

AD-421 Progress Report Checklist
Plant and Soil Sciences
10/14/2020

Accession Number	Project Number	Title	Department	Project Director	Funding Source	Project Start Date	Project End Date	Last Progress Report FY	Reporting Period of Performance	Project Status
1009015	KY006094	Onsite Wastewater Treatment Systems: Assessing the Impact of Climate Variability and Climate Change	Plant and Soil Sciences	Lee, Brad	HATCH/MULTI-STATE	12/15/2015	09/30/2020	2019	2019-10-01 - 2020-09-30	Active
1009329	KY006095	The cytokinin signaling mechanism and plant growth	Plant and Soil Sciences	Smalle, Jan	HATCH	07/01/2016	09/30/2020	2019	2019-10-01 - 2020-09-30	Active
1010357	KY006096	Effects of fungal endophyte symbiosis on tall fescue pasture nutrient dynamics and resilience to climate change	Plant and Soil Sciences	McCulley, Rebecca	HATCH	10/01/2016	09/20/2021	2019	2019-10-01 - 2020-09-30	Active
1010358	KY006097	Effect of coatings on the behavior of manufactured zinc oxide nanoparticles in soil and zinc bioavailability to plants	Plant and Soil Sciences	Unrine, Jason	HATCH	10/01/2016	09/30/2021	2019	2019-10-01 - 2020-09-30	Active
1010736	KY006098	Enhancing Wheat Breeding Through Selection for Resilience to Climate Change	Plant and Soil Sciences	Van Sanford, David	HATCH	10/01/2016	09/30/2021	2019	2019-10-01 - 2020-09-30	Active
1011341	KY006099	Evaluation of soybean varieties for use in Kentucky	Plant and Soil Sciences	Pfeiffer, T	HATCH	10/28/2016	09/30/2021	2019	2019-10-01 - 2020-09-30	Active
1011624	KY006100	Performance of Small Grain Varieties in Kentucky	Plant and Soil Sciences	Van Sanford, David	HATCH	12/22/2016	09/30/2021	2019	2019-10-01 - 2020-09-30	Active
1011681	KY006101	Genetics and biochemistry of phosphate solubilization by rhizosphere-dwelling microbes	Plant and Soil Sciences	Moe, Luke	HATCH	12/12/2016	09/30/2021	2018	2018-10-01 - 2019-09-30	Active
1011780	KY006103	Ecophysiology of soybean yield and water use efficiency-experimental and modeling approaches	Plant and Soil Sciences	Salmeron Cortasa, Montserrat	HATCH	01/03/2017	09/30/2021	2018	2018-10-01 - 2019-09-30	Active
1013409	KY006104	Mechanisms of gene regulation during plant embryogenesis	Plant and Soil Sciences	Perry, S	HATCH	10/01/2017	09/30/2022	2019	2019-10-01 - 2020-09-30	Active
1013862	KY006105	Impact of global warming on timing of seedling emergence in summer annuals	Plant and Soil Sciences	Baskin, C	HATCH	10/01/2017	09/30/2022	2019	2019-10-01 - 2020-09-30	Active
1014280	KY006106	A key to unlocking the seed size and number dilemma: a new approach to make bigger seeds for better yield	Plant and Soil Sciences	Kawashima, Tomokazu	HATCH	10/01/2017	09/30/2022	2019	2019-10-01 - 2020-09-30	Active
1017837	KY006107	Genetic and molecular basis of symbiotic specificity in Medicago	Plant and Soil Sciences	Zhu, Hongyan	HATCH	10/01/2018	09/30/2022	2019	2019-10-01 - 2020-09-30	Active
1016185	KY006108	Improving Forage and Bioenergy Crops for Better Adaptation, Resilience, and Flexibility	Plant and Soil Sciences	Phillips, T	HATCH/MULTI-STATE	05/18/2018	01/10/2022	2019	2019-10-01 - 2020-09-30	Active
1017838	KY006109	An integrated modeling framework to understand and predict agroecosystem response to climate-smart agriculture management in the Conterminous U.S.	Plant and Soil Sciences	Ren, Wei	HATCH	10/23/2018	09/30/2022	2019	2019-10-01 - 2020-09-30	Active
1017873	KY006110	Integrated marestail management for corn and soybean production in Kentucky	Plant and Soil Sciences	Haramoto, Erin	HATCH	10/05/2018	09/30/2023	2019	2019-10-01 - 2020-09-30	Active
1018313	KY006112	Industrial Hemp Production, Processing, and Marketing in the U.S.	Plant and Soil Sciences	Pearce, B	HATCH/MULTI-STATE	11/08/2018	09/30/2023	2019	2019-10-01 - 2020-09-30	Active
1018559	KY006113	Plant Genetic Resources Conservation and Utilization	Plant and Soil Sciences	Phillips, T	HATCH/MULTI-STATE	12/21/2018	09/30/2023	2019	2019-10-01 - 2020-09-30	Active

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1018774	KY006114	Genetic improvement of soybeans, chia and hemp seed for Kentucky agriculture	Plant and Soil Sciences	Hildebrand, D	HATCH	02/21/2019	09/30/2023		2019-02-21 - 2019-09-30	Active
1019079	KY006115	Enhancing nitrogen utilization in corn based cropping systems to increase yield, improve profitability and minimize environmental impacts	Plant and Soil Sciences	Poffenbarger, Hanna	HATCH/MULTI-STATE	03/22/2019	09/30/2021	2019	2019-10-01 - 2020-09-30	Active
1020734	KY006117	Plant root trait-based phenotyping in support of sustainable agronomic crop production	Plant and Soil Sciences	McNear, David	HATCH	10/01/2019	09/30/2024		2019-10-01 - 2020-09-30	Active
1020849	KY006118	Messenger RNA 3' end formation in plants	Plant and Soil Sciences	Hunt, A	HATCH	10/10/2019	09/30/2024		2019-10-10 - 2020-09-30	Active
1021290	KY006119	Quantifying the pathways of pedogenesis in the context of past climate cycling in Kentucky	Plant and Soil Sciences	Shepard, Christopher	HATCH	12/05/2019	09/30/2024		2019-12-05 - 2020-09-30	Active
1021563	KY006120	Soil, Water, and Environmental Physics to Sustain Agriculture and Natural Resources	Plant and Soil Sciences	Wendroth, Ole	HATCH/MULTI-STATE	11/25/2019	09/30/2024		2019-11-25 - 2020-09-30	Active
1021567	KY006121	Beneficial Use of Residuals to Improve Soil Health and Protect Public, and Ecosystem Health	Plant and Soil Sciences	Dangelo, Elisa	HATCH/MULTI-STATE	12/05/2019	09/30/2024		2019-12-05 - 2020-09-30	Active
1021845	KY006122	Evaluation of corn hybrids for use in Kentucky	Plant and Soil Sciences	Kenimar, Richard	HATCH	12/12/2019	09/30/2024		2019-12-12 - 2020-09-30	Active
1023622	KY007091	Management and Environmental Factors Affecting Nitrogen Cycling and Use Efficiency in Forage-Based Livestock Production Systems	Plant and Soil Sciences	McCulley, Rebecca	HATCH/MULTI-STATE	07/09/2020	09/30/2024		2020-07-09 - 2020-09-30	Active
1014909	KY0BAILEYWA2	Reduction of Tobacco-specific N-nitrosamines (TSNA) and Benzo [a] pyrene (BaP) in Dark Tobaccos	Plant and Soil Sciences	Bailey, W	STATE	12/01/2017	09/30/2022	2019	2019-10-01 - 2020-09-30	Active
1009920	KY0MILLER2	Tobacco Breeding and Genetics	Plant and Soil Sciences	Miller, R	STATE	07/01/2016	06/30/2021	2018	2018-10-01 - 2019-09-30	Active
1018389	KYKY006111	Dynamics of Nitrogen Fertilizer Transformations in a No-Tillage Agroecosystem	Plant and Soil Sciences	Matocha, Christopher	HATCH	01/01/2019	12/31/2021	2019	2019-10-01 - 2020-09-30	Active
1019259	KYKY006116	Nanotechnology and Biosensors	Plant and Soil Sciences	Tsyusko, Olga	HATCH/MULTI-STATE	03/28/2019	09/30/2021	2019	2019-10-01 - 2020-09-30	Active