



United States Department of Agriculture

Farm Bill Section 10007 FY 17 Spending Plan

Plant Pest and Disease Management and
Disaster Prevention Program

December 13, 2016

Goal	Project #	Title	Cooperator State	Cooperator Type	Funding Level
Tribal Nations					
5	5.0063.00	Tribes in Washington Invasive Species Project (TWISP)	WA	Tribal Nation	\$69,886
5	5.0440.00	Wisconsin Tribal Conservation Advisory Council Outreach and Education	WI	Tribal Nation	\$15,056
5	5.0485.00	Kaibab Paiute Tribe Outreach and Education Program	AZ	Tribal Nation	\$85,000
6	6.0149.00	Pokagon Band	MI	Tribal Nation	\$87,298
6	6.0442.03	Use of Unmanned Aircraft System (UAS) Swarm Technology for sterile insect technique release, survey and treatment	AZ	Tribal Nation	\$15,000
6	6.0608.00	Nez Perce Tribe Bio-control Project- Noxious/Invasive Weed Survey and Control	ID	Tribal Nation	\$250,000
					\$522,240
National					
1A	1A.051.01	A generic validation method for plant pest and pathogen surveys	National	Foreign	\$110,880
1A	1A.051.02	A generic validation method for plant pest and pathogen surveys	National	Foreign	\$110,880
1S	1S.0066.00	Support of the Survey Supplies Procurement Program	National	APHIS	\$620,000
1S	1S.0398.01	National Survey of Honey Pests and Diseases	National	Academia	\$562,627
3	3.0177.03	Lepidoptera Attractants	National	Foreign	\$14,000
3	3.0177.04	Lepidoptera Attractants	National	Foreign	\$24,000
3	3.0242.01	Development of Attractants and Improved Trap Designs for Exotic Wood Borers	National	Foreign	\$24,000

3	3.0242.02	Development of Attractants and Improved Trap Designs for Exotic Wood Borers	National	Foreign	\$165,000
3	3.0242.03	Development of Attractants and Improved Trap Designs for Exotic Wood Borers	National	Foreign	\$12,000
4	4.0294.01	Audit Training for State and Federal Personnel - plant Pest Management Accreditation Programs	National	Non-Profit	\$20,000
5	5.0536.00	Hungry Pests campaign continuation	National	APHIS	\$380,000
6	6.0247.01	Exploration for parasitoids of Asian longhorned beetle in China	National	Foreign	\$38,000
6	6.0306.01	Biological control and host plant utilization for the spotted lanternfly	National	Foreign	\$52,500
6	6.0423.01	Development of generic temperature treatment schedules for exotic tephritid fruit flies	National	Foreign	\$209,720
6	6.0451.06	Systems approach for the management of coffee berry borer in Hawaii and Puerto Rico with emphasis on biological control	National	Foreign	\$20,000
					\$2,363,607
Alaska					
1S	1S.0127.00	Solanaceous Commodity Survey	AK	Academia	\$50,000
1S	1S.0137.00	Asian Defoliating Moth Survey	AK	State Government	\$30,000
5	5.0219.00	Exotic plant pathogen, First Detector training and outreach	AK	Academia	\$40,000
					\$120,000
Alabama					
1S	1S.0007.00	Phytophthora ramorum Survey	AL	State Government	\$20,000

1S	1S.0072.00	Solanaceous Commodity Survey	AL	State Government	\$55,000
1S	1S.0142.00	Asian Defoliating Moth Survey	AL	State Government	\$28,000
1S	1S.0398.02	National Survey of Honey Bee Pests and Diseases	AL	State Government	\$13,800
4	4.0456.00	Best Management Practices for Control of Bacterial Gall on Loropetalum (<i>Pseudomonas savastanoi</i>)	AL	Academia	\$54,494
5	5.0344.00	Invasive Pest Outreach and Education	AL	State Government	\$19,000
					\$190,294
Arkansas					
1S	1S.0187.00	Orchard Commodity Survey	AR	Academia	\$14,136
1S	1S.0316.00	Solanaceous Commodity Survey	AR	State Government	\$15,837
1S	1S.0318.00	Thousand Cankers/Walnut Twig Beetle Survey	AR	State Government	\$8,500
1S	1S.0398.03	National Survey of Honey Bee Pests and Diseases	AR	State Government	\$13,800
5	5.0304.00	Forest Pest Outreach and Education	AR	State Government	\$26,240
					\$78,513
American Samoa					
1S	1S.0586.03	Palm Commodity Survey	AS	Academia	\$26,000
					\$26,000
Arizona					

1S	1S.0279.00	Nursery Stock Commodity Survey	AZ	State Government	\$125,000
1S	1S.0280.00	Nut Pest Commodity Survey	AZ	State Government	\$100,000
1S	1S.0284.00	Palm Commodity Survey	AZ	State Government	\$100,000
6	6.0442.01	Use of Unmanned Aircraft System (UAS) Swarm Technology for sterile insect technique release, survey and treatment	AZ	Private Entity	\$30,000
6	6.0442.04	Use of Unmanned Aircraft System (UAS) Swarm Technology for sterile insect technique release, survey and treatment	AZ	Academia	\$15,000
6	6.0451.03	Systems approach for the management of coffee berry borer in Hawaii and Puerto Rico with emphasis on biological control	AZ	APHIS	\$170,427
					\$540,427
California					
1A	1A.0043.01	PRE Pairing for Success: Emerging Invasives, Contentious Cultivars & Common Ground	CA	Non-Profit	\$83,731
1A	1A.0488.00	Risk, spread and control of Fusarium dieback – Shot Hole Borers (Euwallacea spp.)	CA	Academia	\$97,285
1A	1A.0555.01	Quantifying efficacies associated with systems-approaches to insect pest control	CA	Academia	\$91,764
1A	1A.0555.02	Quantifying efficacies associated with systems-approaches to insect pest control	CA	Non-APHIS-Federal	\$142,000
1S	1S.0212.00	Polyphagous Shot Hole Borer/Fusarium Dieback in Avocado: Survey, Detection and Producer Education	CA	Non-Profit	\$175,000

1S	1S.0291.00	Grape Commodity Survey	CA	State Government	\$140,000
1S	1S.0292.00	Palm Commodity Survey	CA	State Government	\$120,000
1S	1S.0295.00	Solanaceous Commodity Survey	CA	State Government	\$20,000
1S	1S.0358.00	Asian Defoliating Moth Survey	CA	State Government	\$425,000
1S	1S.0359.00	Citrus Commodity Survey	CA	State Government	\$470,000
1S	1S.0360.00	Exotic Fruit Fly Survey	CA	State Government	\$3,000,000
2	2.0144.00	California Agriculture Detector Dog Team Program	CA	State Government	\$3,241,455
3	3.0094.01	Early Detection System for Exotic Honey Bee Pests	CA	State Government	\$4,000
3	3.0256.02	Guide to introduced and potentially invasive bees in the U.S.: identification, biology, and possible impacts	CA	APHIS	\$6,000
3	3.0275.00	Enhancing taxonomic and molecular diagnostics capacity for fruit flies (Diptera: Tephritidae)	CA	State Government	\$196,801
3	3.0289.01	Tools for the identification/detection of Graminicolous downy mildews, including <i>Peronosclerospora philippinensis</i>	CA	Non-APHIS Federal	\$80,000
3	3.0289.02	Tools for the identification/detection of Graminicolous downy mildews, including <i>Peronosclerospora philippinensis</i>	CA	Academia	\$105,000
3	3.0315.00	Targeted identification of pheromones and related attractants for invasive cerambycid beetles from Asia	CA	Academia	\$190,000
3	3.0426.00	Enhancing diagnostics of cyst forming nematodes	CA	State Government	\$44,157
3	3.0459.00	Improving Monitoring of the Old World Bollworm <i>Helicoverpa armigera</i> (Lepidoptera: Noctuidae)	CA	Academia	\$131,380

4	4.0024.00	National Ornamentals Research Site at Dominican University of CA (NORS-DUC)	CA	Academia	\$487,911
4	4.0121.00	Understanding the opportunities present for honey bees from commercial plant material	CA	Non-Profit	\$74,000
4	4.0294.02	Audit Training for State and Federal Personnel - plant Pest Management Accreditation Programs	CA	State Government	\$20,000
4	4.0571.00	A BMP Program for California Nurseries and Liaison to the National Ornamental Research Site at Dominican University	CA	State Government	\$210,000
4	4.0593.02	Determining the minimum treatment area and importance of soil moisture for effective soil solarization in nurseries	CA	Academia	\$8,608
5	5.0228.00	Protecting trees and plants in our communities and our forests: Plant health outreach for diverse youth	CA	Non-APHIS Federal	\$27,608
6	6.0014.00	Light Brown Apple Moth Delimitation Survey	CA	Academia	\$150,000
6	6.0207.00	Selecting and Improving Varroa-Resistant Honey Bee Stocks for Commercial Beekeeping	CA	Non-Profit	\$75,889
6	6.0269.01	Activators and Attractants for Giant African Snail	CA	Academia	\$67,000
6	6.0340.01	Biological Control of Bagrada Bug, Bagrada hilaris (Pentatomidae)	CA	Non-APHIS-Federal	\$60,000
6	6.0340.02	Biological Control of Bagrada Bug, Bagrada hilaris (Pentatomidae)	CA	State Government	\$90,000
6	6.0379.02	Development of attractant-based detection and control methods for invasive gastropod species	CA	Academia	\$41,447
6	6.0385.02	Biological Control Development for the Harrisia Cactus Mealybug	CA	Academia	\$15,000

6	6.0466.00	Natural Enemies and Control of Polyphagous Shot Hole Borer (Euwallacea sp.)	CA	Academia	\$47,264
6	6.0487.00	Endophytes for Fusarium dieback – Shot Hole Borers (Euwallaceae spp.) biocontrol	CA	Academia	\$100,000
6	6.0579.00	Emergency Plant Health Response Teams	CA	State Government	\$1,700,000
					\$11,938,300
Colorado					
1S	1S.0398.04	National Survey of Honey Bee Pests and Diseases	CO	State Government	\$13,800
1S	1S.0535.00	Stone Fruit Commodity Survey	CO	State Government	\$34,548
1S	1S.0591.00	Grape Commodity Survey	CO	State Government	\$20,234
3	3.0412.00	Insect Screening Aids for CAPS	CO	Academia	\$45,852
3	3.0427.01	Molecular-based initiatives to support the Old World Bollworm Strategic Management Plan	CO	Academia	\$8,000
3	3.0427.02	Molecular-based initiatives to support the Old World Bollworm Strategic Management Plan	CO	Academia	\$155,000
6	6.0533.01	Development and implementation of mitigation strategies for the emerging maize pathogen Xanthomonas vasicola vasculorum	CO	Academia	\$90,000
					\$367,434
Connecticut					
1S	1S.0026.00	Grape Commodity Survey	CT	State Government	\$18,000
1S	1S.0276.00	Phytophthora Ramorum Survey	CT	State Government	\$20,000
1S	1S.0398.05	National Survey of Honey Bee Pests and Diseases	CT	State Government	\$13,800

5	5.0277.00	Forest Pest Outreach and Education	CT	State Government	\$41,050
					\$92,850
District of Colombia					
3	3.0520.04	Development of More Rapid and Reliable Diagnostic Tools for All Life Stages of Anastrepha and Other Pest Fruit Flies	DC	Non-APHIS-Federal	\$10,000
4	4.0547.00	National Harmonized Systems Approach to Nursery Certification	DC	Non-Profit	\$105,600
6	6.0385.03	Biological Control Development for the Harrisia Cactus Mealybug	DC	Non-APHIS-Federal	\$2,000
					\$117,600
Delaware					
1S	1S.0398.06	National Survey of Honey Bee Pests and Diseases	DE	State Government	\$13,800
5	5.0444.00	Forest Pest Outreach	DE	State Government	\$29,660
6	6.0381.01	Brown Marmorated Stink Bug (BMSB) Classical Biological Control	DE	Non-APHIS-Federal	\$50,000
6	6.0420.00	Anastatus as potential biocontrol agents of Lycorma delicatula and investigation of potential non-target organisms	DE	Non-APHIS-Federal	\$71,032
6	6.0244.02	Spotted Lanternfly Life Cycle and Natural Enemy Study in North America	DE	Non-APHIS-Federal	20,001
6	6R.6.0306.03	Biological control and host plant utilization for the spotted lanternfly	DE	Non-APHIS-Federal	8,000
					\$192,493
Florida					
1A	1A.0103.01	Decision support dataset to prevent establishment of exotic wood borers	FL	State Government	\$10,500

1A	1A.0103.02	Decision support dataset to prevent establishment of exotic wood borers	FL	Academia	\$186,187
1A	1A.0495.00	The emerging Cuba-US plant pest pathway: Assessing Cuban pest threats, institutional capacity, and economic impacts	FL	Academia	\$208,273
1S	1S.0179.00	Solanaceous Commodity Survey	FL	State Government	\$180,000
1S	1S.0195.00	A Survey of Hemipteran Cat-Facing Insects and Plum Pox Virus in Florida's Emerging "Low-Chill" Peach Industry	FL	Academia	\$45,423
1S	1S.0398.16	National Survey of Honey Bee Pests and Diseases	FL	State Government	\$20,700
2	2.0335.00	Enhanced Pest Detection at High Risk Interdiction Sites, Distribution Sites and Florida Detector Dog Inspection	FL	State Government	\$1,210,000
3	3.0094.04	Early Detection System for Exotic Honey Bee Pests	FL	State Government	\$54,000
3	3.0320.03	Attractants for Spotted Lanternfly, <i>Lycorma delicatula</i>	FL	Academia	\$55,000
3	3.0328.02	Rapid and accurate diagnostic identification of phytoplasmas	FL	Academia	\$114,000
3	3.0520.02	Development of More Rapid and Reliable Diagnostic Tools for All Life Stages of <i>Anastrepha</i> and Other Pest Fruit Flies	FL	Non-APHIS-Federal	\$100,000
3	3.0520.03	Development of More Rapid and Reliable Diagnostic Tools for All Life Stages of <i>Anastrepha</i> and Other Pest Fruit Flies	FL	Academia	\$212,165
3	3.0524.00	Bermudagrass (<i>Cynodon dactylon</i> L.): A potential host and reservoir of new viruses	FL	Academia	\$90,000
5	5.0193.00	Invasive Pest Outreach and Education	FL	Academia	\$53,574

5	5.0388.01	Developing a state-wide Florida ornamental arthropod workshop	FL	Academia	\$56,552
5	5.0388.02	Developing a state-wide Florida ornamental arthropod workshop	FL	Academia	\$9,933
5	5.0481.00	First Detector Training	FL	Academia	\$68,440
6	6.0011.00	Giant African Land Snail Eradication Program	FL	State Government	\$1,900,000
6	6.0269.04	Activators and Attractants for Giant African Snail	FL	APHIS	\$5,000
6	6.0379.03	Development of attractant-based detection and control methods for invasive gastropod species	FL	APHIS	\$6,120
6	6.0385.01	Biological Control Development for the Harrisia Cactus Mealybug	FL	Non-APHIS Federal	\$120,000
6	6.0502.00	Mitigating the ecological and cultural losses from laurel wilt: Year 2	FL	Academia	\$137,254
6	6.0507.00	Mitigation of Invasive Pests Using Biological Control in Open Field Tomato Crops	FL	Academia	\$50,500
6	6.0530.00	Spray treatment methods of targeted plant gene silencing to control citrus diseases: Year 2	FL	Private Entity	\$180,000
6	6.0552.00	Neonic Stewardship Program for the Management of the Invasive Bemisia Whitefly Complex	FL	Non-APHIS Federal	\$93,494
6	6.0570.01	Enhanced Mitigation Techniques for Control of Cactoblastis cactorum	FL	Non-APHIS Federal	\$100,000
6	6.0582.01	Enhanced Mitigation Techniques for Control of Several Exotic Whitefly Species	FL	State Government	\$110,000
6	6.0582.02	Enhanced Mitigation Techniques for Control of Several Exotic Whitefly Species	FL	Academia	\$90,000

					\$5,467,115
Georgia					
1A	1A.0043.04	PRE Pairing for Success: Emerging Invasives, Contentious Cultivars & Common Ground	GA	Non-Profit	\$11,000
1S	1S.0298.00	Blueberry Commodity Survey	GA	State Government	\$60,313
1S	1S.0299.00	Solanaceous Commodity Survey	GA	State Government	\$38,000
1S	1S.0300.00	Orchard Commodity Survey	GA	State Government	\$100,000
1S	1S.0398.07	National Survey of Honey Bee Pests and Diseases	GA	State Government	\$20,700
3	3.0094.06	Early Detection System for Exotic Honey Bee Pests	GA	State Government	\$15,000
5	5.0214.00	First Detector Training	GA	Academia	\$48,568
					\$293,581
Guam					
1S	1S.0046.00	Solanaceous Commodity Survey	GU	Academia	\$38,320
1S	1S.0398.08	National Survey of Honey Bee Pests and Diseases	GU	State Government	\$13,800
1S	1S.0586.02	Palm Commodity Survey	GU	Academia	\$86,000
6	6.0158.00	Biological Control of Coconut Rhinoceros Beetle Biotype G	GU	Academia	\$200,000
6	6.0160.00	Guam Coconut Rhinoceros Beetle Management Program	GU	State Government	\$200,000
6	6.0587.03	Response to coconut rhinoceros beetle	GU	Academia	\$75,000
					\$613,120
Hawaii					
1A	1A.0592.00	Emerging diseases, viral spillover, and the risk to agricultural pollinators	HI	Academia	\$87,771
1A	1A.0602.00	USDA Compendium of Fruit Fly Host Information (CoFFHI)	HI	Academia	\$265,811

1S	1S.0398.09	National Survey of Honey Bee Pests and Diseases	HI	State Government	\$27,600
1S	1S.0586.01	Palm Commodity Survey	HI	Academia	\$148,000
2	2.0075.00	Hawaii Pre-Clearance X-ray Support	HI	APHIS	\$165,500
3	3.0497.01	Genomic approaches to fruit fly exclusion and pathway analysis (year 3)	HI	Academia	\$260,000
3	3.0497.02	Genomic approaches to fruit fly exclusion and pathway analysis (year 3)	HI	Non-APHIS-Federal	\$303,000
5	5.0474.00	Little Fire Ant Education for Nursery Supply Stores	HI	Academia	\$42,090
6	6.0071.00	Integrated and Sustainable Approach to Manage New Invasive Pests of Ficus Trees in Hawaii's Urban Landscapes - Year 2	HI	Academia	\$40,995
6	6.0269.03	Activators and Attractants for Giant African Snail	HI	Academia	\$41,000
6	6.0382.00	Response to Rapid Ohia Death, a disease threatening forests	HI	State Government	\$120,000
6	6.0451.01	Systems approach for the management of coffee berry borer in Hawaii and Puerto Rico with emphasis on biological control	HI	Academia	\$125,000
6	6.0451.02	Systems approach for the management of coffee berry borer in Hawaii and Puerto Rico with emphasis on biological control	HI	State Government	\$100,000
6	6.0451.04	Systems approach for the management of coffee berry borer in Hawaii and Puerto Rico with emphasis on biological control	HI	Non-APHIS-Federal	\$115,000
6	6.0587.01	Response to Coconut Rhinoceros Beetle in Hawaii	HI	Academia	\$975,000
6	6.0587.02	Response to Coconut Rhinoceros Beetle in Hawaii	HI	State Government	\$250,000
					\$3,066,767

Iowa					
1S	1S.0143.00	Thousand Cankers/Walnut Twig Beetle Survey	IA	State Government	\$25,000
1S	1S.0398.10	National Survey of Honey Bee Pests and Diseases	IA	State Government	\$13,800
3	3.0106.00	Pilot Biosecurity Framework for Imported Seeds	IA	Academia	\$105,419
6	6.0533.02	Development and implementation of mitigation strategies for the emerging maize pathogen <i>Xanthomonas vasicola vasculorum</i>	IA	Academia	\$70,000
6	6.0533.04	Development and implementation of mitigation strategies for the emerging maize pathogen <i>Xanthomonas vasicola vasculorum</i>	IA	Academia	\$20,000
6	6.0598.02	Developing ways to utilize hatching factors for PCN mitigation	IA	Academia	\$48,625
					\$282,844
Idaho					
1.S	1S.0361.00	Stone Fruit Commodity Survey	ID	State Government	\$19,000
1S	1S.0398.11	National Survey of Honey Bee Pests and Diseases	ID	State Government	\$13,800
3	3.0497.04	Genomic approaches to fruit fly exclusion and pathway analysis (year 3)	ID	Academia	\$25,000
4	4.0162.02	Harmonizing Grapevine Nursery Stock Certification Programs in the Pacific Northwest	ID	State Government	\$5,500
6	6.0095.01	Eradication Strategies for <i>Globodera pallida</i> , the pale cyst nematode (PCN)	ID	Academia	\$221,000
6	6.0095.02	Eradication Strategies for <i>Globodera pallida</i> , the pale cyst nematode (PCN)	ID	Academia	\$20,000
6	6.0095.03	Eradication Strategies for <i>Globodera pallida</i> , the pale cyst nematode (PCN)	ID	Academia	\$156,000

6	6.0095.04	Eradication Strategies for <i>Globodera pallida</i> , the pale cyst nematode (PCN)	ID	Academia	\$2,000
6	6.0221.01	PCN Immunity	ID	Academia	\$200,000
6	6.0221.02	PCN Immunity	ID	Academia	\$70,000
6	6.0221.03	PCN Immunity	ID	Academia	\$73,000
6	6.0221.06	PCN Immunity	ID	Academia	\$67,000
6	6.0346.00	Predicting plant uptake of inorganic bromide following soil fumigation with methyl bromide	ID	Academia	\$195,000
6	6.-578.00	Sterile Litchi Tomato - PCN Eradication	ID	Academia	60,000
					\$1,127,300
Illinois					
1A	1A.0043.02	PRE Pairing for Success: Emerging Invasives, Contentious Cultivars & Common Ground	IL	Non-Profit	\$9,000
1S	1S.0398.12	National Survey of Honey Bee Pests and Diseases	IL	State Government	\$13,800
1S	1S.0508.00	Grape Commodity Survey	IL	State Government	\$25,000
1S	1S.0514.00	Orchard Commodity Survey	IL	State Government	\$28,799
1S	1S.0564.00	Bundled Forest Pest Survey	IL	State Government	\$25,000
5	5.0357.00	Forest Pest Outreach and Education	IL	Non-Profit	\$77,150
					\$178,749
Indiana					
1A	1A.0165.01	NPDN Data Analysis	IN	Academia	\$33,858
1A	1A.0165.02	NPDN Data Analysis	IN	Academia	\$9,196

1A	1A.0281.02	Mobile Application Development for Data Collection and Upload to NAPIS	IN	State Government	\$25,000
1S	1S.0240.00	Thousand Cankers/Walnut Twig Beetle Survey	IN	State Government	\$25,000
1S	1S.0398.13	National Survey of Honey Bee Pests and Diseases	IN	State Government	\$13,800
5	5.0330.00	Forest Pest Outreach and Survey Project FY2016	IN	State Government	\$63,867
					\$170,721
Kansas					
1S	1S.0005.00	Thousand Cankers/Walnut Twig Beetle Survey	KS	State Government	\$8,500
1S	1S.0398.14	National Survey of Honey Bee Pests and Diseases	KS	Academia	\$13,800
					\$22,300
Kentucky					
1S	1S.0049.00	Phytophthora ramorum Survey	KY	Academia	\$20,000
1S	1S.0053.00	Grape Commodity Survey	KY	Academia	\$21,000
1S	1S.0054.00	Thousand Cankers/Walnut Twig Beetle Survey	KY	Academia	\$25,000
1S	1S.0155.00	Apple Orchard Commodity Survey	KY	Academia	\$17,000
1S	1S.0398.15	National Survey of Honey Bee Pests and Diseases	KY	State Government	\$13,800
4	4.0324.00	National Harmonized Systems Approach to Nursery Certification	KY	Non-Profit	\$378,720
4	5.0386.00	SANC Risk Assessment Tool Application	KY	Non-Profit	\$281,900
5	5.0050.00	Forest Pest Outreach and Education	KY	Academia	\$8,768
5	5.0424.00	Healthy Trees – Healthy People: A Tool to Increase Physical Activity and Improve Human and Urban Tree Health	KY	Academia	\$34,396

6	6.0036.00	Development of RNAi-based control technologies for use in plant health emergencies	KY	Academia	\$91,999
					\$892,583
Louisiana					
1S	1S.0037.00	Phytophthora Ramorum Survey	LA	State Government	\$20,000
1S	1S.0079.00	Citrus Commodity Survey	LA	State Government	\$12,000
					\$32,000
Massachusetts					
1S	1S.0378.00	Stone Fruit Commodity Survey	MA	State Government	\$45,000
1S	1S.0398.17	National Survey of Honey Bee Pests and Diseases	MA	State Government	\$13,800
3	3.0177.01	Lepidoptera Attractants	MA	State Government	\$12,000
3	3.0177.02	Lepidoptera Attractants	MA	State Government	\$39,790
3	3.0198.01	Attraction and Detection of the Fruit Piercing Moth	MA	Academia	\$129,774
3	3.0198.02	Attraction and Detection of the Fruit Piercing Moth	MA	APHIS	\$2,500
3	3.0320.01	Attractants for Spotted Lanternfly, Lycorma delicatula	MA	Academia	\$20,000
3	3.0427.02	Molecular-based initiatives to support the Old World Bollworm Strategic Management Plan	MA	APHIS	\$9,314
5	5.0208.00	Forest Pest Outreach and Education	MA	State Government	\$57,317
5	5.0469.00	Asian Longhorned Beetle Public Awareness Campaign	MA	State Government	\$150,000

6	6.0013.02	Facilitating Spread of the Microsporidian Pathogen, <i>Ovavesicula popilliae</i> , for Long-Term Suppression of Japanese Beetle	MA	APHIS	\$5,500
6	6.0203.01	Artificial rearing system for spotted lanternfly	MA	Academia	\$2,000
6	6.0247.02	Exploration for parasitoids of Asian longhorned beetle in China	MA	APHIS	\$38,000
6	6.0306.02	Biological control and host plant utilization for the spotted lanternfly	MA	APHIS	\$54,500
6	6.0402.02	Optimizing Bark Spray Treatments for Spotted Lantern Fly Control	MA	APHIS	\$19,500
6	6.0423.02	Development of generic temperature treatment schedules for exotic tephritid fruit flies	MA	APHIS	\$8,000
6	6.0425.00	The population genetics of hybridization between non-native winter moth and native Bruce spanworm	MA	Academia	\$63,288
					\$670,283
Maryland					
1S	1S.0215.00	Asian Defoliating Moth Survey	MD	State Government	\$15,372
1S	1S.0305.00	Apiary Inspection Disease Detection Canine Training	MD	State Government	\$37,121
1S	1S.0322.00	Grape Commodity Survey	MD	State Government	\$16,658
1S	1S.0332.00	Phytophthora ramorum Survey	MD	State Government	\$20,000
1S	1S.0341.00	Small Berry Commodity Survey	MD	State Government	\$13,749
1S	1S.0398.18	National Survey of Honey Pests and Diseases	MD	State Government	\$13,800

3	3.0094.05	Early Detection System for Exotic Honey Bee Pests	MD	State Government	\$10,000
3	3.0223.00	Rapid and accurate diagnostic detection/identification of exotic viroids in seed tissues	MD	Non-APHIS-Federal	\$15,000
3	3.0328.01	Rapid and accurate diagnostic identification of phytoplasmas	MD	Non-APHIS-Federal	\$78,000
3	3.0328.03	Rapid and accurate diagnostic identification of phytoplasmas	MD	APHIS	\$8,000
3	3.0245.01	Systematics and identification of Urocystis species causing flag smut	MD	Non-APHIS-Federal	\$34,000
3	3.0351.00	International efforts for the development of species-specific diagnostics of Sclerophthora species of regulatory concern	MD	APHIS	\$100,000
3	3.0462.00	Enhancing the Plant Germplasm Quarantine Program Diagnostic Capacity by Implementing NGS Technologies	MD	APHIS	\$255,000
3	3.0563.01	Specific detection of Xylella fastidiosa subspecies pauca-CoDiRO strain using molecular approaches	MD	APHIS	\$22,330
3	3.0563.02	Specific detection of Xylella fastidiosa subspecies pauca-CoDiRO strain using molecular approaches	MD	APHIS	\$26,400
3	3.0597.00	Specimen Imaging for Rusts and Smuts of North America	MD	Non-APHIS Federal	\$58,969
4	4.0395.00	The effect of potting medium type and moisture and soil microorganisms on infection by Phytophthora tentaculata	MD	Academia	\$39,600

					\$763,999
Maine					
1S	1S.0003.00	Exotic Pest Survey of Small Fruits; Berries and Grapes	ME	State Government	\$15,615
1S	1S.0109.00	Solanaceous Commodity Survey	ME	State Government	\$50,934
1S	1S.0499.00	Vegetable Crops Pest Survey	ME	State Government	\$10,838
5	5.0002.00	Outreach and Education Program on Invasive Species of Forests	ME	State Government	\$68,841
5	5.0200.00	Forest Pest Outreach and Education	ME	State Government	\$26,832
					\$173,060
Michigan					
1S	1S.0130.00	Oak and Pine Commodity Survey	MI	State Government	\$90,000
1S	1S.0131.00	Cyst Nematode Survey	MI	State Government	\$26,260
1S	1S.0132.00	Exotic Tortricidae Survey	MI	State Government	\$61,000
1S	1S.0133.00	Phytophthora ramorum Survey	MI	State Government	\$20,000
1S	1S.0173.00	Thousand Cankers/Walnut Twig Beetle Survey	MI	State Government	\$10,000
1S	1S.0398.19	National Survey of Honey Bee Pests and Diseases	MI	State Government	\$13,800
5	5.0167.00	Forest Pest Outreach and Education	MI	State Government	\$35,480
5	5.0268.00	Invasive Pest Outreach and Education	MI	APHIS	\$4,025
6	6.0013.01	Facilitating Spread of the Microsporidian Pathogen, <i>Ovavesicula popilliae</i> , for Long-Term Suppression of Japanese Beetle	MI	Academia	\$130,455

6	6.0402.01	Optimizing Bark Spray Treatments for Spotted Lantern Fly Control	MI	Academia	\$24,500
6	6.0342.00	Video manual for the Production and Release of Emerald Ash Borer Biological Control Agents and Their Host	MI	APHIS	\$3,200
6	6.0402.01	Optimizing Bark Spray Treatments for Spotted Lantern Fly Control	MI	Academia	\$24,500
					\$418,720
Minnesota					
1A	1A.0043.03	PRE Pairing for Success: Emerging Invasives, Contentious Cultivars & Common Ground	MN	Non-Profit	\$8,000
1S	1S.0227.00	Bundled survey for exotic pests of fruits and vegetables	MN	State Government	\$110,000
1S	1S.0230.00	Exotic Wood Borer/Bark Beetle Bundled Survey	MN	State Government	\$80,000
1S	1S.0231.00	Cyst Nematode Survey	MN	State Government	\$51,013
1S	1S.0273.00	Asian Defoliating Moth Survey	MN	State Government	\$16,000
1S	1S.0398.20	National Survey of Honey Bee Pests and Diseases	MN	State Government	\$13,800
5	5.0232.00	Invasive Pest Outreach and Education	MN	State Government	\$102,343
6	6.0575.00	Characterizing larval movement of gypsy moth to improve quarantine guidelines	MN	Academia	\$75,000
					\$456,156
Missouri					
1S	1S.0266.00	Thousand Cankers/Walnut Twig Beetle Survey	MO	State Government	\$25,000

1S	1S.0398.21	National Survey of Honey Bee Pests and Diseases	MO	State Government	\$13,800
1S	1S.0457.01	Screening insects for <i>Geosmithia morbida</i> , cause of thousand cankers disease	MO	State Government	\$1,500
1S	1S.0457.02	Screening insects for <i>Geosmithia morbida</i> , cause of thousand cankers disease	MO	State Government	\$10,500
5	5.0554.00	Forest Pest Outreach and Education	MO	State Government	\$30,000
					\$80,800
Mississippi					
1S	1S.0523.00	Palm Commodity Survey	MS	Academia	\$36,000
1S	1S.0525.00	Asian Defoliating Moth Survey	MS	Academia	\$39,953
3	3.0401.00	Taxonomic Assistance to Eastern Regional States for Processing Insect Pest Survey Samples	MS	Academia	\$133,088
3	3.0413.00	Use of E-probe Diagnostic Nucleic acid Assays for the early detection of exotic pests in bulk CAPS trap samples	MS	Academia	\$103,420
3	3.0427.05	Molecular-based initiatives to support the Old World Bollworm Strategic Management Plan	MS	Non-APHIS-Federal	\$85,000
5	5.0319.00	Forest Pest Outreach and Education	MS	State Government	\$26,529
5	5.0436.00	Cogongrass Outreach and Education	MS	State Government	\$50,000
					\$473,990
Montana					

1S	1S.0027.00	Mollusk Survey	MT	State Government	\$18,145
1S	1S.0105.00	Exotic Woodborer and Bark Beetle Survey	MT	State Government	\$24,800
1S	1S.0113.00	Stone Fruit Commodity Survey	MT	State Government	\$16,804
1S	1S.0398.22	National Survey of Honey Bee Pests and Diseases	MT	State Government	\$13,800
3	3.0196.00	Regional Pulse Crop Diagnostic Laboratory	MT	Academia	\$150,000
5	5.0222.00	Don't Move Firewood National Outreach Campaign	MT	Non-Profit	\$184,208
6	6.0433.00	Xerolenta obvia suppression and mitigation	MT	State Government	\$20,000
6	6.0585.00	Xerolenta obvia chemical treatments	MT	State Government	\$45,000
					\$472,757
North Carolina					
1A	1A.0281.01	Mobile Application Development for Data Collection and Upload to NAPIS	NC	State Government	\$2,773
1A	1A.0476.00	Honeybee data reanalysis: a large scale integration and reanalysis of PPQ data with Honeybee Survey data	NC	Academia	\$35,742
1A	1A.0482.00	Analytical support for completing impact assessments of pests on the CAPS commodity survey lists	NC	Academia	\$74,056
1A	1A.0517.00	Integrative Spatiotemporal Risk Maps of Fruit Flies	NC	Academia	\$180,705
1A	1A.0538.00	Development and use of a model to objectively categorize and prioritize exotic pests for survey and response	NC	Academia	\$156,760

1S	1S.0016.00	Asian Defoliating Moth Survey	NC	State Government	\$6,636
1S	1S.0017.00	Grape Commodity Survey	NC	State Government	\$5,446
1S	1S.0018.00	Solanaceous Commodity Survey	NC	State Government	\$9,247
1S	1S.0020.00	Phytophthora ramorum Survey	NC	State Government	\$9,985
1S	1S.0104.00	Thousand Cankers/Walnut Twig Beetle Survey	NC	State Government	\$8,500
1S	1S.0398.23	National Survey of Honey Bee Pests and Diseases	NC	State Government	\$13,800
3	3.0520.01	Development of More Rapid and Reliable Diagnostic Tools for All Life Stages of Anastrepha and Other Pest Fruit Flies	NC	Academia	\$165,000
5	5.0021.00	Smartphone Pest Education and Outreach	NC	Non-Profit	\$38,324
5	5.0141.00	Invasive Pest Outreach and Education	NC	State Government	\$19,900
6	6.0203.02	Artificial rearing system for spotted lanternfly	NC	Academia	\$68,000
6	6.0381.06	Brown Marmorated Stink Bug (BMSB) Classical Biological Control – Phase 2/year 2	NC	Non-APHIS-Federal	\$8,000
6	6.0385.06	Biological Control Development for the Harrisia Cactus Mealybug	NC	APHIS	\$1,500

6	6.0451.05	Systems approach for the management of coffee berry borer in Hawaii and Puerto Rico with emphasis on biological control	NC	Academia	\$20,000
6	6.0471.02	A CRISPR-based antimicrobial system for the targeted removal of bacterial plant pathogens	NC	Academia	\$227,298
6	6.0500.00	Enhancing Exotic Plant-Pest Management by Creating New Pest Response Guidelines with University Collaboration	NC	Academia	\$300,000
					\$1,351,672
North Dakota					
1S	1S.0035	Cyst Nematode Survey	ND	State Government	\$75,000
1S	1S.0052	Cyst Nematode Survey	ND	State Government	\$10,919
1S	1S.0398.24	National Survey of Honey Bee Pests and Diseases	ND	State Government	\$13,800
1S	1S.0589	Honey Bee Virus and Disease Survey	ND	State Government	\$20,000
					\$119,719
Nebraska					
1S	1S.0398.25	National Survey of Honey Bee Pests and Diseases	NE	State Government	\$13,800
1S	1S.0506.00	Cyst Nematode Survey	NE	State Government	\$28,000
6	6.0533.03	Development and implementation of mitigation strategies for the emerging maize pathogen <i>Xanthomonas vasicola vasculorum</i>	NE	Academia	\$70,000

					\$111,800
New Hampshire					
1S	1S.0334.00	Stone Fruit Commodity Survey	NH	State Government	\$3,558
1S	1S.0338.00	Asian Defoliating Moth Survey	NH	State Government	\$4,511
1S	1S.0339.00	Solanaceous Commodity Survey	NH	State Government	\$3,952
5	5.0125.00	Forest Pest Outreach and Education	NH	State Government	\$9,500
5	5.0135.00	Forest Pest Outreach and Education	NH	Academia	\$45,000
6	6.0015.00	Effect of Emerald Ash Borer density and tree condition on parasitism by the biocontrol wasp, <i>Tetrastichus planipennis</i>	NH	Academia	\$88,073
					\$154,594
New Jersey					
1S	1S.0216.00	Spotted Lanternfly Pathway Survey	NJ	State Government	\$12,000
1S	1S.0218.00	Solanaceous Commodity Survey	NJ	State Government	\$20,469
1S	1S.0325.00	Potato Survey for <i>Dickeya solani</i> and Potato Cyst Nematode	NJ	State Government	\$20,000
1S	1S.0398.26	National Survey of Honey Bee Pests and Diseases	NJ	State Government	\$13,800
5	5.0213.00	Forest Pest Outreach and Education	NJ	State Government	\$58,847
					\$125,116
New Mexico					

1S	1S.0185.00	Nut Pest Survey	NM	State Government	\$25,000
1S	1S.0398.27	National Survey of Honey Bee Pests and Diseases	NM	State Government	\$13,800
5	5.0528.00	Invasive Pest Outreach and Education	NM	State Government	\$40,000
					\$78,800
Nevada					
1S	1S.0022.00	Phytophthora ramorum Survey	NV	State Government	\$20,000
1S	1S.0073.00	Asian Defoliating Moth Survey	NV	State Government	\$16,826
1S	1S.0084.00	Palm Commodity Survey	NV	State Government	\$15,000
1S	1S.0181.00	Cyst Nematode Survey	NV	State Government	\$32,909
1S	1S.0293.00	Solanaceous Commodity Survey	NV	State Government	\$30,000
1S	1S.0398.28	National Survey of Honey Bee Pests and Diseases	NV	State Government	\$13,800
					\$128,535
New York					
1S	1S.0051.00	Orchard Commodity Survey	NY	State Government	\$100,000
1S	1S.0057.00	Grape Commodity Survey	NY	State Government	\$120,062
1S	1S.0058.00	Small Fruit/Mixed Berry Commodity Survey	NY	State Government	\$60,000
1S	1S.0398.29	National Survey of Honey Bee Pests and Diseases	NY	State Government	\$13,800
1S	1S.0543.00	Stone Fruit Commodity Survey	NY	State Government	\$275,000
3	3.0274.00	NPDN and State Diagnostician Preparedness Training through the CPHST-Beltsville Laboratory and other sites.	NY	Academia	\$88,380

3	3.0320.04	Attractants for Spotted Lanternfly, <i>Lycorma delicatula</i>	NY	Industry	\$32,000
4	4.0572.00	Reinstating an apple certification program	NY	State Government	\$50,019
5	5.0581.00	New resources and enhanced tools to improve First Detector training and outreach	NY	Academia	\$90,922
6	6.0028.00	Safeguarding the US seed potato industry against emerging seed potato pathogens that impact trade and farm viability	NY	Non-APHIS-Federal	\$425,453
6	6.0221.05	PCN Immunity	NY	Academy	\$61,000
6	6.0322.00	Deregulation and Enhanced Regulatory Activities of Golden Nematode (<i>Globodera rostochiensis</i>) in NY	NY	State Government	\$125,000
					\$1,441,636
Ohio					
1A	1A.0272.00	Evaluating the extent of attack, determinants of susceptibility, and tolerance of fringetrees and olive to EAB	OH	Academia	\$62,328
1S	1S.0387.00	Phytophthora ramorum Survey	OH	State Government	\$15,000
1S	1S.0390.00	Thousand Cankers/Walnut Twig Beetle Survey	OH	State Government	\$24,847
1S	1S.0394.00	Grape Commodity Survey	OH	State Government	\$20,000
1S	1S.0398.30	National Survey of Honey Bee Pests and Diseases	OH	State Government	\$13,800
1S	1S.0403.00	Nursery and Orchard Survey	OH	State Government	\$60,000
5	5.0407.00	First Detector Training	OH	Academia	\$25,846

6	6.0442.02	Use of Unmanned Aircraft System (UAS) Swarm Technology for sterile insect technique release, survey and treatment	OH	Private Entity	\$90,000
					\$311,821
Oklahoma					
1S	1S.0258.00	Grape Commodity Survey	OK	State Government	\$10,000
					\$10,000
Oregon					
1S	1S.0086.00	Orchard Commodity Survey	OR	State Government	\$100,000
1S	1S.0087.00	Solanaceous Commodity Survey	OR	State Government	\$60,000
1S	1S.0088.00	Grape Commodity Survey	OR	State Government	\$80,000
1S	1S.0090.00	Asian Defoliating Moth Survey	OR	State Government	\$277,000
1S	1S.0098.00	Nut Pest Survey	OR	State Government	\$75,000
1S	1S.0170.00	Cyst Nematode Survey	OR	State Government	\$62,337
1S	1S.0174.00	Survey of Susceptible Crops for Exotic Phytoplasmas	OR	State Government	\$35,177
1S	1S.0398.31	National Survey of Honey Bee Pests and Diseases	OR	State Government	\$13,800
2	2.0183.00	Post-entry plant material as a potential pathway for invasive pests	OR	State Government	\$23,045
3	3.0080.00	Regional Identification Center for Bark Beetle and other woodboring beetles	OR	State Government	\$157,793
3	3.0567.01	Serological detection tools for early detection of boxwood blight	OR	Non-APHIS-Federal	\$125,000
4	4.0593.01	Determining the minimum treatment area and importance of soil moisture for effective soil solarization in nurseries	OR	Academia	\$50,635

5	5.0159.01	Don't Pack a Pest (DPAP) - International Student Toolkit	OR	State Government	\$199,738
6	6.0095.05	Eradication Strategies for <i>Globodera pallida</i> , the pale cyst nematode (PCN)	OR	Non-APHIS-Federal	\$34,000
6	6.0099.00	Light Brown Apple Moth Delimitation Survey	OR	State Government	\$50,000
6	6.0101.00	Gypsy Moth Response	OR	State Government	\$255,000
6	6.0188.00	Ash White Fly Biological Control	OR	State Government	\$27,000
6	6.0221.04	PCN Immunity	OR	Academia	\$29,000
6	6.0269.02	Activators and Attractants for Giant African Snail	OR	Academia	\$67,000
6	6.0379.01	Development of attractant-based detection and control methods for invasive gastropod species	OR	Academia	\$112,433
6	6.0557.00	Enhancing mitigation responses to the new threat of an emerging EU1 <i>Phytophthora ramorum</i> population in Oregon	OR	Academia	\$124,722
					\$1,958,680
Pennsylvania					
1S	1S.0045.00	<i>Phytophthora ramorum</i> Survey	PA	State Government	\$20,000
1S	1S.0151.00	Thousand Cankers/Walnut Twig Beetle Survey	PA	State Government	\$70,000
1S	1S.0152.01	Solanaceous Commodity Survey	PA	State Government	\$55,000
1S	1S.0152.02	Solanaceous Commodity Survey	PA	State Government	\$20,000
1S	1S.0154.01	Grape Commodity Survey	PA	State Government	\$60,000
1S	1S.0154.02	Grape Commodity Survey	PA	State Government	\$15,000

1S	1S.0398.32	National Survey of Honey Bee Pests and Diseases	PA	State Government	\$13,800
1S	1S.0503.00	Public Garden Surveys	PA	Non-Profit	\$108,557
1S	1S.0548.01	Orchard Commodity Survey	PA	State Government	\$22,000
1S	1S.0548.02	Orchard Commodity Survey	PA	Academia	\$63,000
3	3.0094.02	Early Detection System for Exotic Honey Bee Pests	PA	State Government	\$15,000
3	3.0182.01	Allium Leafminer: Identification and Pest Detection	PA	Academia	\$104,000
3	3.0182.02	Allium Leafminer: Identification and Pest Detection	PA	Academia	\$6,000
3	3.0182.03	Allium Leafminer: Identification and Pest Detection	PA	Academia	\$10,000
3	3.0242.04	Development of Attractants and Improved Trap Designs for Exotic Wood Borers	PA	State Government	\$15,886
3	3.0320.02	Attractants for Spotted Lanternfly, <i>Lycorma delicatula</i>	PA	Academia	\$93,000
4	4.0607.00	Effects of composting on causal agent of boxwood blight	PA	Academia	\$60,095
5	5.0164.00	Forest Pest Outreach and Education	PA	State Government	\$52,921
5	5.0494.00	Sentinel Plant Network	PA	Non-Profit	\$205,400
5	5.0566.01	Spotted Lanternfly Outreach Project	PA	State Government	\$20,000
5	5.0566.02	Spotted Lanternfly Outreach Project	PA	State Government	\$20,000
6	6.0211.01	Spotted Lanternfly Eradication Project	PA	State Government	\$1,390,000
6	6.0211.02	Spotted Lanternfly Eradication Project	PA	State Government	\$60,000
6	6.0211.03	Spotted Lanternfly Eradication Project	PA	State Government	\$50,000

6	6.0244.01	Spotted Lanternfly Life Cycle and Natural Enemy Study in North America	PA	State Government	\$49,999
					\$2,599,658
Puerto Rico					
1S	1S.0398.33	National Survey of Honey Bee Pests and Diseases	PR	State Government	\$13,800
1S	1S.0595.00	Integrative approach for multi pest survey of palms in Puerto Rico	PR	Academia	\$70,413
3	3.0596.00	SNP database for rapid identification of <i>Helicoverpa armigera</i> , <i>H. zea</i> , their close relatives and hybrids	PR	Academia	\$200,312
6	6.0385.04	Biological Control Development for the <i>Harrisia</i> Cactus Mealybug	PR	Academia	\$70,000
					\$354,525
Rhode Island					
1S	1S.0078.00	Phytophthora ramorum Survey	RI	State Government	\$12,251
1S	1S.0166.00	Orchard Commodity Survey	RI	State Government	\$17,000
1S	1S.0331.00	Grape Commodity Survey	RI	Academia	\$11,290
					\$40,541
South Carolina					
1S	1S.0267.00	Pathway Survey for Pests of Multiple Agricultural Systems	SC	Academia	\$25,220
1S	1S.0350.00	Palm Commodity Survey	SC	Academia	\$14,733
1S	1S.0398.34	National Survey of Honey Bee Pests and Diseases	SC	Academia	\$13,800

5	5.0077.00	Junior Invasive Inspectors	SC	Academia	\$35,000
5	5.0296.00	Forest Pest Outreach and Education	SC	State Government	\$36,920
					\$125,673
South Dakota					
1S	1S.0398.35	National Survey of Honey Bee Pests and Diseases	SD	State Government	\$13,800
					\$13,800
Tennessee					
1S	1S.0146.00	Phytophthora ramorum Survey	TN	State Government	\$20,000
1S	1S.0285.00	Solanaceous Commodity Survey	TN	Academia	\$17,750
4	4.0448.00	Continuation Soil Temperature Effects on Japanese Beetle Harmonization Plan Dip Treatments & Non-Neonicotinoid Alternativ	TN	Academia	\$84,663
5	5.0532.00	Forest Pest Outreach and Education	TN	Academia	\$37,500
5	5.0539.00	Outreach, Education, and Bio-control to Mitigate Invasive Insect Pests in Tennessee: Phase I	TN	Academia	\$64,240
					\$224,153
Texas					
1A	1A.0043.05	PRE Pairing for Success: Emerging Invasives, Contentious Cultivars & Common Ground	TX	Non-Profit	\$9,000
1S	1S.0255.00	Stone Fruit Commodity Survey	TX	Academia	\$65,000

1S	1S.0384.00	Palm Commodity Survey	TX	Academia	\$60,000
1S	1S.0398.36	National Survey of Honey Bee Pests and Diseases	TX	Academia	\$27,600
2	2.0171.00	Critical Entry Point Monitoring for the Pests of Biosecurity Concern	TX	State Government	\$685,000
3	3.0094.03	Early Detection System for Exotic Honey Bee Pests	TX	Academia	\$26,500
3	3.0427.04	Molecular-based initiatives to support the Old World Bollworm Strategic Management Plan	TX	Academia	\$133,000
3	3.0497.03	Genomic approaches to fruit fly exclusion and pathway analysis (year 3)	TX	APHIS	\$12,000
3	3.0520.05	Development of More Rapid and Reliable Diagnostic Tools for All Life Stages of Anastrepha and Other Pest Fruit Flies	TX	APHIS	\$10,000
5	5.0081.00	Pollinator, Pest, and Plant Education and Outreach Program	TX	Academia	\$28,707
5	5.0123.00	National Training Program for New CAPS Employees	TX	Academia	\$130,000
5	5.0287.00	Master Gardener Specialist FIRST DETECTOR education program	TX	Academia	\$52,121
5	5.0336.00	Development of an Education and Outreach Program to Identify Exotic European Honey Bee Pests	TX	Academia	\$25,000
5	5.0576.00	Public Education of Mexican Fruit Fly	TX	Non-Profit	\$52,258
6	6.0385.05	Biological Control Development for the Harrisia Cactus Mealybug	TX	APHIS	\$1,500
6	6.0471.01	A CRISPR-based antimicrobial system for the targeted removal of bacterial plant pathogens	TX	Academia	\$54,000

6	6.0542.00	Area-wide integrated management of citrus leafminer, <i>Phyllocnistis citrella</i> , (Lepidoptera: Gracillariidae) in Texas	TX	Academia	\$137,908
					\$1,509,594
Utah					
1S	1S.0114.00	Asian Defoliating Moth Survey	UT	State Government	\$15,000
1S	1S.0205.00	Orchard Commodity Survey	UT	Academia	\$17,000
1S	1S.0398.37	National Survey of Honey Bee Pests and Diseases	UT	State Government	\$13,800
1S	1S.0417.00	Bumble Bee Pathogen Survey in the Western Bumble Bee	UT	Non-APHIS-Federal	\$20,000
3	3.0256.01	Guide to introduced and potentially invasive bees in the U.S.: identification, biology, and possible impacts	UT	Academia	\$139,000
5	5.0250.00	Invasive Pest Outreach and Education	UT	Academia	\$49,995
					\$254,795
Virginia					
1S	1S.0070.00	Thousand Cankers/Walnut Twig Beetle Survey	VA	State Government	\$25,000
1S	1S.0076.00	Ralstonia solanacearum Delimiting and Monitoring Survey	VA	State Government	\$30,100
1S	1S.0136.00	Phytophthora ramorum Survey	VA	State Government	\$20,000
1S	1S.0226.00	Grape Commodity Survey	VA	State Government	\$25,000

1S	1S.0398.38	National Survey of Honey Bee Pests and Diseases	VA	State Government	\$13,800
6	6.0551.00	Enhancing boxwood blight mitigation through innovation, integration, and education	VA	Academia	\$490,000
					\$603,900
Vermont					
1S	1S.0180.00	Exotic Woodborer and Bark Beetle Survey	VT	State Government	\$25,400
1S	1S.0199.00	Orchard Commodity Survey	VT	State Government	\$17,000
1S	1S.0202.00	Grape Commodity Survey	VT	State Government	\$18,000
1S	1S.0398.39	National Survey of Honey Bee Pests and Diseases	VT	Academia	\$13,800
5	5.0168.00	Forest Pest Outreach and Education	VT	State Government	\$66,566
					\$140,766
Washington					
1S	1S.0041.00	Stone Fruit Commodity & Solanaceous Commodity Survey	WA	Academia	\$39,218
1S	1S.0225.00	Asian Defoliating Moth Survey	WA	State Government	\$277,000
1S	1S.0398.40	National Survey of Honey Bee Pests and Diseases	WA	State Government	\$13,800
1S	1S.0447.00	Hardwood Commodity Survey	WA	State Government	\$80,000
1S	1S.0470.00	Softwood Commodity Survey	WA	State Government	\$25,000
1S	1S.0590.00	Grape Commodity Survey	WA	State Government	\$120,000
3	3.0224.00	Comparing capture rates of hot melt and traditional	WA	State Government	\$36,946

		sticky inserts under field and laboratory conditions			
3	3.0245.02	Systematics and identification of Urocystis species causing flag smut	WA	Non-APHIS-Federal	\$116,000
3	3.0521.00	Western States Lepidoptera Diagnostic Center	WA	State Government	\$123,824
3	3.0567.02	Serological detection tools for early detection of boxwood blight	WA	Non-APHIS-Federal	\$25,000
4	4.0162.01	Harmonizing Grapevine Nursery Stock Certification Programs in the Pacific Northwest	WA	State Government	\$36,500
4	4.0162.03	Harmonizing Grapevine Nursery Stock Certification Programs in the Pacific Northwest	WA	State Government	\$78,000
4	4.0162.04	Harmonizing Grapevine Nursery Stock Certification Programs in the Pacific Northwest	WA	State Government	\$15,000
4	4.0553.00	NORSUDUC - Movement of Phytophthora ramorum inoculum in the soil profile, Year 2	WA	Academia	\$38,755
5	5.0246.00	Establishing a First Detector Invasive Species Network in Washington State	WA	State Government	\$62,000
5	6.0270.00	Asian Defoliating Moth Survey	WA	State Government	\$275,000
6	6.0095.06	Eradication Strategies for Globodera pallida, the pale cyst nematode (PCN)	WA	Academia	\$42,000
6	6.0354.00	Vineyard Snail Eradication	WA	State Government	\$15,000
6	5.0363.00	Expanding the Columbia Gorge Invasive Species Project: A Multiregional Approach	WA	State Government	\$68,000
6	6.0540.00	Steam mitigation of P. ramorum at nurseries in Washington State	WA	Academia	\$50,626

6	6.0544.00	Training and Certification for Canopy Survey	WA	State Government	\$11,844
6	6.0598.01	Developing ways to utilize hatching factors for PCN mitigation	WA	Non-APHIS-Federal	\$70,940
					\$1,620,453
Wisconsin					
1S	1S.0055.00	Cyst Nematode Survey	WI	Academia	\$58,750
1S	1S.0391.00	Blueberry Commodity Survey	WI	State Government	\$5,354
1S	1S.0392.00	Exotic Woodborer and Bark Beetle Survey	WI	State Government	\$24,005
1S	1S.0398.41	National Survey of Honey Bee Pests and Diseases	WI	State Government	\$13,800
1S	1S.0410.00	Thousand Cankers/Walnut Twig Beetle Survey	WI	State Government	\$10,000
3	3.0430.00	Workshop on Seed Potato Certification, Pests and Diseases	WI	State Government	\$120,000
5	5.0345.00	Monitoring for Aquatic and Agricultural Invasive species through Wisconsin's First Detector Network	WI	Academia	\$51,676
5	5.0397.00	Pollinator Plan and Apiary Outreach Initiative	WI	State Government	\$27,281
					\$310,866
West Virginia					
1S	1S.0116.00	Phytophthora ramorum Survey	WV	State Government	\$20,000
1S	1S.0117.00	Solanaceous Commodity Survey	WV	State Government	\$11,000
1S	1S.0120.00	Cherry Commodity Survey	WV	State Government	\$5,000
1S	1S.0122.00	Asian Defoliating Moth Survey	WV	State Government	\$15,000
1S	1S.0398.42	National Survey of Honey Bee Pests and Diseases	WV	State Government	\$13,800
5	5.0115.00	Invasive Pest Outreach and Education	WV	State Government	\$25,000
					\$89,800