

CAPS Work Plan for Calendar Year 2006

Cooperator: Connecticut Agricultural Experiment Station

State: Connecticut

Project Category: Part III Survey for Chrysanthemum White Rust

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I. OBJECTIVES AND THE NEED FOR ASSISTANCE:

Chrysanthemum White Rust (CWR), caused by the fungus *Puccinia horiana*, is a potentially damaging disease of several species of Chrysanthemum. There have been outbreaks of this disease in Canada and the US, but it has been eradicated when found. The proposed survey would be conducted in conjunction with yearly inspections of commercial production nurseries for detection of other pests and diseases, and by examination of plants submitted by home gardeners to the Plant Disease and Information Office (PDIO) at the Connecticut Agricultural Experiment Station. In addition, an educational outreach component of the project will disseminate pertinent information to commercial nursery growers and hobbyist gardeners through presentations at meetings and workshops.

CWR is a significant quarantine pest in the US. Importation of Chrysanthemum is prohibited from several countries, territories, and possessions due to the potential of this organism to be transported with prohibited articles of Chrysanthemum. When CWR is found in the US, the States and APHIS cooperate to eradicate it. Management of CWR will help to protect the economic value of the nursery and greenhouse industry of Connecticut.

II. RESULTS/BENEFITS EXPECTED

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

- Data on the presence or absence of this non-native disease in Connecticut. Early intervention is important in successful eradication of non-native pests and diseases. If a disease is discovered before it becomes widely established, eradication can be a relatively simple process.
- Educational outreach to growers and gardeners and information about management options if this disease is found. Educational outreach will be accomplished by distribution of written information such as fact sheets, to professional nursery personnel and hobbyist gardeners, through their respective organizational meetings. Oral presentations will be made to professional and hobbyist organizations as requested. When oral presentations are given, a count

will be made of those present in the audience, as a way to assess the impact of these outreach efforts. Attendance at the above mentioned meetings also will be included.

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 once a year to discuss fostering the goals of CAPS.
- ii) Work together in carrying out field surveys, trapping, and data collection, setting emphasis on the 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 and detection activities. In addition, specific appropriated funding in the level authorized by the PPQ Eastern Region, will be dedicated to the delivery of CAPS objectives listed above.

B) The Cooperator will:

- i) **Conduct surveys for Chrysanthemum White Rust (CWR).** Each year, during the course of regular nursery inspections, registered nurseries and nursery dealers are inspected for presence of pests and diseases on the stock on hand and in production. Plants are examined visually by trained inspectors, and signs and symptoms of infection are noted. When warranted, samples are transported to the PDIO for further examination by a trained and experienced plant pathologist. If necessary, plant samples will be incubated to encourage growth and sporulation of diseases, to aid in identification of the causal agent.

In addition, plants are delivered to the PDIO by hobbyist gardeners. These plant samples will be examined as above, and, when warranted, will be incubated to encourage growth and sporulation.

- ii) **Provide the following resources:**
 - (1) **Personnel:** One summer research assistant to assist in field survey activities. This person will be hired at the beginning of summer 2006 for this purpose. He/she will work under the direction of current Station Personnel. This will be a paid assistant, hired through the usual channels for hiring summer assistants. In addition, a trained and experienced plant disease diagnostician will supervise survey and detection activities. Surveys will take place through the office of the Deputy State Entomologist, and detection activities will take place in the Plant Disease and Information Office of the CT Agricultural Experiment Station.

(2) Type of equipment provided by Cooperator for personnel: None

(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 the Cooperator personnel in conducting field surveys and collecting data.

(5) Supplies:

(a) Laboratory supplies for examination, preservation, and shipping of any plants with signs/symptoms of CWR.

(b) digital camera to document signs/symptoms of CWR.

iii) **Contracts**—not applicable

iv) **Reports**

(1) narrative accomplishment reports (**Accomplishment 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 any new information that becomes available on CWR, provide appropriate forms, and review the data

ii) Provide the following resources: funds to the Cooperator to cover costs outlined in the Financial Plan.

iii) Make arrangements for Taxonomic support in identification of CWR should this disease be found.

IV) QUANTITATIVE PROJECTION OF ACCOMPLISHMENTS TO BE ACHIEVED

i) The survey will take place when regular nursery inspections occur, beginning in March 2006 and continuing through November 2006, or until completed. Submission of samples from hobbyist gardeners to the PDIO occurs throughout the year. Outreach activities will occur as outlined in Section II above.

V) DATA COLLECTION AND MAINTENANCE

The Cooperator will provide data to Donna Ellis, CAPS State Survey Coordinator, who will enter presence/absence data for *Chrysanthemum white rust*. All survey data will be entered as follows:

- A) All survey data will be entered into the NAPIS database.
- i) First record for the State and/or County will be entered within **48 hours** of confirmation by a qualified identifier.
 - ii) All other required records, both positive and negative, must be entered **within 2 weeks** of confirmation.
 - iii) All records are to be entered into the NAPIS database by **December 1** of the year of the survey, so these data are included in the yearly Plant Board Report.
- B) 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.
- C) Data will be maintained in the NAPIS database and in both paper and Excel spreadsheet files at the Connecticut Agricultural Experiment Station. Excel files are converted to Access for report generation.
- D) Criteria to evaluate the project:
- i) Whether survey goals are met
 - ii) Whether the Cooperator is able to adequately document signs and symptoms of infection by CWR.
- E) Methodology used to determine if:
- i) Identified needs are met: Identified nurseries are sampled and deformed plants examined to determine if CWR is present
 - ii) Results and benefits are achieved: evaluation if sampling is adequate to determine whether CWR is present in the areas sampled or the plants delivered to the PDIO.

VI) GEOGRAPHIC LOCATION OF THE PROJECT

Surveys will be conducted throughout the state of Connecticut, and samples will be delivered by citizens to the PDIO from throughout the state of Connecticut. Data will be provided to the Cooperator's State Regulatory Official (SPRO) for entry into the database.

- A) Type of terrain: nursery and garden areas
- i) Features which may have an impact on the project: none

VII) TAXONOMIC SUPPORT

- A) Person/institution that will screen samples and request taxonomic support if suspicious plants are found: Dr. Sharon M. Douglas
- B) List of target pests by scientific name: *Puccinia horiana*
- C) Survey dates: March 2006 through November 2006, or until completed.
- D) Number of survey sites: at least 20 nurseries, and an unknown number of plants submitted to the PDIO

- E) Number of traps, visual surveys, etc. Approximately 400 growers of chrysanthemum will be inspected. Approximately 900,000 plants will be visually examined for CWR.
- F) Number of collections. Collections will be made when symptoms of CWR are apparent.