

## Specialty Crop Research Initiative (SCRI) Abstracts of Funded Projects

Award Year	Project Title/Link to CRIS report	Primary Institution	Project Director Last Name	Total Amount	Project Website
2014	<a href="#">Development of Grafting Technology to Improve Sustainability and Competiveness of tte U.S. Fruiting Vegetable Industry</a>	North Carolina State University	Louws	\$2,957,918	
2014	<a href="#">Developing Scientifically-based Consensus Food Safety Metrics for Leafy Greens and Tomatoes</a>	University of Maryland	Buchanan	\$4,599,601	
2014	<a href="#">Biology, Ecology, and Management of Brown Marmorated Stink Bug in Orchard Crops, Small Fruit, Grapes, Vegetables, and Ornamentals</a>	USDA, Agriculture Research Service	Leskey	\$2,705,308	
2014	<a href="#">Clean Water3 - Reduce, Remediate, Recycle: Informed Decision Making to Facilitate Use of Alternative Water Resources</a>	Clemson University	White	\$1,783,670	
2014	<a href="#">Northern Grapes: Integrating Viticulture, Winemaking &amp; Marketing of New Cold-Hardy Cultivars Supporting New and Growing Rural Wineries</a>	New York Agricultural Experiment Station	Martinson	\$2,627,860	
2014	<a href="#">RosBREED: Combining disease resistance with horticultural quality in new rosaceous cultivars</a>	Michigan State University	Lezzoni	\$1,802,113	
2014	<a href="#">Performance and Adoptability of Biodegradable Plastic Mulch for Sustainable Specialty Crop Production</a>	University of Tennessee	Hayes	\$1,912,178	
2014	<a href="#">Biological &amp; economic impacts of emerging potato tuber necrotic viruses &amp; the development of comprehensive &amp; sustainable mgmnt practices.</a>	Cornell University	DeJong	\$1,602,307	
2014	<a href="#">Strategic Management of Multiple Diseases in Strawberry Nurseries and</a>	University of Florida	Peres	\$1,363,057	

	Production Fields in the Eastern U.S.				
2014	Combatting Rose Rosette Disease: Short and Long Term Approaches	Texas A&M University	Byrne	\$3,135,689	
2014	Reducing the impact of industry-critical insect and disease problems in hops through development of preventative and predictive strategies	Washington State University	Walsh	\$3,163,180	
2014	Optimizing Protective Culture Environments for Berry Crops	Michigan State University	Hanson	\$2,450,060	
2014	A Systems Approach to Improve Disease Management and Production of Watermelon in the Southeastern U.S.	University of Georgia	Ji	\$1,741,071	
2014	Unburdening US nurseries: Integrating new technologies and innovative approaches to manage broad host range, gall-forming bacterial diseases	Oregon State University	Chang	\$2,977,880	
2014	Genome Database for Rosaceae: Empowering Specialty Crop Research through Big-Data Driven Discovery and Application in Breeding	Washington State University	Main	\$2,741,575	
2014	Scale Neutral Harvest Aid System and Sensor Technologies to Improve Harvest Efficiency and Handling of Fresh Market Highbush Blueberries	University of Georgia	Li	\$2,375,545	
2014	Development of Disease-Resistant Walnut Rootstocks: Integration of Conventional and Genomic Approaches	USDA, Agriculture Research Service	Kleupfel	\$2,869,937	
2014	New detection, research, and extension tools for managing wood-canker diseases of fruit and nut crops	USDA, Agriculture Research Service	Baumgartner	\$2,534,803	
2014	Crop Signaling for Automated Weed/Crop Differentiation and Mechanized Weed Control in Vegetable Crops	University of California, Davis	Slaughter	\$2,715,901	

2014	Creating InterDisciplinary Extension and Research (CIDER) Programs to Redevelop the North American Hard Cider Industry	Virginia Polytech Institute	Peck	\$49,498	
2014	Harnessing Unmanned Aerial Vehicles (UAVs) in Fruit, Vegetable, and Nut Crops	University of Georgia	Scherm	\$32,212	
2014	Planning Grant to develop research and Extension priorities for brown marmorated stink bug in western US specialty crops	Oregon State University	Wilman	\$50,000	
2012	Rear and release psyllids as biological control agents - an economical and feasible mid-term solution for huanglongbing (HLB) disease	Citrus Research and Development Foundation	Turpen	\$9,000,000	<a href="http://citrusrdf.org">citrusrdf.org</a>
2012	Developing sustainable pollination strategies for U.S. specialty crops	Michigan State University	Isaacs	\$1,697,671	<a href="http://www.projecticp.org">www.projecticp.org</a>
2012	Understanding the global virus distribution in tomato and development of translation genomic tools to accelerate breeding for resistance	USDA-ARS	Ling	\$1,335,515	
2012	Building market foundations for sustainable vegetable production and processing: A consumer and metrics-based approach	University of Wisconsin	Mitchell	\$2,144,836	<a href="http://ipcm.wisc.edu/scrif/">http://ipcm.wisc.edu/scrif/</a>
2012	Addressing management gaps with sustainable disease and pest tactics for mushroom production	Pennsylvania State University	Beyer	\$1,442,481	
2012	Germplasm improvement of low-input fine fescues in response to consumer attitudes and behaviors	University of Minnesota	Watkins	\$2,136,489	<a href="http://finefescue.umn.edu/">http://finefescue.umn.edu/</a>
2012	Managing downy mildew of spinach: A genomics-based approach to the host and the pathogen	University of Arkansas	Correll	\$827,745	
2012	Automation of dormant pruning of specialty crops	Purdue University	Hirst	\$3,027,747	<a href="http://pruningautomation.com/">http://pruningautomation.com/</a>
2012	Toward a better bean: improving genetic, genomic, breeding, and	University of Delaware	Donofrio	\$1,573,112	<a href="http://sites.udel.edu/limabean/">http://sites.udel.edu/limabean/</a>

	crop management resources for lima bean to benefit the Mid-Atlantic region				
2012	Development and use of genomic tools to improve firs for use as christmas trees	North Carolina State University	Frampton	\$1,298,023	
2012	New detection, research, and extension tools for managing wood-canker diseases of fruit and nut crops	USDA-ARS	Baumgartner	\$1,761,897	<a href="http://treeandvinetrunkdiseases.org/">http://treeandvinetrunkdiseases.org/</a>
2012	Development of disease-resistant walnut rootstocks: integration of conventional and genomic approaches	USDA-ARS	Kleupfel	\$1,142,930	
2012	Shielding cucurbit crops for resilient agroecosystems	Iowa State University	Gleason	\$1,582,002	
2012	Snap pea: enhanced production of nutrient-dense vegetable legumes	Washington State University	Main	\$34,046	
2011	Ethnic and specialty crops research and development: local food networks and heritage marketing in Florida and Alabama	North-South Institute	Scott	\$749,559	<a href="http://www.nsi-ceed.org">www.nsi-ceed.org</a>
2011	Magnetoelastic biosensors for detection of pathogens on globe fruits	Auburn University	Chin	\$1,542,160	<a href="http://www.eng.auburn.edu/research/centers/audfs/current-research/globe-fruit.html">http://www.eng.auburn.edu/research/centers/audfs/current-research/globe-fruit.html</a>
2011	Sustainable management of canker diseases to extend the productive life of vines, stone fruits, and nut crops	Auburn University	Baumgartner	\$50,000	
2011	Disease-resistant seedless muscadine grape cultivars utilizing eco- and consumer-friendly cisgenic modification technologies	University of Florida	Gray	\$2,202,711	<a href="http://www.mrec.ifas.ufl.edu/muscadine">www.mrec.ifas.ufl.edu/muscadine</a>
2011	Systems approach at improving the long-term competitiveness of U.S. pecans based on their nutritional and health-promoting component	University of Georgia	Pegg	\$1,219,636	
2011	Bioplastic Container Cropping Systems: Green Technology for the Green Industry	Iowa State University	Graves	\$1,949,642	<a href="http://www.public.iastate.edu/~bioplastic">http://www.public.iastate.edu/~bioplastic</a>
2011	Developing scientifically-based consensus for food	University of Maryland	Buchanan	\$5,558,252	<a href="http://cfs3.umd.edu/scri/">http://cfs3.umd.edu/scri/</a>

	safety metrics for leafy greens and tomatoes				
2011	Pollination security for fruit and vegetable crops in the Northeast	University of Massachusetts	Averill	\$3,318,651	
2011	Development and delivery of resource-efficient, ecologically sustainable fruit production systems for apple and cherry producers	Michigan State University	Grieshop	\$2,472,895	<a href="http://www.canopydelivery.msu.edu">http://www.canopydelivery.msu.edu</a>
2011	Genomics-based approaches for improving petunia production efficiency and performance	Michigan State University	Warner	\$1,256,039	
2011	Limiting bird damage in fruit crops: integrating economic, biological, and consumer information to develop sustainable, long-term solutions	Michigan State University	Lindell	\$2,044,335	<a href="http://birddamagetofruitcrops.info/Homepage.html">http://birddamagetofruitcrops.info/Homepage.html</a>
2011	Developing native and native-European hybrid hazelnut germplasm and agronomics for the upper Midwest	University of Minnesota	Wyse	\$903,909	
2011	Strategies for improving the United States responses to fusarium, downy mildew and chilling injury to production of sweet basil	Rutgers University	Simon	\$1,866,558	
2011	Northern grapes: integrating viticulture, winemaking, and marketing of new cold-hardy cultivars supporting new and growing rural wineries	Cornell University	Martinson	\$2,511,333	<a href="http://northerngrapesproject.org/">http://northerngrapesproject.org/</a>
2011	Accelerating grape cultivar improvement via phenotyping centers and next generation markers	Cornell University	Reisch	\$4,563,164	<a href="http://www.vitisgen.org">www.vitisgen.org</a>
2011	Development of grafting technology to improve sustainability and competitiveness of the U.S. fruiting vegetable industry	North Carolina State University	Louws	\$2,490,839	<a href="http://www.vegetablegrafting.org/">www.vegetablegrafting.org/</a>
2011	Reducing injury to fruit and vegetable crops caused by drift or volatility of herbicides applied to row crops	Ohio State University	Doohan	\$50,000	<a href="http://www.riskanalysis.osu.edu">www.riskanalysis.osu.edu</a>

2011	Developing the genomic infrastructure for breeding improved black raspberries	USDA-ARS	Finn	\$1,590,717	
2011	Biology, ecology, and management of brown marmorated stink bug in orchard crops, small fruit, grapes, vegetables, and ornamentals	USDA-ARS	Leskey	\$5,739,966	<a href="http://www.stopbmsb.org">www.stopbmsb.org</a>
2011	Marketing vitamin D mushroom: a case study of nutrition marketing for specialty crops	Saint Joseph's University	Stanton	\$322,202	
2011	Reinforcing skills and building infrastructure for production, handling, process, and distribution of vegetable soybean (edamame)	Virginia State University	Mersie	\$49,280	
2011	Roadmap development for U.S. raspberry producers: forging links between new tools for breeding programs and crop markets	Washington State University	Daniels	\$49,506	
2011	Improved breeding and variety evaluation methods to reduce acrylamide content and increase quality in processed potato products	University of Wisconsin	Bussan	\$7,607,916	
2011	Translational genomics in cucumber: tool development and application for recessive disease resistances	USDA-ARS	Weng	\$1,332,040	<a href="http://cucumber.vcru.wisc.edu/">http://cucumber.vcru.wisc.edu/</a>
2011	Containment, remediation, and recycling of irrigation water for sustainable ornamental crop production	Clemson University	White	\$50,000	