

CAPS Survey Accomplishment Report – FY2020

CAPS Survey Report

Year:	2020
State:	Colorado
Cooperative Agreement Name:	Commodity Bundled Survey
Cooperative Agreement Number:	AP19PPQFO000C035
Project Funding Period:	March 1, 2020 – February 28, 2021
Project Report:	CAPS Survey Report
Project Document Date:	February 28, 2021
Cooperators Project Coordinator:	Kristin Wolfe
Name:	Kristin Wolfe
Agency:	Colorado Department of Agriculture
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Quarterly Report	<input type="checkbox"/>
Semi-Annual Accomplishment Report	<input type="checkbox"/>
Annual Accomplishment Report	<input checked="" type="checkbox"/>

CAPS Survey Accomplishment Report – FY2020

- A.** Write a brief narrative of work accomplished. Compare actual accomplishments to objectives established as indicated in the work plan. If reporting on a combined surveys work plan, report accomplishments by survey. When the output can be quantified, a computation of cost per unit is required when useful.*

This survey was carried out along the Front Range from the Arkansas Valley to Fort Collins, focusing on four commodities; tomatoes, onions, peppers, and melons. Trap installation began in May and traps were serviced every two weeks through September. Insect samples were sent to Colorado State University to be screened by Boris Kondrtieff, Professor of Entomology. Plant tissue samples were sent to the CSU plant diagnostic lab. No target material was found.

Funding Amount	Total Number of Traps	Cost Per Unit
Proposed = \$28,526	Proposed = 100	Proposed= \$285
Actual =\$28,526	Actual =69	Actual =\$460

1. Survey methodology (trapping protocol):

	Common Name	Scientific Name
Pest:	Cucurbit beetle	<i>Diabrotica speciosa</i>
	Old world bollworm	<i>Helicoverpa armigera</i>
	Tomato fruit borer	<i>Neoleucinodes elegantalis</i>
	Tomato leafminer	<i>Tuta absoluta</i>
	Allium leaf miner	<i>Phytomyza gymnostoma</i>
	Bacterial wilt; Southern bacterial wilt	<i>Ralstonia solanacearum</i> race 3 biovar 2
	Cucumber green mottle mosaic (CGMMV)	<i>Tobamovirus</i> Cucumber Green Mottle Mosaic Virus
	Cotton cutworm	<i>Spodoptera litura</i>
	Egyptian cottonworm	<i>Spodoptera littoralis</i>
	False Codling Moth	<i>Thaumatotibia leucotreta</i>
	Tomato Black Ring Virus	<i>Nepovirus</i> (TBRV)

	Proposed	Actual
Sites (Locations):	40	12
Traps:	100	23

Number of Counties:	4
Counties:	<i>Pueblo, Otero, Weld, Larimer</i>

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2. Survey dates:

	Proposed	Actual
Survey Dates:	May-October	May-September

3. Benefits and results of survey:

	Positive	Negative	Total Number
Traps	0	23	23

4. Database submissions:

Data has been submitted in NAPIS

B. If appropriate, explain why objectives were not met.*

We had difficulty identifying enough onion fields this year. Many previously surveyed sites were not growing the typical commodities needed, and many sites were completely unavailable and unresponsive to any communication.

C. Where appropriate, explain any cost overruns or unobligated funds in excess of \$1,000. *

There are no unobligated funds associated with this project.

**indicates information is required per 7 CFR 3016.40 and 7 CFR 3019.51*

Year:	2020
State:	Colorado
Cooperative Agreement Name:	Forest Pest Survey
Cooperative Agreement Number:	AP20PPQFO000C495
Project Funding Period:	3/1/2020-2/28/2021
Project Report:	CAPS Survey Report

CAPS Survey Accomplishment Report – FY2020

Project Document Date:	February 28, 2021
Cooperators Project Coordinator:	Kristin Wolfe
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Quarterly Report	<input type="checkbox"/>
Semi-Annual Accomplishment Report	<input type="checkbox"/>
Annual Accomplishment Report	<input checked="" type="checkbox"/>

CAPS Survey Accomplishment Report – FY2020⁸⁹

- D. Write a brief narrative of work accomplished. Compare actual accomplishments to objectives established as indicated in the work plan. If reporting on a combined surveys work plan, report accomplishments by survey. When the output can be quantified, a computation of cost per unit is required when useful.

Trapping was completed both along the Front Range and in two counties on the Western Slope of Colorado to survey for potential exotic forest pest introductions. All target pests can be found on the Priority Pest List. The goal of 20 different survey sights (with the exception of 5 for *T. campestris*) was met. All surveys produced negative results.

Funding Amount	Total Number of Traps	Cost Per Unit
Proposed = \$35,687	Proposed = 105	Proposed= \$339.87
Actual =\$35,687	Actual =195	Actual = \$183.01

1. Survey methodology (trapping protocol):

	Common Name	Scientific Name
Pest:	Siberian Silk Moth	<i>Dendrolimus sibiricus</i>
	Pine Tree Lappet	<i>Dendrolimus pini</i>
	Black fir sawyer	<i>Monochamus urussovii</i>
	Japanese pine sawyer	<i>Monochamus alternatus</i>
	European spruce bark beetle	<i>Ips typographus</i>
	Sixtoothed bark beetle	<i>Ips sexdentatus</i>
	Large pine weevil	<i>Hylobius abietis</i>
	Sixtoothed spruce bark beetle	<i>Pityogenus chalcographus</i>
	Velvet long horned beetle	<i>Trichoferus campestris</i>

	Proposed	Actual
Sites (Locations):	20	20
Traps:	105	195

Number of Counties:	12
Counties:	<i>Adams, Arapahoe, Boulder, Delta, Denver, Douglas, Gilpin, Jefferson, Mesa, Montrose, Larimer and Weld.</i>

2. Survey dates:

	Proposed	Actual
Survey Dates:	3/01/2020-2/28/2021	3/01/2020-2/28/2021

3. Benefits and results of survey:

	Positive	Negative	Total Number
Traps	0	195	195

4. Database submissions:

All data has been uploaded into NAPIS

E. If appropriate, explain why objectives were not met.*

All objectives were met.

F. Where appropriate, explain any cost overruns or unobligated funds in excess of \$1,000. *

There are no unobligated funds associated with this project.

**indicates information is required per 7 CFR 3016.40 and 7 CFR 3019.51*

Year:	2020⁹
State:	Colorado
Cooperative Agreement Name:	Small Grains Corn Bundled Survey
Cooperative Agreement Number:	AP19PPQFO000C038
Project Funding Period:	3/1/2020-2/28/2021
Project Report:	CAPS Survey Report
Project Document Date:	February 28, 2021
Cooperators Project Coordinator:	Kristin Wolfe
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Quarterly Report	<input type="checkbox"/>
Semi-Annual Accomplishment Report	<input type="checkbox"/>
Annual Accomplishment Report	<input checked="" type="checkbox"/>

Pest Detection / CAPS Survey Accomplishment Report Template – FY2020

- G. Write a brief narrative of work accomplished. Compare actual accomplishments to objectives established as indicated in the work plan. If reporting on a combined surveys work plan, report accomplishments by survey. When the output can be quantified, a computation of cost per unit is required when useful.

The purpose of this project was to conduct a survey of wheat and corn pests, focusing on the early detection of particularly concerning invasive species. Wheat and corn crops are highly valuable commodities within Colorado's agriculture and detection of any of these pest species would be crucial to our economic well-being. The following table lists the target pest species for this survey.

Funding Amount	Total Number of Traps	Cost Per Unit
Proposed = \$10,766	Proposed = 125	Proposed= \$86.128
Actual =\$10,766	Actual =89	Actual = \$120.97

1. Survey methodology (trapping protocol):

	Common Name	Scientific Name
Pest:	Old World Boll Worm	<i>Helicoverpa armigera</i>
	Snails, no common name	<i>Cochlicella spp.</i>
	Sunn pest	<i>Eurygaster integriceps</i>
	Egyptian Cottonworm	<i>Spodoptera littoralis</i>
	Cotton Cutworm	<i>Spodoptera litura</i>
	Silver Y moth	<i>Autographa gamma</i>
	False Codling moth	<i>Thaumatotibia leucotreta</i>
	Cucurbit beetle	<i>Diabrotica speciosa</i>

	Proposed	Actual
Sites (Locations):	25	18
Traps:	125	89

Number of Counties:	2
Counties:	<i>Kit Carson, Cheyenne</i>

2. Survey dates:

	Proposed	Actual
Survey Dates:	3/01/2020-2/28/2021	3/01/2020-2/28/2021

3. Benefits and results of survey:

	Positive	Negative	Total Number
Traps	0	144	144

4. Database submissions:

All data has been uploaded into NAPIS

H. If appropriate, explain why objectives were not met.*

All objectives were met.

I. Where appropriate, explain any cost overruns or unobligated funds in excess of \$1,000. *

There are no unobligated funds associated with this project.

**indicates information is required per 7 CFR 3016.40 and 7 CFR 3019.51*

Year:	2020
State:	Colorado
Cooperative Agreement Name:	Colorado Department of Agriculture and Colorado State University
Cooperative Agreement Number:	AP20PPQFO000C512
Project Funding Period:	March 1, 2020 – February 28, 2021
Project Report:	Grapes Commodity-Based Survey PD / CAPS Survey Report
Project Document Date:	January 8, 2021
Cooperators Project Coordinator:	Meredith Schrader
Name:	Kristin Wolfe
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Quarterly Report	<input type="checkbox"/>
Semi-Annual Accomplishment Report	<input type="checkbox"/>
Annual Accomplishment Report	<input checked="" type="checkbox"/>

Pest Detection / CAPS Survey Accomplishment Report Template – FY2020

- J. Write a brief narrative of work accomplished. Compare actual accomplishments to objectives established as indicated in the work plan. If reporting on a combined surveys work plan, report accomplishments by survey. When the output can be quantified, a computation of cost per unit is required when useful.*

All work went as planned in the objectives submitted to the CAPS Survey farm bill for 2020. We did not detect any pests within the vineyards and all samples sent to CSU plant clinic were negative for pathogens. All traps have been removed from the vineyards as of 31 October 2020.

Funding Amount	Total Number of Traps	Cost Per Unit
Proposed = 18,000	Proposed = 27	Proposed= 666.67
Actual = 18,000	Actual = 27	Actual = 666.67

1. Survey methodology (trapping protocol):

	Scientific Name	Common Name
Pest:	<i>Lobesia botrana</i>	European grapevine moth
	<i>Cryptoblabes gnidiella</i>	Christmas berry webworm
	<i>Heteronychus arator</i>	Black maize beetle
	<i>Candidatus Phytoplasma australiense</i> 16SrXII-B	Australian grapevine yellows
	<i>Candidatus Phytoplasma vitis</i> 16SrV-C	Flavescence dorée
	<i>Pseudopezicula tracheiphila</i>	Rotbrenner
	<i>Candidatus Phytoplasma solani</i> 16SrXII-A	Stolbur disease
	<i>Eupoecilia ambiguella</i>	European grape berry moth
	<i>Lycorma delicatula</i>	Spotted lantern fly
	<i>Daktulosphaira vitifoliae</i>	Grape phylloxera

	Proposed	Actual
Sites (Locations):	Mesa; 3, Delta; 3, Montrose; 3	Mesa; 3, Delta; 3, Montrose; 3
Traps:	Mesa;9 , Delta; 9, Montrose;9	Mesa; 9 , Delta; 9, Montrose; 9

Number of Counties:	3
Counties:	Mesa, Montrose and Delta

2. Survey dates:

	Proposed	Actual
Survey Dates:	May 2020- October 2020	May 2020- October 2020

3. Benefits and results of survey:

	Positive	Negative	Total Number
Traps	0	27	27

4. Database submissions:

Was all Pest Detection / CAPS survey data entered into the National Agricultural Pest Information System (NAPIS)? If not, please provide a justification.

All data has been submitted to NAPIS by the State Survey Coordinator

- K. If appropriate, explain why objectives were not met. n/a
- L. Where appropriate, explain any cost overruns or unobligated funds in excess of \$1,000. *
None

**indicates information is required per 7 CFR 3016.40 and 7 CFR 3019.51*

Year:	2020
State:	Colorado
Cooperative Agreement Name:	Colorado Department of Agriculture and Colorado State University
Cooperative Agreement Number:	AP20PPQFO000C513
Project Funding Period:	3/01/20- 02/28/21
Project Report:	Stone Fruit Commodity-Stone Fruit
Project Document Date:	January 6, 2021
Cooperators Project Coordinator:	Meredith Schrader
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Quarterly Report	
Semi-Annual Accomplishment Report	
Annual Accomplishment Report	X

- M.** Write a brief narrative of work accomplished. Compare actual accomplishments to objectives established as indicated in the work plan. If reporting on a combined surveys work plan, report accomplishments by survey. When the output can be quantified, a computation of cost per unit is required when useful.*

All work went as planned in the objectives submitted to the CAPS Survey farm bill for 2020. No insects were detected in the traps, nor were any diseases identified by visual or molecular testing.

Funding Amount	Total Number of Traps	Cost Per Unit
Proposed = 38,073	Proposed = 155	Proposed= 245.63
Actual = 38,073	Actual = 189	Actual = 201.44

1. Survey methodology (trapping protocol):

	Scientific Name	Common Name
Pest:	<i>'Candidatus Phytoplasma phoenicium' 16SrIX-B</i>	Witches Broom
	<i>Rhagoletis cerasi</i>	European cherry fruit fly
	<i>Adoxophyes orana</i>	Summer fruit tortrix moth
	<i>Epiphyas postvittana</i>	Light brown apple moth
	<i>Conotrachelus nenuphar</i>	Plum curculio
	<i>Rhagoletis pomonella</i>	Apple Maggot
	<i>Grapholita funebrana</i>	Plum fruit moth
	<i>Potyvirus Plum Pox Virus</i>	PPV
	<i>Thaumatotibia leucotreta</i>	False codling moth
	<i>'Candidatus Phytoplasma prunorum' 16SrX-F</i>	European stone fruit yellows

	Proposed	Actual
Sites (Locations):	Mesa; 30, Delta; 3, Montrose; 2	Mesa; 30, Delta; 3, Montrose; 2
Traps:	Mesa; 130, Delta; 15, Montrose; 10	Mesa; 156, Delta; 22, Montrose; 11

Number of Counties:	3
Counties:	Mesa, Montrose and Delta

2. Survey dates:

	Proposed	Actual
Survey Dates:	May 2020- October 2020	May 2020- October 2020

3. Benefits and results of survey:

No apple maggots were detected this year, which is valuable data considering we trapped that insect the previous year. No other pests, pathogens or other issues have been detected in our trapping areas.

	Positive	Negative	Total Number
Traps	0	189	189

4. Database submissions:

Was all Pest Detection / CAPS survey data entered into the National Agricultural Pest Information System (NAPIS)? If not, please provide a justification.

All data has been submitted to NAPIS by the State Survey Coordinator

- N.** If appropriate, explain why objectives were not met. n/a
- O.** Where appropriate, explain any cost overruns or unobligated funds in excess of \$1,000. *
- None

**indicates information is required per 7 CFR 3016.40 and 7 CFR 3019.51*
