soybean traits of interest in weed suppression. Presented at the Weed Science Society of North Carolina conference in Raleigh, NC (oral presentation).
39. Place, GT, TE Carter, and **SC Reberg-Horton**. 2009. Breeding for weed suppressiveness: an initial approach to soybean genotype screening. Presented at the Weed Science Society of America/Southern Weed Science Society of America joint conference in Orlando, FL (first place oral presentation in PhD student category).
40. **Reberg-Horton, S.C.**, J. Grossman, C. Brinton, A. Smith and M.S. Wells. 2009. Mechanisms of weed suppression in rolled cover crop systems. American Society of Agronomy Annual Meeting, Pittsburgh, PA.
41. Parr, M.C., **C. Reberg-Horton**, C. Crozier, C. Brinton and J. Grossman. 2009. Fixation and release of nitrogen from novel cover crops for use in reduced tillage organic corn production in North Carolina. American Society of Agronomy Annual Meeting, Pittsburgh, PA.
42. Brinton, C.M., **S.C. Reberg-Horton**, M.C. Parr and J. Grossman. 2009. Weed control in organic cropping systems using a roll-kill/no-till technique with cover crops. American Society of Agronomy Annual Meeting, Pittsburgh, PA.

43. Smith, A.N., **S.C. Reberg-Horton**, and J. P. Mueller. 2009. Utilizing rolled rye mulch for weed suppression in organic no-till soybeans. American Society of Agronomy Annual Meeting, Pittsburgh, PA.
44. Smith, A.N., J.P. Mueller, and **S.C. Reberg-Horton**. 2009. Weed management tactics in organic no-till soybeans. Presented at the Weed Science Society of America/Southern Weed Science Society of America joint conference in Orlando, FL.
45. Crozier, C.R. **S.C. Reberg-Horton**, A.D. Meijer, J. Grossman, M. Hamilton, L. Elworth, R.W. Heiniger, and R. Weisz. 2009. Multifaceted organic grain extension programming in North Carolina. American Society of Agronomy Annual Meeting, Pittsburgh, PA.
46. Meijer, A.D., D.L. Hubers, C.R. Crozier, **C. Reberg-Horton**, and M. Hamilton. 2009. Transitioning to organic crop production: can conservation tillage practices be effective? In: Proceedings from the Southern Conservation Agriculture Systems Conference. Painter, VA.
47. Place, G.T, T. E. Carter, **S. C. Reberg-Horton**. 2009. Breeding for weed suppressiveness: an initial approach to soybean genotype screening. Proceedings of the 2009 Weed Science Society of America annual meeting.
48. Smith, A.N., J. P. Mueller, **S. C. Reberg-Horton**. 2009. Weed management tactics in organic no-till soybeans. Proceedings of the 2009 Weed Science Society of America annual meeting. Orlando, FL.
49. **Reberg-Horton, S.C.**, A. Brooks, D. Danehower, M. Burton, J. Burton, G. Ma, and P. Murphy. 2008. Breeding rye cover crops for increased allelopathic potential. 5th World Congress on Allelopathy. Saratoga Springs, NY
50. Place, G.T., M.G. Burton, and **S.C. Reberg-Horton**. 2008. Improving weed suppressive ability in soybeans. Proceedings of the 26th Annual Meeting of the Weed Science Society of North Carolina. Raleigh, NC.
51. Smith, A.N., Place, G.T., and **Reberg-Horton, S.C.** 2008. Seeding rate effects on weed control and yield in organic soybeans. Proceedings of the 26th Annual Meeting of the Weed Science Society of North Carolina. Raleigh, NC.
52. **S.C. Reberg-Horton**, J.P. Mueller, and N.G. Creamer. 2007. Combining short-term and long-term research on organic farming systems at the Center for Environmental Farming Systems. In: Agronomy Society of America, Crop Science Society of America, Soil Science Society of America, 2007 International Annual Meetings Abstracts, New Orleans, LA. CDROM.
53. Place, G.T., T.E. Carter, M.G. Burton, and **S.C. Reberg-Horton**. 2007. Traits of interest for improving weed suppressive ability in soybean during the critical period for weed competition. In: Agronomy Society of America, Crop Science Society of America, Soil Science Society of America, 2007 International Annual Meetings Abstracts, New Orleans, LA. CDROM.

54. Crozier, C.R., G.D. Hoyt, D.L. Osmond, R.W. Heiniger, **S.C. Reberg-Horton**, and N. George. 2007. North Carolina biofuels activity and soil fertility update. In: C. Crozier (ed.), Proc. Southern Plant Nutrient Conf. Olive Branch, MS. Published by The Samuel Roberts Noble Foundation, Ardmore, OK.
55. Place, G.T., M.G. Burton, **S.C. Reberg-Horton**, and G.G. Wilkerson. Rotary hoe cultivation for early-season weed control in corn and soybean. Proceeding of the Weed Science Society of North Carolina 2007.
56. **Reberg-Horton, C.** 2007. The impact of cultivation, timing and increased plant population density on weed control in organic soybeans. Proceedings of the Annual Meeting - Northeastern Weed Science Society 61:142.
57. Burton, M., **C. Reberg-Horton**, G. Place and S. Hoyle. 2007. Rotary hoe efficacy in corn; influence of soil type and moisture. Proceedings of the Annual Meeting - Northeastern Weed Science Society 61:145.
58. Place, G.T., M.G. Burton, **S.C. Reberg-Horton** and G.G. Wilkerson. 2007. Blind cultivation in corn: effect of frequency, soil type and moisture on weed density and estimated yield loss. Proceedings of the Annual Meeting - Southern Weed Science Society 60:219.
59. Jemison, J.M. and **C. Reberg-Horton**. 2006. Alternative cropping systems for organic dairy producers: improvements and lessons learned. Proceedings of the Annual Meeting - Northeastern Weed Science Society 60:74-77.
60. Kersbergen, R. and **C. Reberg-Horton**. 2006. Managing smooth bedstraw in pasture and forage crops in New England. Proceedings of the Annual Meeting - Northeastern Weed Science Society 60: 78.
61. Shearin, A. F., **S.C. Reberg-Horton**, E.R. Gallandt, and F.A. Drummond. 2005. Cover crop and cultivation impacts on the weed seed predator *Harpalus rufipes*. Hortscience 40:1102.
62. **Reberg-Horton, S.C.**, E. Gallandt and N. Taylor. 2005. A distance-based redundancy analysis of weed seed bank changes in the Maine potato ecosystem project. Proceedings of the Annual Meeting - Northeastern Weed Science Society 59:139.
63. Jemison, J.M. and **S.C. Reberg-Horton**. 2005. An alternative forage production system for organic dairy producers: quality feed and fewer weeds. Proceedings of the Annual Meeting - Northeastern Weed Science Society 59:13.
64. Shearin, A. and **S.C. Reberg-Horton**. 2005. Cover crop management impacts on the weed seed predator, *Harpalus rufipes*. Proceedings of the Annual Meeting - Northeastern Weed Science Society 59:77.
65. **Reberg-Horton, S.C.**, N.G. Creamer, and J.P. Murphy. 2004. Breeding for increased rye allelopathy. Proceedings of the Annual Meeting - Northeastern Weed Science Society 58: 157.

66. **Reberg-Horton, S.C.**, N.G. Creamer, D.A. Danehower, G. Ma, D.W. Monks, J.P. Murphy, N.N. Ranells, J.D. Williamson, and J.D. Burton. 2003. Cultivar and maturation effects on the allelochemical content of ten cultivars of rye. Proceedings of the Annual Meeting - Northeastern Weed Science Society 57: 84
67. **Reberg-Horton, S.C.**, N.G. Creamer, D.A. Danehower, G. Ma, D.W. Monks, N.N. Ranells, J.D. Williamson, J.D. Burton and J.P. Murphy. 2003. Breeding a more allelopathic rye for use in organic vegetable production. HortScience 38:866.
68. Ranells, N.N., **Reberg-Horton, S.C.**, and Creamer, N.G. 2002. Varietal effects of cereal rye on recovery of soil inorganic nitrogen. Annual Meeting Abstracts of the American Society of Agronomy.
69. **Reberg-Horton, S.C.**, N.G. Creamer, J. Burton, N. Ranells, and C.L. Mohler. 2001. Bioassay and field evaluation of rye cultivars for allelopathy. 41st Annual Meeting of the Weed Science Society of America. WSSA Abstracts 41:109.
70. **Reberg-Horton, S.C.**, N.G. Creamer, J. Burton, N. Ranells, and P. Murphy. 2001. Breeding rye (*Secale cereale*) for increased allelopathy. 98th Annual Conference of the American Society for Horticultural Science. HortScience 36:561.
71. **Reberg-Horton, S.C.**, N.G. Creamer, and C.L. Mohler. 1999. The suppression of weeds by nine varieties of rye (*Secale cereale*). 40th Annual Meeting of the Weed Science Society of America. WSSA Abstracts 40:27.

Extramural Awards

\$6,842,000 (\$4,952,000 as lead PI, \$1,889,000 as co-PI)

Reberg-Horton, S.C., S. Mirsky, H. Schomberg, D. Timlin, M. Cabrera, J. Gaskin. 2015-2019. Decision Support Tools for Cover Crops: Crediting Water and Nitrogen Conservation. NRCS Conservation Innovation Grant, (\$~1,000,000)

Mirsky, Steven, **Chris Reberg-Horton**, Matthew Ryan, Jude Maul, Rebecca McGee, Gerald Smith, Heathcliffe Riday, Laurie Drinkwater. 2015-2019. Creating the Cover crops that Organic Farmers Need: Delivering Regionally Adapted Varieties across America. USDA – Organic Agriculture Research and Extension Initiative (OREI). (\$~2,000,000)

Reberg-Horton, S.C., et al. (Principal Investigators from nine states). 2015-2017. Institutionalizing Cover Crop Research and Education in the Southeast. USDA-SARE (\$129,712)

Reberg-Horton, S.C., J.M. Luginbuhl, D. Bloom, W. Everman, W. Robarge, S.P. Washburn, S.K. Bowen, S. Hu, M.S. Schroeder, and N.G. Creamer. 2015-2018. Phase II of CEFS Long-Term Systems Research: Providing the Building Blocks for Resilient Food Production Systems Reberg-Horton, USDA-SARE (\$300,000)

Atwell, R.A. and **S.C. Reberg-Horton**. 2014-2015. Breeding Rice to Suppress Weeds: Helping Marginalized Farmers in Central America Reduce Yield Loss. U.S. Borlaug Fellows Program – USAID and Purdue University. (\$14,986)

Atwell, R.A. and **S.C. Reberg-Horton**. 2014-2016. Identifying Regionally Adapted Winter Pea and Faba Bean Genotypes that Maximize Grain and Cover Cropping Potential. USDA-SARE (\$10,957)

Reberg-Horton, S.C., J.P. Murphy, T.G. Isleib, and M.M. Goodman. 2012-2015. Creating an Organic Plant Breeding Center USDA - National Institute of Food and Agriculture (\$1,262,855)

Reberg-Horton, S.C., J.M. Luginbuhl, M.D. Schulman, J.M. Grossman, Y.J. Cardoza, D.B. Orr, S.P. Washburn, S.K. Bowen, M.H. Poore, S. Hu, M.S. Schroeder, and N.G. Creamer. 2012-2015. CEFS Long-Term Systems Research: Providing the Building Blocks for Resilient Food Production Systems Reberg-Horton, USDA-SARE (\$300,000)

Hu, S., **Reberg-Horton, S.C.**, M.S. Schroeder, J.M. Grossman, Y.J. Cardoza, W. Everman, and W.P. Robarge. 2012-2015. Assessing The Greenhouse Gas Mitigation Potential Of Organic. USDA - National Institute of Food and Agriculture (\$749,000)

Reberg-Horton, S.C. 2011-2014. Nutrient Management in Organic No-Till. Subcontract with the Rodale Institute (\$142,730)

Shew, H.D. and **S.C. Reberg-Horton**. 2012-2014. Stevia Production. NC Tobacco Trust Fund Commission (\$98,000)

Worthington, M.L., J.P. Murphy, and **S.C. Reberg-Horton**. 2012-2014. Breeding Wheat For Increased Weed-Suppressive Ability Against Italian Ryegrass. USDA-SARE (10,952)

Crozier, C.R. and **S.C. Reberg-Horton**. 2012-2013. Soil Fertility Management for Rapeseed Production Crozier, (\$20,000)

Reberg-Horton, S.C. 2010-2012. Organic Canola and Spelt Production. NC Tobacco Trust Fund Commission. (\$73,500)

Reberg-Horton, S.C., Place, G.T. Carter, T.E. Goodman, M.M. Isleib, T.G. Murphy, J.P. and M. Sligh. 2009-2012. Farmer Driven Breeding: Addressing the Needs of Southeastern Organic Field Crop Producers. USDA – Organic Agriculture Research and Extension Initiative (OREI). (\$1,174,942).

Reberg-Horton, S.C. and E.J. Dunphy. 2012-2013. Soybean Variety Trials for Organic Farmers NC Soybean Producers Association, Inc. (\$21,419)

Reberg-Horton, S.C. 2009-2011. Improving weed and insect management in organic reduced-tillage cropping systems. USDA- Organic Agriculture Research and Extension Initiative (OREI). (\$39,661).

Reberg-Horton, S.C., R. Weisz, and J. P. Murphy. 2009-2010. Cultural practices to improve the control of Italian Ryegrass. NC Small Grain Growers Association. (\$3,000).

Robertson, D., **S.C. Reberg-Horton**, D. Marshall and R. McReynolds. 2008-2009. New market opportunities for farmers in North Carolina. Golden Leaf Foundation. (\$83,000).

S.C. Reberg-Horton, M. Gibbs, J.P. Mueller, A. Meijer, M. Wagger and M.N. Hamilton. 2008. "Reducing tillage in organic grain production with an innovative cover crop management system." USDA NRCS Conservation Innovation Grants. (\$246,902).

Place, G.T. and **S.C. Reberg-Horton**. 2008. "Traits of interest for improving weed suppressive ability in soybean during the critical period for weed competition." (\$10,000).

Orr, D., **S.C. Reberg-Horton**, C. Moorman, and Y. Cardoza. 2008. "Whole farm-level evaluation of field border vegetation on organic management of insect pest and weed seed banks, and on farmland wildlife. USDA Integrated Organic Program. (\$340,000).

B. Shew and **S.C. Reberg-Horton**. 2008. "Exploiting the organic peanut market: refining production systems for the Southeast." (\$30,001)

Mueller, J.P, H. Shuijin, **S.C. Reberg-Horton**, and C.W. Raczkowski. 2008. "Reduced tillage in Organic Systems; A Soil and Water Quality Imperative." Sustainable Agriculture and Research Education (SARE). (\$190,000).

Reberg-Horton, S.C., C. Crozier, A. Meijer and M. Gibbs. 2008. "New tools to reduce tillage in organic systems." Sustainable Agriculture and Research Education (SARE). (\$14,917).

Reberg-Horton, S.C., G.T. Place and A. Meijer. 2008. "Weed Management Tactics For No-Till Organic Soybean Production." NC Soybean Producers Assoc., Inc. (\$9,963)

Reberg-Horton, S.C., R.W. Heiniger, C.R. Crozier, A. Meijer, T. Kleese, L. Elworth, and M.N. Hamilton. 2007. "Developing an Organic Grain Industry in North Carolina." Golden Leaf Foundation. (\$100,000)

Reberg-Horton, S.C., and M.N. Hamilton. 2007. Increasing the Grain Supply for Organic Dairies in North Carolina. Organic Valley. (\$35,502).

Reberg-Horton, S.C., R.W. Heiniger, C.R. Crozier, A. Meijer, M.G. Burton, P.R. Weisz, T. Kleese, L. Elworth, and M.N. Hamilton. 2006. "Developing an Organic Grain Industry in North Carolina." Golden Leaf Foundation. (\$150,000)

Reberg-Horton, S.C., R.W. Heiniger, C.R. Crozier, P.R. Weisz, A. Meijer, M.G. Burton, and M.N. Hamilton. 2006. "Developing an Organic Grain Industry in North Carolina". Office of Extension, Engagement, and Economic Development, North Carolina State University. (\$9,615).

Reberg-Horton, S.C. 2006. "Assessing the suitability of specialty oil seed crops in North Carolina." Technology Crops International. (\$14,651).

Reberg-Horton, S.C., C.R. Crozier, M.G. Burton, R.W. Heiniger, P.R. Weisz, J.P. Murphy, M.N. Hamilton, and G.L. Ambrose. 2006. "Fostering organic grain production in North Carolina." North Carolina Agricultural Foundation. (\$59,256)

Reberg-Horton, S.C. K.W. Jennings, and D.W. Monks. 2006. "Natural Product Herbicides for Organic Farmers." North Carolina Integrated Pest Management Program. (\$4,000)

Reberg-Horton, S.C., D.P. Marcinkowski, J.M. Halloran, T.S. Griffin, E.R. Gallandt, J.M. Jemison, R. Kersbergen, M.R. Stokes, G.W. Anderson, C.G. Schwab, and P.S. Erickson. 2005. "Reducing off-farm grain inputs on northeast organic dairy farms." CSREES Integrated Organic Program. (\$827,274)

Curran, W.S., D.A. Mortensen, M.E. Barbercheck, T.S. Hoover, A.G. Hulting, R.J. Hoover, **S. C. Reberg-Horton** and E.R. Gallandt. 2005. "Using cover crops and crop diversity to optimize

ecologically-based weed management” Sustainable Agriculture and Research Education (SARE) Program (\$98,000).

Gallandt, E. R., **S. C. Reberg-Horton**, E. B. Mallory, W. S. Curran, D. A. Mortensen, M. E. Barbercheck, and R. J. Hoover. 2003. “Threshold-based Cover Cropping Strategies for Weed Management.” CSREES Northeastern Region IPM. (\$174,989).

Reberg-Horton, S.C. and S. Seiter. 2003. “Farmer research education program.” Sustainable Agriculture and Research Education (SARE) Program. (\$141,471).

Shearin, A.F., **S.C. Reberg-Horton**, and E.R. Gallandt. 2004. “Evaluating the Effects of Weed Management on Weed Seed Predators.” Maine Agricultural Center. (\$5,000).

Reberg-Horton, S.C., R. Kersbergen, M. Hutchinson, and B. Hoskins. 2003. “Evaluating the Amino Sugar N Test for Preventing Overfertilization.” Maine Agricultural Center. (\$5,000).

Gallandt, E.R., E. Haramoto, and **S.C. Reberg-Horton**. 2003. “Brassica Green Manures: Biofumigants for Pest Management in Potato.” Maine Agricultural Center. (\$7,000).

Invited Presentations

Best management practices and input costs for southeastern organic grain production. Emerging Opportunities for Organic Grain Production and Marketing in South Carolina, Santee, SC. December 8, 2015

Creation of an organic plant breeding center. USDA-National Institute of Food and Agriculture Project Directors Workshop. Washington, D.C. October 20, 2015.

Organic plant breeding. Grass Up! An educational event for congressional staffers hosted by Organic Valley, Washington, D.C. October 6, 2015.

Climate Smart Agriculture: innovation and resiliency. French Ameri-Can Climate Talks (FACTS). Raleigh, NC. August 27, 2015

Plant Breeding for Organic Systems. University of Maryland and Agricultural Research Service Joint Symposium 2014: Organic Production; Food, Health, Ecosystems. Beltsville, MD, November 13, 2014.

Organic Field Crop Production. University of Costa Rica. San Jose, Costa Rica, October 20, 2014.

The basics of organic production in southeastern field crops. Tobacco Workers Conference. Pinehurst, NC. January 14, 2014.

Creation of an organic plant breeding center. USDA-National Institute of Food and Agriculture Project Directors Workshop. Washington, D.C. January 13, 2014.

Organic production in NC. Mount Olive College. Goldsboro, NC. October 21, 2013.

Cover crop mulches for water conservation. Natural Resources Conservation Service YouTube site. September 17, 2013.

Overview of organic grain production the Southeast. Organic Grain and Oilseed Workshop. At the National Environmentally Sound Production Agriculture Laboratory, Tifton, GA. June 27, 2013

Organic soybean production. Organic Grain and Oilseed Workshop. At the National Environmentally Sound Production Agriculture Laboratory, Tifton, GA. June 27, 2013

Cover crop diversity and management strategies. Southeastern Soil Health Field Day. Natural Resource Conservation Service. Albemarle, NC. May 14, 2013.

Farming Strategies in Today's Changing Climate. Climate Adaptation Conference, Abundance Foundation. Pittsboro, NC. February 8, 2013.

Organic grain systems in the Carolinas, Carolina Farm Stewardship Association annual conference, Greenville, SC, October 28, 2012.

Organic Agriculture Training Program for the Natural Resources Conservation Service, Charleston, SC, September 25, 2012.

Rapeseed production in North Carolina, Franklin County, August 2, 2012.

Organic Grain and Vegetable Conference, Queen Anne's county, MD, March 6, 2012

Reberg-Horton, S.C. 2010. Overview of tools for systems research: statistical tools and experimental design. Agricultural Systems Research Workshop. University of Georgia, Athens, GA.

Reberg-Horton, S.C., J.M. Grossman, W.C. Johnson, T.S. Kornecki, A. Meijer, A.J. Price, G.T. Place and T.M. Webster. 2010. Utilizing cover crop mulches to reduce tillage in organic systems in the Southeast. Symposium on Organic No-till at ASA-CSSA-SSSA International Annual Meetings. Long Beach, CA.

Reberg-Horton, S.C, S. Mirsky, M. Cavigelli, J. Teasdale, R. Heiniger, A. Meijer, A.K. Culbreath, C. Crozier, G.T. Placer, L Grabau, H. Schomberg, J. Grossman, W.C. Johnson and E.G. Cantonwine. 2010. Challenges and opportunities with organic grain production in the Southeast. Symposium on Organic Grain Production at ASA-CSSA-SSSA International Annual Meetings. Long Beach, CA.

Reberg-Horton, S.C. 2010. Statistical tools for system research. Agricultural Systems Research Workshop. University of Georgia conference sponsored by southern SARE. Athens, GA.

Reberg-Horton, S.C. 2009. Organic field crops: opportunities and challenges. Annual Meeting of the North Carolina Weed Science Society

Reberg-Horton, S.C. 2009. Traditions and conventions in the use of repeated measures analysis, contrasts, and pairwise comparison. Annual Meeting of the Northeastern Weed Science Society. Baltimore, Maryland.

Reberg-Horton, S.C. 2009. Traditions and conventions in the use of repeated measures analysis, contrasts, and pairwise comparison. Annual Meeting of the North Central Weed Science Society. Kansas City, Missouri.

S. Chris Reberg-Horton. 2008. Weed and fertility management in organic grains. Introduction to Organic Grain Production by Braswell Milling. Rocky Mount, NC.

S. Chris Reberg-Horton, J. Paul Mueller, and Nancy G. Creamer. 2007. Combining short-term and long-term research on organic farming systems at the center for environmental farming systems. Agronomy Society of America, New Orleans, Louisiana.

Reberg-Horton, S.C. 2005. Analysis of on-farm research data: where statistical ideals meet field realities. Farmer Driven Research Conference, Portsmouth New Hampshire.

Reberg-Horton, S.C. 2003. Experimental Design and Statistical Analysis of On-farm Research. On-farm Research for Extension Agents. Cornell University, Ithaca, New York.

Reberg-Horton, S.C. 2003. Managing weed seedbanks. New England Vegetable & Berry Conference, Manchester, New Hampshire, December 17, 2003.

Graduate committees

Student	My role	Date begun	Defense Date
Sean Bloszies	Member	Aug. 2012	Currently enrolled
Alex Knight	Co-chair	Aug. 2013	Currently enrolled
Matthew Granberry	Member	Aug. 2013	Currently enrolled
Jeremy Machacek	Co-chair	Aug. 2013	Currently enrolled
Natalie Gross	Member	Aug. 2013	Currently enrolled
Zachary Jones	Member	Aug. 2013	Currently enrolled
Rachel Atwell, PhD	Chair	May 2015	Currently enrolled
Natalie Ross, M.S.	Member	Aug. 2013	Currently enrolled
Sam McGowen, M.S.	Member	Aug. 2014	Currently enrolled
Nathan Bennett, M.S.	Member	Aug. 2013	Currently enrolled
Rachel Atwell, M.S.	Chair	Aug. 2012	April 2015
Scott Wells, PhD	Chair	June 2011	Aug. 2013
Aaron Fox, PhD	Co-Chair	Aug. 2008	May 2013
Margaret Worthington, PhD	Co-chair	Aug. 2010	Dec. 2013
Scott Wells, M.S.	Chair	Aug. 2008	June 2011
Eileen Balz, M.S.	Member	Aug. 2009	Aug. 2011
Charlie Plush, M.S.	Member	Aug. 2008	July 2011
Mary Parr, M.S.	Member	Aug. 2009	Dec. 2010
Samba Ansumana-Kawa, PhD	Member	May 2006	Jan 2010
George Place, PhD	Co-Chair	Jan. 2007	Sep. 2009

Adam Smith, M.S.	Chair	Aug. 2007	Dec. 2009
Sarah Ruark, M.S.	Member	Jul. 2006	Nov. 2008
Emily Vollmer, M.S.	Member	May 2006	Dec 2008
Ashley Brooks, M.S.	Member	Jan 2006	Dec 2008
Eric West, PhD	Member	Jan 2007	Dec 2009
Amanda Shearin, M.S (Maine)	Chair	Sep 2003	Dec. 2005
Megan Gardener, M.S. (Maine)	Member	Sep 2003	Dec. 2005

Field days and workshops hosted

Organic Farm Tour: Reedy Fork Farm, Alamance County, July 7, 2015

Wheat and Barley for Bread and Beer: production in WNC, Buncombe County, June 4, 2015

Carolina Organic Commodity and Livestock Conference. February 12, 2015

Stevia Production and Establishment, Moore County, June 24, 2014

Production and Disease Management for Stevia in NC. Kinston, August 19, 2014.

Carolina Organic Commodity and Livestock Conference. February 12, 2014

Organic Grain Production Field Day, Goldsboro. July 30, 2013.

Stevia Production in NC, Avoca Farms, Merry Hill, NC. July 11, 2013

Carolina Organic Commodity and Livestock Conference. Rocky Mount, NC. February 14 and 15, 2013.

Chair, Center for Environmental Farming Systems Field Day, May 3, 2012.

Organic canola field tour. Organic farm in Nash county. May 30, 2012.

Organic canola field tour. Organic farm in Hyde county. May 31, 2012.

Organic grains summer workshop. Organic farm in Nash county. July 19, 2012.

Carolina Organic Commodity and Livestock Conference. Rocky Mount. January 12-13, 2012.

Organic Canola and Spelt Production and Marketing – Goldsboro, June 2, 2011. Toured field research plots and discussed market with regional buyers.

Carolina Organic Commodity and Livestock Conference – Oxford, January 20-21, 2011

The Roll Kill/No-till Method for Organic Row Crops. On-farm workshops held for the Natural Resource Conservation Service, county extension agents and farmers:

- Hoffner Dairy Farm, Rowan County, July 15, 2010
- Pocosin Farms, Hyde County, June 8, 2010.
- Breeze Farm, Orange County, April 28, 2009.
- Hoffner Dairy Farm, Rowan County, May 7, 2009.

- Looking Back Farm, Perquimans County, May 28, 2009.
- Pocosin Farms, Hyde County, June 4, 2009.

Webinar – New Organic Breeding Coalition: Breeding for Organic Production Systems. Held on Jan 24th, 2010.

NC Commercial Organic Production Conference, January 15, 2010. I conducted workshops on no-till production and plant breeding for organic grain crops.

Organic Field Crops Conference. Rocky Mount, February 27th, 2009.

Organic Wheat: From Field To Bread, June 11th, 2009. Mountain Research Station, Waynesville.

Out-of-State Organic Grain Bus Tour, July 24-26. 2008. A tour of farms and research plots in Maryland, Pennsylvania and Virginia. Speakers included organic farmers from the eastern shore of Maryland, scientists from the USDA-Agricultural Research Service station in Beltsville, researchers at the Rodale Institute, PA, extension agents from Maryland and Virginia and the state agronomist for the Natural Resource Conservation Service in Virginia.

Organic Grain Introduction. March, 25, 2008, Center for Environmental Farming Systems, Goldsboro.

The Future for Organic Grains in Hyde County. December 4, 2007.

Organic Grain Research and Farm Tour. August 7, 2007.

Organic Grains in Northeastern NC. August 2, 2007.

Organic Corn and Soybeans in Wayne and Duplin Counties. July 17, 2007.

Weed Management in Organic Grains. July 11, 2006. Center for Environmental Farming Systems, Goldsboro.

Organic corn and soybean management. August 2, 2006. Macha-Pungo Farm, Hyde County.

Organic grain farmers panel. December 12, 2006. Center for Environmental Farming Systems, Goldsboro.

Organized the twice yearly Dairy Forage conference that is co-hosted by the Maine Organic Milk Producers.

Co-hosted the annual Sustainable Agriculture Field Day held at the Roger's Research Farm in Stillwater Maine.

Co-hosted the annual 2-day Certified Crop Advisors Training for New England.

Teaching

I guest lecture at NC State University in the following courses:

CS 430/590 Advanced Agroecology

CS 230 Introduction to Agroecology

CS 201 Crop Adaptation and Production

SSC 495/590 Special Topics - Soil Agroecology

CS/SSC 620 Critical Issues in Sustainable Agriculture

CS 717 Weed Management Systems

CS 312 Grassland Management for Natural Resources Conservation

CS 415 Integrated Pest Management

ENT 495/590 Special Topics – Organic Pest Management

CS 224, Seeds, Biotechnology and Society

ENT 791, Special Topics in Entomology – Grant Writing

Each summer, I lead an all-day workshop for interns with the Center for Environmental Farming Systems on organic grain production.

Lecturer and curriculum coordinator for a course in “Farmer-led Research” offered by Maine and New Hampshire through a SARE professional development grant. The course was attended by employees of Cooperative Extension, Natural Resource Conservation Service and non-profits from throughout New England. The course consisted of:

- Three 2-day workshops held in Portsmouth, New Hampshire
- Hands on practicum to design an on-farm experiment in 2003 and implement it in 2004 and 2005
- Field days to showcase results of the on-farm experiments

Co-lecturer for the 3 credit course “Statistical Methods for Applied Ecologists” at the University of Maine

Professional Service

- Panel Manager, USDA- ORG transitions grant – USDA. 2015 & 2016. Budget ~ \$4,000,000
- Chair, Organic Management Systems Community, Agronomy Society of America. 2015-2016.
- Chair of committee organizing the Southern Region Cover Crop Conference for USDA-SARE. We expect 350 participants from throughout the region in Goldsboro July 18-19 of 2016.
- Began new role as the state coordinator for the Southern SARE Professional Development Program. I administer a statewide scholarship fund and serve as the point of connection for SARE programming in the state in collaboration with a faculty member from NC A&T.
- Assistant Director of Collaborative Research. Center for Environmental Farming Systems. 2011 to present.
- Chair, Farming Systems Research Unit, Center for Environmental Farming Systems. 2011 to present.
- Review panel member for the ORG transition grants –USDA. Year confidential.
- Review panel member for Organic Research and Extension Initiative grants – USDA. Year confidential.
- Seminar coordinator. Department of Crop Science. Fall 2009-Spring 2010.
- State Coordinator for SARE professional development 2002-2005
- Chairman of the Executive Council for Northeast SARE professional development 2004
- Chair of the NE1000 regional Hatch project “Improved Weed Control Through Residue Management and Crop Rotation” 2004
- Member of the Maine State IPM Council 2003-2005
- Chair of the Organic Dairy Research and Education Consortium for Maine and New Hampshire 2004-2005

International Experience

- Faculty Coordinator, Semester Abroad program for Sustainable Agriculture and Forestry program between NC State, U. of Costa Rica, and the Organization for Tropical Studies.
- Sabbatical, University of Costa Rica, 2014. Ongoing research projects in breeding rice for allelopathy.
- Delegate, fostering student and faculty exchanges with the University of Costa Rica, the Centro Agronomico Tropical de Investigacion (CATIE) and EARTH university. (2011)
- Member, advisory team for the development of the student Agroecology Farm at La UNA University in Catacamas, Honduras (2009)
- Delegate, organic research and teaching consortium with Universidad de la Empresa, Montevideo, Uruguay (2007)
- Intern host for students from La UNA University in Honduras. Four interns hosted from 2010 to 2013.

Awards

- US Department of Agriculture, Secretary’s Honor Award, 2012
- Gamma Sigma Delta, Honorary Agricultural Society, 2012
- Advisor to graduate students receiving awards:

- Rachel Atwell, Second Place – 2013, Weed Science Society of America poster competition
- Scott Wells, First Place, – 2011, Northeast Weed Science Society Oral Papers
- Scott Wells, College of Agriculture and Life Sciences (NC State University) Graduate Student Professional Development Workshop selection (2012)
- George Place, First Place – 2009 Agronomy Society of America Graduate Oral Papers
- George Place, First Place - 2009 Southern Weed Science Society Oral Papers
- Northeast US Extension Directors’ Award of Excellence. 2006. For: “Building an organic dairy research and extension program”.
- College of Agriculture and Life Sciences (NC State University) Graduate Student Professional Development Workshop selection (2001)
- Pi Alpha Xi, Honorary Horticultural Society, 2000

Professional Associations

Agronomy Society of America

Northeast Weed Science Society