

CAPS Work Plan for Calendar Year 2008

Cooperator: Connecticut Agricultural Experiment Station
State: Connecticut
Project: Part II Surveys: *P ramorum* National Nursery Survey

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I) OBJECTIVES AND NEED FOR ASSISTANCE

The main objective of this survey is to determine if *Phytophthora ramorum* has entered Connecticut through the nursery trade. *P. ramorum* has a wide range of host species including species that are popular in the nursery trade as well as species that are predominant in the natural environment. The potential for negative impacts on the natural environment, as well as interstate and international trade in plant materials is immense. According to the 2002 Census of Agriculture, Connecticut's number one agricultural industry is the green industry which earned \$470 million.

In 2004 and in 2006, nursery firms in CT were shipped plants that were found to be infested with *P. ramorum*. In both cases, plants were destroyed and facilities were disinfested according to USDA-APHIS-PPQ protocols, under the supervision of both PPQ officers and the SPRO. Under further testing, facilities were found to be free of *P. ramorum*. The facility that was positive in 2006 is still operating under the Confirmed Nursery Protocol and will be subjected to further testing and sampling, according to that protocol.

II) RESULTS OR BENEFITS EXPECTED

The Cooperator seeks to conduct a cooperative agricultural pest survey program which is expected to result in:

The ultimate benefit of the proposed survey is to prevent or limit the establishment of *P. ramorum* in Connecticut by responding quickly to any new detections of this disease. In addition, Federal and state decision makers involved in pest management and international and interstate trade will utilize Connecticut's survey data in conjunction with other states' survey data to make regulatory decisions about how to manage or eradicate this pest. Specific results include:

- (1) Determining whether or not *P. ramorum* is present in the CT nursery industry.
- (2) Continued outreach to the nursery industry about this disease, the ongoing survey efforts, and how they can help mitigate its effects on their businesses should this pest be found.

III) APPROACH

A) The Cooperator and APHIS mutually agree to/that:

- i) Maintain a State Cooperative Agricultural Pest Survey Committee that will meet at least twice a year to discuss fostering the goals of CAPS.
- ii) Work together in carrying out field surveys, trapping, and data collection, setting emphasis on pest/diseases particularly identified (see attached list), that may pose an immediate risk to the agriculture of this state and the United States.
- iii) Have representation at National and/or Regional annual planning meetings.
- iv) Utilize Cooperator and APHIS program funding, as outlined in the Financial Plan, within the authorized parameters to support survey, detection and outreach activities. In addition, specific appropriated funding in the level authorized by the PPQ Eastern Region may be dedicated to the delivery of CAPS objectives listed above.

B) The Cooperator will:

- i) Description of cooperator activities:
 - Nurseries will be surveyed for *P. ramorum* from June 1, 2008 through September 1, 2008. In cooperation with PPQ, nurseries have been identified, based on presence of Hosts and Associated Host Plants, which may be likely to harbor *P. ramorum*. Twenty nurseries have been selected for survey. Nurseries are located in all eight counties of CT. Visual surveys will be conducted by trained personnel, and all symptomatic tissue will be collected. Samples will be tested by ELISA and culturing, and presence of *P. ramorum* in DNA samples will be confirmed by an approved laboratory. The survey will be conducted following the National Nursery Survey Protocol developed by APHIS.
- ii) Provide the following resources:
 - (1) List types of personnel and what they will be doing.
 - Trained and experienced nursery inspectors will conduct visual surveys in the selected nurseries. Inspectors include Peter Trenchard, Steve Sandrey, Jeff Fengler, and Tia Blevins. In addition, summer workers will also be trained to recognize symptoms of infection by *P. ramorum* and will be supervised by the above inspectors. In the laboratory, Dr. Sharon Douglas and Dr. Robert Marra will supervise an experienced technician, Jason Corwin, in processing of samples and interpretation of DNA analysis. The State Survey Coordinator will coordinate the survey, ensure the objectives are met, and assist in the outreach activities.
 - (a) Nursery inspectors, state survey coordinator, and diagnostic personnel are currently employed by CAES.
 - (b) Summer workers will need to be hired.
 - (c) All positions are paid positions.
 - (2) Type of equipment provided by Cooperator for personnel.
 - (a) Identify major equipment needs.
 - All equipment necessary for diagnostics are already on site.
 - (b) Use of the equipment purchased.
 - Diagnostics
 - (c) Purchased with APHIS funds?
 - No
 - (d) Method of procurement.
 - N/A
 - (e) Method of disposition.
 - N/A
 - (3) Provide office space at 123 Huntington St., New Haven, CT, with associated services and utilities, computers and other office equipment for the use of Cooperator personnel in entering survey data into the NAPIS database.

- (4) Vehicles for Cooperator personnel in conducting field surveys and collecting data. The Cooperator will provide for all operational costs of the vehicles.
- (5) Supplies
 - (a) Trapping Supplies for Survey
Visual surveys will be conducted, so supplies needed will be limited to plastic bags for sample collection.
 - (b) Special supplies.
Processing of samples in the lab will require reagents for ELISA and DNA processing, as well as culture dishes and culture media.
 - (c) Method of procurement.
Materials are purchased through the approved system of state contract vendors. Purchases are made with a credit card billed directly to the appropriate account at CAES.
- iii) Contracts
 - (1) Who will handle contractual needs?
Michael Last, Chief of Services of the CT Agricultural Experiment Station, will handle contractual and financial reporting needs. His office is located at 123 Huntington St., New Haven CT 06504; phone 203-974-8442, fax 203-974-8502; Michael.Last@po.state.ct.us
 - (2) Cooperator procurement activities shall be in accordance with A-102 and A-110.
 - (3) Special requirements
N/A
- iv) Reports
Submit all reports to the APHIS Authorized Department Officer's Designated Representative (ADODR0. Reports include:
 - (1) Narrative accomplishment reports (**Accomplish Report – Appendix H of the ER CAPS Guide**) in the frequency and time frame specified in the Notice of Award, Article 4.
 - (2) Financial Status Reports, SF-269, in the frequency and time frame specified in the Notice of Award, Article 4.
- v) Adhere to APHIS ADP security guidelines as referenced in the Notice of Award when entering pest survey data and transmitting it to NAPIS.

C) APHIS will:

- i) Provide the following personnel:
 - (1) Patricia M. Douglass, State Plant Health Director, USDA APHIS will provide informational support and federal guidance.
 - (2) Nichole K. Campbell, Pest Survey Specialist, USDA APHIS will assist in developing CAPS pest survey protocols, pest risk analysis, and other related activities.
- ii) Provide any new information that becomes available on *P ramorum*, provide appropriate forms, and review data.
- iii) Provide the following resources: funds to the Cooperator to cover costs outlined in the financial plan. In addition, specific appropriated funding, in the level authorized by APHIS Eastern Region, will be dedicated to the delivery of CAPS objectives listed above.
- iv) Make arrangements for taxonomic support in confirming identification of suspect *P ramorum* samples.
- v) Produce maps of the *P ramorum* survey activities with the location data (latitude and longitude) provided by the Cooperator, if the Cooperator does not have the necessary software or resources to produce maps.

D) Other parties who will work on the project:

- i) List participating agencies/institutions.

- None.
- ii) List all who will work on the project.
N/A
- iii) Describe the nature of their effort.
N/A
- iv) Describe their specific contribution.
N/A

IV) QUANTITATIVE PROJECTION OF ACCOMPLISHMENTS TO BE ACHIEVED

January	Outreach activities (grower meetings, etc)
February	“
March	“
April	“
May	“
June	Survey nurseries
July	Survey nurseries
August	Survey nurseries
September	Tally data, outreach activities, report final data to NAPIS
October	Outreach activities
November	Outreach activities
December	Outreach activities

V) DATA COLLECTION AND MAINTENANCE

A) Data management:

The State Survey Coordinator has the responsibility for delivering tentative identification of targeted or other introduced pests to the State Plant Health Director and State Plant Regulatory Official, in accordance with the requirements listed below.

- i) All survey data from cooperative agreements involving pest surveys will be entered into the NAPIS database.
 - (1) First record for the State and/or County will be entered within **48 hours** of confirmation of identification by a qualified identifier.
 - (2) All other required records, both positive and negative survey data, must be entered **within two weeks** of confirmation.
 - (3) All records are to be entered into the NAPIS database by **December 1** of the year of survey, so these data can be included in the yearly Plant Board Report.

B) Data to be collected:

- i) Data to be collected for each survey at each nursery: date of nursery inspection, location of nursery, name and address of the owner, names and cultivars of the host plants, and pests or diseases detected. For samples from the public, similar information will be collected. The following data specified in the 2007 *P. ramorum* protocol will be recorded for entrance into the NAPIS database: Observation Number, Observation Date, Data Source, State-County, EPA Site Code, (Crop/Host), Crop Situation (Nursery Type and Survey History), Latitude/Longitude (or zip code), EPA Pest Code, Pest Status, Survey Method, Quantification, Descriptor Units, Total Units Check, Diagnostic Lab, Confirmation Method, Lab Process Date, Survey Method and Sample Number. ISIS will be used to collect all survey data, if possible. If ISIS is not used for survey, the cooperator will provide monthly summary progress reports during the survey season to APHIS including summary

data on number of nurseries visited, number of samples, number of ELISA positives, and number of positive/negative finds.

- ii) GPS technology will be used to collect location data, in decimal degree NAD 83 format, at all appropriate sites, specifically survey or high risk locations.
- iii) GIS technology will be used to create maps of surveys, pest distributions within the state, and high risk pest introduction locations for future monitoring.

C) Data maintained in:

All data collected will be maintained both electronically (Access data files) and in files at the CAES. ISIS will store survey data, if used. Ultimately, all survey data and exotic pest data will be stored in NAPIS.

D) Criteria to evaluate the results and successes of the project:

- i) Pest detection survey and outreach activities, are completed in the manner and time frame outlined in Section III.
- ii) All data collected from the pest detection surveys is entered into the NAPIS database in the timeframes outlined in Section V.
- iii) Maps of the pest detection survey activities are produced to aid in planning of future pest detection surveys, pathway risk analysis, and outreach activities.

E) Methodology used to determine if the results and benefits are achieved:

- i) Review the NAPIS database to ensure that data from the pest detection activities has been entered.
- ii) Review the accomplishment reports, supporting outreach materials (if applicable), and maps.

VI) GEOGRAPHIC LOCATION OF PROJECT

Survey activities will be conducted in all eight counties of Connecticut. Data will be provided to the Cooperator’s State Regulatory Official (SPRO) for entry into the NAPIS database.

A) Type of terrain:

Nurseries

B) Features which may have an impact on the project or activity:

None

VII) TAXONOMIC SUPPORT

A) Person or Institution that will screen suspects:

Dr. Sharon Douglas and Dr. Robert Marra will screen samples from the public.

B) CAPS Survey Collection Details:

Target Species	Survey Dates start – end	# Sites	# Traps or visual surveys per site	# Trap Services or Visits	Potential collections
<i>Phytophthora ramorum</i>	June 1, 2008-September 1, 2008	20	50	1	1,000
<i>Sites x Traps x Services = Potential Collections</i>					

VIII) BUDGET/DETAILED FINANCIAL PLAN:

PartII National Survey: P ramorum National Nursery Survey (01/01/2008 – 12/31/2008)

Item/description	Calculation	Federal Funds	Cooperator Funds
a) Personnel	State Survey Coordinator	\$ 0.00	\$ 0.00
	Summer Worker (450 hrs. @ \$10.50/hr)	\$ 4,725.00	\$ 0.00
	Scientist (1 mo. @ \$4,658)	\$ 0.00	\$ 4,658.00
	Scientist (1 mo. @ \$4,870)	\$ 0.00	\$ 4,870.00
	Scientist (1 mo. @ \$8,493)	\$ 0.00	\$ 8,493.00
	Subtotal	\$ 4,725.00	\$ 18,021.00
b) Fringe	33 % of salary	\$ 1,559.00	\$ 0.00
	52 % of salary	\$ 0.00	\$ 2,422.00
	52 % of salary	\$ 0.00	\$ 2,533.00
	52 % of salary	\$ 0.00	\$ 4,416.00
	Subtotal	\$ 1,559.00	\$ 9,371.00
c) Travel	Vehicle rental (3 mos. @ \$410/mo)	\$ 1,230.00	\$ 0.00
	Subtotal	\$ 1,230.00	\$ 0.00
d) Equipment		\$ 0.00	\$ 0.00
	Subtotal	\$ 0.00	\$ 0.00
e) Supplies	Testing of samples from NNS, 205 samples at \$65/sample	\$ 13,300.00	\$ 0.00
	Subtotal	\$ 13,300.00	\$ 0.00
f) Contractual		\$ 0.00	\$ 0.00
	Subtotal	\$ 0.00	\$ 0.00
g) Construction		\$ 0.00	\$ 0.00
	Subtotal	\$ 0.00	\$ 0.00
h) Other		\$ 0.00	\$ 0.00
	Subtotal	\$ 0.00	\$ 0.00
i) Total Direct Costs		\$ 20,814.00	\$ 27,392.00
j) Indirect Costs	32.72 % of salary	\$ 1,546.00	\$0.00
	32.72 % of salary	\$ 0.00	\$ 1,524.00
	32.72 % of salary	\$ 0.00	\$ 1,593.00
	32.72 % of salary	\$ 0.00	\$ 2,779.00
	Subtotal	\$ 1,546.00	\$ 5,896.00
k) TOTAL		\$ 22,360.00	\$ 33,288.00
	Cost Share Information	40%	60%

IX) SIGNATURES

State Plant Regulatory Official Date

ADODR Date