

**Agriculture
June 2010
Proposal Submissions**

Principal Investigator	Sponsor	Title	Department	Total Amount Requested
Agouridis, Carmen	Environmental Protection Agency	Evaluating Hydrological, Water Quality, and Biological Responses to Headwater Stream Restoration on Eastern Kentucky Surface Mines	Biosystems & Ag Eng	\$309,441
Ashurst, Kerri	Kansas State University	Kentucky Operation Military Kids-2011	Family & Consumer Sciences	\$292,000
Barton, Christopher	American Chestnut Foundation	Continued Monitoring of American Chestnut Restoration Sites on Surface Mined Land in Kentucky	Forestry	\$2,500
Bastin, Sandra	Southern Sustainable Agriculture Research	Sustainable Entrepreneur and Education Development (SEED) for Homebased Processors.	Nutrition and Food Science	\$0
Bastin, Sandra	National Institute of Food and Agriculture	Healthy Eating for Rural Older Adults	Nutrition and Food Science	\$0
Bessin, Ricardo	University of Florida	Southern Region Program to Clear Pest Control Agents for Minor Uses	Entomology	\$2,250
Bullock, Kevin	North Carolina State University	A multifaceted approach to enhancing nutrient utilization in beef cattle	Animal and Food Sciences	\$1,022,400
Carter, Craig	KY Department of Agriculture	Bovine Spongiform Encephalopathy Surveillance	Livestock Diag Disease Center	\$14,000
Carter, Craig	KY Department of Fish and Wildlife	Diagnostic Services 2010	Livestock Diag Disease Center	\$5,000
Chappell, Joseph	National Institute of Food and Agriculture	Engineering High Value Oil Production into Biofuel Crops	Plant & Soil Sciences	\$985,157
Cox, John	KY Department of Fish and Wildlife	UK Population Dynamics of Black Bear in Eastern Kentucky	Forestry	\$90,000
Cox, John	KY Department of Fish and Wildlife	Resource Selection, Movement Patterns, Survival, and Cause-Specific Mortality of Adult Bulk Elk in Kentucky	Forestry	\$0
Davis, Alison	Foundation for a Healthy KY	Kentucky Health Market Report	Agr Economics	\$118,525
Day, George	Iowa State University	Climate Change	Biosystems & Ag Eng	\$616,665
Day, George	Western KY University	Factors Controlling the Emissions of Greenhouse Gases from Livestock Operations: Monitoring and Modeling of Fate and Transport Processes	Biosystems & Ag Eng	\$367,572

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DeBolt, Seth	Kansas State University	The Impact of Sterol Biogenesis on Cellulose Synthesis in Higher Plants	Horticulture	\$0
Dobson, Stephen	National Institute of Allergy and Infectious Diseases	Eradication of a Primary Filariasis Vector Population at an Endemic Field Site	Entomology	\$1,700,000
Dunwell, Winston	KY Department of Agriculture	Evolution of Fabric Containers in Pot-in-Pot and Above-Ground Systems for More Sustainable Nursery Crop Production	Horticulture	\$43,230
Fehr, Robert	KY Energy and Environment Cabinet	Energy - A Cooperative Extension Program for Kentucky's Building Systems Energy Needs 2010-2011	Biosystems & Ag Eng	\$110,786
Fei, Songlin	KY Energy and Environment Cabinet	Second Invasives Conference	Forestry	\$5,000
Grove, John	University of Illinois	Defining Optimum Nitrogen Use Strategies in Corn-Based Cropping Systems to Mitigate Climate Change	Plant & Soil Sciences	\$397,420
Hanley, Carol	KY Department of Military Affairs		Center for the Environment	\$335,000
Hanley, Carol	KY Department of Education	Leading the Way to STEM	Center for the Environment	\$0
Harwood, James	Pennsylvania State University	Linking Predator-Prey Interactions with Parasite Transmission in an Ecological Community: A Test of the Dilution Effect Hypothesis for a Parasite with a Complex Lifecycle	Entomology	\$23,998
Harwood, James	Washington State University	The Rare Prey Hypothesis: Reconsidering the Role of Generalist Predators in Pest Control	Entomology	\$80,000
Horohov, David	Pfizer Inc	Characterization of the Inflammatory Response to Anthelmintics	Veterinary Science	\$39,546
Hustedde, Ronald	University of California	Center for Agriculture in the Urban Biome	Community & Leadership Devel	\$0
Ingram, Dewayne	KY Department of Agriculture	Sustainable Ground Cover Production for More Sustainable Kentucky Landscapes	Horticulture	\$49,940
Jacobsen, Krista	KY Department of Agriculture	Developing Diversified High Tunnel Systems to Enhance Food Security and Specialty Crop Production in Kentucky	Horticulture	\$62,834
Jones, Richard	KY Department of Agriculture	Wild and Cultivated Ginseng	Horticulture	\$10,000
Lee, Brad	Natural Resources Conservation Service	Expression and Distribution of Dynamic Soil Properties in Benchmark Catenas under Forest and Cultivated Land Use in the Shawnee Hills, MLRA 115 & 120	Plant & Soil Sciences	\$30,000

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Moe, Luke	National Science Foundation	Dimensions: The Effects of Legume Genetic Diversity on the Taxonomic and Functional Diversity of the Associated Rhizosphere Microbial Community	Plant & Soil Sciences	\$1,604,711
Murray, Deborah	National Institute of Food and Agriculture	Rural Health and Safety Education Competitive Grants	Family & Consumer Sciences	\$0
Nagy, Peter	National Institute of Health	Screening of Temperature Sensitive and MYTH Libraries for Host Factors Affecting (+)RNA Virus Replication	RCTF-1-Plant Sciences-PlantPath	\$0
Nagy, Peter	National Institute of Health	Active reprogramming of host lipid synthesis by an RNA virus.	RCTF-1-Plant Sciences-PlantPath	\$0
Obrycki, John	National Institute of Food and Agriculture	Ecological Genetics of the Predatory Lady Beetle Hippodamia convergens: Effects of Augmentative Releases	Entomology	\$66,961
Palli, Subba	National Institute of Food and Agriculture	Molecular Analysis of Xenobiotic Response in the Colorado Potato Beetle	Entomology	\$499,435
Potter, Daniel	University of Georgia	Behavioral and Baculovirus-Mediated Interactions between Armyworms and Improved Forage Grasses: Implications for Sustainable Tall Fescue Pastures in the Southern Region	Entomology	\$6,000
Potter, Daniel	University of Florida	Southern Region Program to Clear Pest Control Agents for Minor Uses	Entomology	\$10,250
Reed, Michael	Foreign Agricultural Service	Extension Services in Serbia and Montenegro	International Programs	\$51,733
Rieske-Kinney, Lynne	National Institute of Food and Agriculture	Integrating Natural Enemies and Habitat Manipulation to Sustainably Manage an Invasive Gallmaker Impacting Chestnut Restoration and Production	Entomology	\$278,125
Saghaian, Sayed	National Institute of Food and Agriculture	Food Safety Risk Management and Educational Programs for Socially Disadvantaged Farmers of Fresh and Fresh-Cut Fruits and Vegetables in Kentucky	Agr Economics	\$395,702
Schardl, Christopher	KY Science and Technology Co Inc	KSEF R&D Excellence: Development and deployment of a non-toxic endophyte in tall fescue for forage	Plant Pathology	\$98,663
Schardl, Christopher	National Science Foundation	Dimensions: Collaborative Research: Taxonomic, genetic and ergot alkaloid diversity in the Convolvulaceae-fungal endosymbiosis and their functional significance.	Plant Pathology	\$0
Schieffer, John	Economic Research Service	How the Cause and Consensus Affect Farmer Participation in Carbon Trading Markets	Agr Economics	\$149,795
Seebold, Kenneth	University of Florida	Southern Region Program to Clear Pest Control Agents for Minor Uses	Plant Pathology	\$10,000
Seebold, Kenneth	KY Science and Technology Co Inc	KSEF R&D Excellence: Investigating the Role of the Cuticle in Resistance to Foliar Plant Pathogens	Plant Pathology	\$80,000

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Sharkey, Michael	National Science Foundation	Collaborative Proposal: Dimensions of Lepidoptera-Parasitoid Food Webs Over Altitudinal Gradients in Eastern and Western North America	Entomology	\$1,050,000
Smith, Samuel	Eastern KY University	The Transition to Biofuel Feedstock Production in Kentucky	Plant & Soil Sciences	\$18,333
Stephenson, Laura	KY Department of Agriculture	Speciality Crop Recipe Development with Nutritional Research Component	Family & Consumer Sciences	\$40,000
Stephenson, Laura	KY Department of Agriculture	Speciality Crop-Plate It Up	Family & Consumer Sciences	\$75,000
Stombaugh, Timothy	National Institute of Food and Agriculture	Precision Agriculture: Precision Resource Management - Phase VI	Biosystems & Ag Eng	\$624,478
Stringer, Jeffrey	KY Energy and Environment Cabinet	Forest Stewardship Public Awareness, Publicity, Training	Forestry	\$20,000
Stringer, Jeffrey	KY Energy and Environment Cabinet	Regional Non-Native Invasive Plant Species Workshops	Forestry	\$12,000
Stringer, Jeffrey	KY Energy and Environment Cabinet	Kentucky Woodlands Magazine - Forest Certification and Forest Health Issues	Forestry	\$30,000
Suman, Surendranath	University of Nebraska	Novel Food Processing Technologies to Reduce and/or Eliminate the Risk of E.coli O157:H7 and Other STEC in Non-Intact Beef	Animal and Food Sciences	\$160,000
Tang, Guiliang	National Science Foundation	EAGER: RNAi Gene Discovery Tool to Randomly Generate Dominant Mutant Pools in Plants	Plant & Soil Sciences	\$295,576
Thomas, William	KY Energy and Environment Cabinet	Emerald Ash Borer Public Conference	Forestry	\$35,000
Townsend, Lee	KY Department of Agriculture	Private Pesticide Applicator - FY 2011-2012	Entomology	\$55,000
Vail, Ann	KY Cabinet for Health and Family Services	Supplemental Nutrition Assistance Program-Education (SNAP-Ed)	Family & Consumer Sciences	\$494,472
Vaillancourt, Lisa	Pennsylvania State University	Evaluation and mitigation of anthracnose disease pressure due to the introduction of sorghum for feedstock production.	Plant Pathology	\$0
Van Sanford, David	University of California Davis	Improving Barley and Wheat Germplasm for Changing Environments	Plant & Soil Sciences	\$251,933
Wagner, George	Philip Morris International Management SA	Stacking of Two Mechanistically-Different Tobacco Root Cell Cadmium Sequestration Mechanisms to Achieve Low Lamina Cadmium in Tobacco	Plant & Soil Sciences	\$274,331

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Warner, Richard	Environmental Protection Agency	Development and On-site Evaluation of Best Management Practices and Mining Techniques to Enhance Environmental Protection	Biosystems & Ag Eng	\$598,865
Webber, Kelly	National Institute of Health	Contingency Management for Self-Monitoring and Weight Loss	Nutrition and Food Science	\$0
Wells, Larry	Association Nationale Interprofessionnelle Et Technique Du Tabac	Collaborative Refinement and Evaluation of a Phase 1 Prototype Burley Rail Harvester and of a Phase 2 Prototype Modified to Allow the Mechanization from Harvesting Through Stripping and Packaging	Biosystems & Ag Eng	\$56,446
Wendroth, Ole	University of Arkansas	Assessment of Carbon Storage and Sequestration Potential of Common Agricultural Systems on Benchmark Soils Across the Southern Region Climate Gradient	Plant & Soil Sciences	\$500,878
White, Jennifer	KY Science and Technology Co Inc	KSEF R&D Excellence: Molecular Characterization of the Microbial Community of Invasive Arthropods	Entomology	\$49,658
White, Jennifer	National Institute of Food and Agriculture	The Effect of an Aphid Bacterial Symbiont on Interactions Among Soybean Aphid	Entomology	\$149,950
Xiong, Youling	National Institute of Food and Agriculture	Reduction of Allergenicity of Milk, Egg and Peanut Proteins Through pH-Shifting, Enzymatic Hydrolysis and Cross-Linking Processes.	Animal and Food Sciences	\$0
Zhou, Xuguo	Consortium for Plant Biotechnology Research Inc	Farming Energy: Identification and in planta Production of Novel Lignocellulolytic Enzymes from Wood-Feeding Dictyoptera.	Entomology	\$0
Zhu, Hongyan	National Institute of Food and Agriculture	Enhancing nutrient assimilation, drought tolerance and carbon sequestration through enhanced mycorrhizal symbiosis	Plant & Soil Sciences	\$2,756,913