

Cooperative Agricultural Pest Survey Annual Accomplishment Report

Year: 2007

State: Rhode Island

Agency: RI Department of Environmental Management, Division of Agriculture and Resource Marketing

I. Core Level Funding Activities

A. State Survey Coordinator:

Liz Lopes- Duguay
RIDEM-Division of Agriculture and Resource
Marketing
235 Promenade St.
Providence, RI 02908

Phone: 401-949-1770

Fax: 401-949-0344

Email: liz.lopesduguay@dem.ri.gov

B. Member name, if applicable, of National CAPS Committee:

N/A

C. A comparison of the actual accomplishments from January 1st to December 31, 2007 to the objectives outlined in the work plans is as follows:

- **All educational information is to be compiled for the purpose of outreach to the general public with special attention paid to members of RI's green industries. All fact sheets are to be distributed to these parties at the outset of each survey, and throughout the entire duration of each survey. RICAPS contact information is to be made readily available for immediate response to questions and comments or suggestions through the year 2007.**

Public outreach and education has been a top priority during the 2007 survey season. Literature pertaining to this season's surveys (Pine Shoot Beetle, Wood Boring/Bark Beetle Warehouse Survey, Summer Fruit Tortix Moth and Fruit Tree Tortrix Moth, Sirex Wood Wasp, P. Ramorum, Swede Midge and Chrysanthemum White Rust) was provided to all survey sites and field interns took the time to discuss the general CAPS mission with site owners. During 2007, most of the pest alerts for the surveys conducted were revised. The CAPS team also responds to calls from the general public answering questions or investigating potential sightings of pests. To date the RICAPS team has responded to two suspects, Brown Marmorated Stink bug captures from homeowners, three suspect ALB, one exotic wireworm/click beetle and two Giant Hogweed. One of the stinkbug captures was positive; all of the suspects ALB were identified as White Spotted Sawyers. The Giant Hogweed sightings were investigated by the State nursery inspector and determined to be Cow Parsnip. Each year

brings more and more response from the public due to outreach efforts. Many of these phone calls are just questions from the public.

- **The SSC will conduct pathway risk analysis, research pests and determine sites for the surveys throughout the survey season as needed.**

The RI State Survey Coordinator and the RI State Nursery Inspector cooperate to determine pathway risks and monitor plant movement within the state. Records and documents provided by the Nursery Inspector have proved valuable in analyzing origins of plant material especially from the west coast.

- **The SSC will coordinate and schedule the annual CAPS committee meeting to be held in May 2007.**

The RI CAPS committee developed a priority pest list to focus our efforts at the 2007 CAPS meeting. In determining sites for the WBBS surveys, RICAPS team took into consideration, whether the companies imported from infested foreign countries and evaluating the surrounding host areas. For P.Ramorum surveys, the RICAPS team selected sites based upon plant materials that are associated with P.ramorum, whether the nurseries obtained nursery stock from infested areas as well as choosing natural areas where infestations could occur, such as imported firewood sites, as in the case of the Pine Shoot Beetle surveys. The CAPS program is continuing to maintain its cooperative working relationship between the University of Rhode Island and the RI DEM, Div. Of Agriculture, as cooperation is vital to the successful protection of RI's economy and biodiversity. The Plant Sciences Department at URI has been assisting RICAPS in identifying insect samples collected during the survey season.

The meeting was held on June 25, 2007.

- **Members of the RICAPS team will promote the CAPS mission through presentations by invitation and the distribution of promotional materials such as fact sheets, pest alerts and other materials to be designed.**

RICAPS staff provided information and pest alerts to the public during Rhode Island's Earth Day and RI Agriculture Day celebrations, the Flower and Garden Show held at the RI Convention Center and the Washington County Fair held in August 2007. Fact sheets and pest alerts were also distributed as described above.

- **The Wood Boring/Bark Beetle Warehouse trapping/visual survey will begin in the month of March and continue through the month of October. Visual surveys will be conducted throughout the summer months (June-September).**

Surveys completed. See Section II for details

- **The Sudden Oak Death Nursery Survey will begin in June and continue throughout the month. Slight variations (one week earlier or later) may apply as weather conditions dictate the emergence of symptoms.**

Surveys completed. See Section II for details

- **All data collected will be entered into the NAPIS database in the timeframes outlined below and results shared with all participants of the surveys.**

All survey data has been entered into NAPIS. See Table for submission dates.

D. Objectives Not Met:

The objectives outlined in the workplan have been met with some small exceptions.

Surveying was required to start later than expected due to hiring limitations. The CAPS team did not start until February 28th. Some of the trapping began later than scheduled beginning on March 6th. We were also unable to implement the use of PDAs for field data collection and ISIS due to survey implementation time constraints and our current Internet capabilities at the Johnston field office. We use a dial-up telephone Internet connection that is inadequate for the required transfer. And therefore, made using the ISIS web interface a lengthy process. However, plans are such that a new Internet connection will be installed possibly during the 2008 season. Training will be rescheduled either at another location or when high-speed Internet connection has been installed at the Johnston office and hopefully ISIS will be used thereafter.

E. Cost Overruns: There were no cost overruns during the 2007 season.

F. State CAPS Committee Narrative:

The 2007 Cooperative Agricultural Pest Survey Committee Meeting was held at the RIDEM office in Providence, RI on Monday, June 25, 2007 at 11:00 am.

Attendees:

Patty Douglas
 Nichole Campbell
 Dennis Martin
 Sara Rondeau
 Robert Green
 Heather Faubert
 Lisa Tewksbury

2007 Annual CAPS Committee Meeting

Agenda

Monday, June 25, 2007

11:00am: Introductions and Refreshments

11:10: Brief discussion of 2006 results

11:15: Brief discussion of 2007 Progress

- Pine Shoot Beetle
- Wood Boring/Bark Beetle
- Exotic Siricid
- Summer Fruit Tortrix Moth/Fruit Tree Tortrix Moth
- Swede Midge
- Sudden Oak Death

- Chrysanthemum White Rust

11:30: Discussion- 2008 Survey Plan

- Changes to infrastructure
- Survey Plans- Wood Boring, SOD

12:00: Discussion- Possibility of second meeting in the Fall 2007

12:15-12:30: Finalize 2008 pests and projects, Adjourn

The CAPS meeting covered the results from the 2006 survey season and the current progress of the 2007 season. There will be a second committee meeting in the fall to finalize the 2007 season and resolve any unresolved issues. This will also give us the opportunity to more effectively plan for 2008. Much of the meeting discussed the changes to the funding specifically to the core. With surveying funds withdrawn from the core, more focus can be placed on outreach and education. Discussion pertaining to the remaining funds and how they will be spent was helpful to the 2008 workplan development. With representatives from the University of RI present, plans for insect identification were arranged for the remainder of the season and possibly for 2008.

State Survey Committee Members:

Name	Organization	Discipline
Patricia Douglass	USDA-APHIS-PPQ	Regulatory
Nichole Campbell	USDA-APHIS-PPQ	Regulatory
Cathy Sparks	RIDEM-Div. of Forest Environment	Forest Health
Sue Sosnowski	RIDEM-Agricultural Advisory Council	Horticulture
Al Bettencourt	RI Farm Bureau	Farm Services
Steve Cotta	RI Nurserymen's Association	Horticulture/Entomology
Ken Ayars	RIDEM-Div. of Agriculture	State Regulatory
Sara L. Baxter	RIDEM-Div. of Agriculture	State Regulatory-SSC
Dennis Martin	RIDEM-Div. of Agriculture	State Regulatory
Rick Enser	RI Natural Heritage Program	Plant Pathology/Entomology
Heather Faubert	University of Rhode Island	Plant Pathology/Entomology
Alan Hill	RI Fruit Growers Association	Horticulture/Entomology
R. Matthew Green	RIDEM- Div. of Agriculture	Supv. Of Insect Pest & Plant Disease Control

A follow-up meeting to discuss the status of the 2007 surveys was held on October 24, 2007. In attendance were Patricia Douglass and Nicole Campbell from USDA/APHIS and Sara Rondeau, SSC and Marcia Houle, her assistant, as well as Matt Green, Dennis Martin, Ken Ayars and Liz Lopes-Duguay from DEM/Div. of Agriculture. The discussion included the status of each survey, what samples were submitted for identification. Which surveys were completed and if there were any samples completed and entered into NAPIS. Four of the eight surveys were completed and the sample results entered into NAPIS. They were the P.ramorum Survey, the Pine Shoot Beetle Survey, Summer Fruit Tortix Moth and the Swedge Midge Survey at that time; Liz Lopes-Duguay was introduced as the new State Survey Coordinator.

G. NAPIS Database Submissions:

<u>Target Pest</u>	<u>Submission Date</u>
<i>Adoxophyes orana</i> (Summer Fruit Tortrix Moth)	January 25, 2008
<i>Archips podana</i> (Fruit Tree Tortrix Moth)	January 25, 2008
Sudden Oak Death Nursery Survey	September 12, 2007
<i>Sirex noctilio</i> (European Woodwasp)	January 25, 2008
<i>Contarinia nasturtii</i> (Swede Midge)	January 25, 2008
<i>Puccinia horiana</i> (Chrysanthemum White Rust)	January 25, 2008
<i>Halymorpha halys</i> (Brown Marmorated Stink Bug)	April 30, 2007
<i>Dendrolimus superans sibiricus</i> (Siberian Silk Moth)	January 25, 2008
<i>Lymantria Dispar ssp</i> (Asian Gypsy Moth)	January 24, 2008
Wood Boring/Bark Beetles:	
<i>Tomicus destruens</i> (A Pine Shoot Beetle)	January 25, 2008
<i>Tomicus piniperda</i> (Pine Shoot Beetle)	September 12, 2007; January 25, 2008
<i>Monochamus alternatus</i> (Japanese Pine Sawyer Beetle)	January 25, 2008
<i>Hylurgus ligniperda</i> (Redhaired pine bark beetle)	January 25, 2008
<i>Hylurgops palliates</i> (Bark Beetle)	January 25, 2008
<i>Ips sexdentatus</i> (Sixtoothed bark beetle)	January 25, 2008
<i>Ips typographus</i> (Spruce bark beetle)	January 25, 2008
<i>Orthotomicus erosus</i> (<i>Ips erosus</i>) Mediterranean pine engraver	January 25, 2008
<i>Trypodendron domesticum</i> (European hardwood ambrosia beetle)	January 25, 2008
<i>Pityogenes chalcographus</i> (Sixtoothed Spruce bark beetle)	January 25, 2008

II. CAPS Survey Activity

Core Surveys:

Wood Boring/Bark Beetle Warehouse Survey

A. Survey Methodology

All eighteen sites throughout the five RI counties were equipped with three 8-funnel lindgren dry traps baited with UHR alpha-pinene and UHR ethanol, UHR ethanol, and the 3 component IPS lures. The traps were placed in the environment surrounding the targeted warehouses. Traps were checked and the contents collected on a bi-weekly basis. Trapping was conducted at locations with a high-risk pathway for the entry and establishment of wood boring and bark beetles. A general visual survey of tree health is also conducted at all sites.

B. Rationale Underlying Survey Methodology

Trapping for these beetles was to begin in April and will end September 30th, in order to leave enough time for identification before the data is due in the NAPIS database on December 1st. In this manner a broad range of temperatures and seasons will be covered. The lures used are known to attract a broad range of the target insects for this national survey. The eighteen warehouses in RI's five counties were targeted, but were not limited to locations receiving such commodities as cut stone, metals, wire/rope on wood spools, heavy machinery and cast iron products, as the solid wood packing materials associated with the shipment of these materials are capable of harboring the larvae of these pests.

C. Survey Dates

April 3, 2007 – November 7, 2007

D. Taxonomic Services

Taxonomic services for the Wood Boring/Bark Beetle Warehouse Survey were provided by:

John Rawlins, PhD
Carnegie Museum of Natural History
Section of Invertebrate Zoology
4400 Forbes Ave.
Pittsburgh, PA 15213
Phone: (412) 688-8668
Fax: (412) 688-8670
E-mail: rawlinsj@carnegiemnh.org

E. Benefits and results of Survey

Survey results will contribute data on the distribution and range of WB/BBs in the State of Rhode Island for NAPIS. This information is then utilized by state and federal-level decision makers involved with the control and quarantine of pests within the US. A total of 520 samples were collected. No targets were found.

F. Compare actual accomplishments to objectives established for the period.

The WBBWS was conducted at many of the same locations as the previous year, with a few new high-risk sites established, in all five counties. A total of 18 sites with a total of 54 traps were placed at the sites following the protocol stated above. Traps were examined on a bi-weekly basis and Educational information pertaining to the Wood Boring/Bark Beetle Warehouse Survey as well as the other surveys that have been conducted by the CAPS program in 2007 was created by the SSC and has been disseminated at all sites. Visual surveys were conducted at all sites to ascertain the general tree health of the sites.

G. Objectives Not Met

Complications with staffing and less than cooperative wood boring/bark beetle sites have left us with eighteen sites. This is only two less than planned and the RICAPS team is still confident

that this is a competent survey. Trapping for the Wood Boring/Bark Beetle Warehouse Survey began on April 3rd, and ended in early November even though the schedule to complete the sampling was until September 30th. Personnel Changes was the reason for the delay and the samples were also shipped for identification later than planned. As a result Data was not entered into the NAPIS database until January. All other objectives were met for this survey except the use a PDA data collection as outlined in section I.

H. Any Cost Overruns

There were no cost overruns for this survey.

I. NAPIS database submissions:

Data submissions for the following pests were entered into NAPIS on January 25, 2008.

Monochamus alternatus (Japanese Pine Sawyer):

Hylurgus ligniperda (Redhaired Pine Bark Beetle):

Hylurgops palliates (Pale Spruce Bark Beetle):

Ips sexdentatus (Spruce Bark Beetle):

Ips typographus:

Orthotomicus erosus (Mediterranean Bark Beetle):

Pityogenes chalcographus (Sixtoothed Spruce Bark Beetle):

Tomicus destruans:

Tomicus piniperda (Pine Shoot Beetle):

Trypodendron domesticus:

Ramorum Blight Survey, (*Phytophthora ramorum*)

A. Survey Methodology

Visual surveys of both foliage and woody stems for trace signs of *Pr.* infestation have taken place at the nursery and retail locations and at adjacent natural areas following the National P ramorum nursery survey guidelines. If suspect hosts are found to be exhibiting symptoms of SOD then tissue samples are collected and submitted for expert analysis and identification.

B. Rationale Underlying Survey Methodology

Surveys were conducted following the National P ramorum Nursery Survey Guidelines.

C. Survey Dates

June 21, 2007 – July 11, 2007

D. Taxonomic Services

Taxonomic services for the *P. ramorum* Survey were provided by:

Agdia, Inc.

30380 County Rd. #6

Elkhart, IN 46514

(800) 622-4342

E. Benefits and results of Survey

Federal decision makers involved in pest management and international trade will utilize the State of Rhode Islands' Sudden Oak Death survey data along with other at-risk states, to develop a consensus on how to proceed with *Pr.* The information gathered will specifically be

used to obtain answers for the many questions associated with *Pr.*, the subsequent disease SOD, and ultimately its' management. No detections of *P.ramorum* were made during this survey.

F. Compare actual accomplishments to objectives established for the period.

RICAPS staff began the P.r. survey on June 21 at nurseries determined to be at risk. Nurseries inspected included both wholesale and retail establishments. Of the 15 nursery locations targeted, a total of 14,805 host plants were inspected. Some not all of the nurseries obtain their nursery stock from the West Coast. All surveys are conducted strictly adhering to the National Survey Guidelines. For the 2007 survey season, a total of fifteen nurseries were inspected. A total of 105 samples were collected and submitted to Agdia, Inc. All samples were negative. Nurserymen have sited a good spring and healthier plants as the reason for less symptomatic tissue. Educational were distributed at all sites.

G. Objectives Not Met

All objectives were met for this survey except the use a PDA data collection as outlined in section I.

H. Any Cost Overruns

There were no cost overruns for this survey.

I. NAPIS database submissions:

Phytophthora ramorum (Ramorum Blight): September 12, 2007.

Part II surveys

European Wood Wasp (*Sirex noctilio*)

A. Survey Methodology

Eight tiered Lindgren funnel wet traps were baited with Sirex (alpha/beta – pinene) lures according to protocol and placed at sites associated with the WBBBW Survey and sawmills. Trap collections are made bi-weekly. Trap cups are filled with propylene glycol to preserve the samples during the two weeks between inspections.

B. Rationale Underlying Survey Methodology

The survey methodology used was the suggested methodology from USDA FS & PPQ.

C. Survey Dates

This survey began on May 2nd and ended on November 7, 2007.

D. Taxonomic Services

Taxonomic services for the Sirex Wood Wasp were provided by:

Heather Faubert, Research Assistant
University of Rhode Island, Dept. of Plant Sciences
9 E Alumni Ave. Ste. 7
Kingston, RI 02881

Phone: (401) 874-2750
Fax: (401) 874-2494
E-mail: hfh@uri.edu

E. Benefits and results of Survey

Conducting an early detection-sampling program and increasing public awareness are the primary benefits of the survey. A total of 153 samples were collected at 18 sites throughout the state. All samples were negative for the *Sirex noctilio*.

F. Compare actual accomplishments to objectives established for the period.

The RICAPS team is conducting this trapping survey in conjunction with the Wood Boring/Bark Beetle Survey. The RICAPS team deployed Lindgren Funnel traps at eighteen sites associated with the Wood Boring/ Bark Beetle survey. Trap contents were collected bi-weekly. The University of RI screened all trap contents. Educational information about this pest was created by the SSC and disseminated at all sites.

G. Objectives Not Met

Only 18 sites were set instead of the planned 20 sites, due to uncooperative landowners. The survey lasted longer than planned. As stated before personnel changes was the reason why samples could not be collected until after the scheduled end date of September 30, 2007. The remaining samples were not submitted for identification until November 8, 2007. Data was not entered into NAPIS until late due to having a new SSC and needing assistance from the PSS. All other objectives were met for this survey except the use a PDA data collection as outlined in section I.

H. Any Cost Overruns

There were no cost overruns for this survey.

I. NAPIS database submissions:

Sirex noctilio (*Sirex* woodwasp): January 25, 2008

Summer Fruit Tortrix Moth, (*Adoxophyas orana*)

A. Survey Methodology

A survey of all five RI counties using bucket traps and species-specific pheromone attractant lures are being implemented to sample for the Summer Fruit Tortrix Moth. Trapping is being conducted at orchards with host material. Traps are checked on a biweekly basis to collect specimens.

B. Rationale Underlying Survey Methodology

Eggs for the first SFTM generation are deposited in May and June (hatching occurs within 90 degree days). The larvae have four instars and are completely developed in three weeks. Pupation occurs in a cocoon spun in a leaf roll or between two leaves and is complete in 10 to 20 days. The larvae feed not only upon the leaves, but the fruit as well, rendering it susceptible to disease and fungal infections and compromising its marketability. Trapping utilizing bucket traps ensures that the moths collected can be identified. The species-specific lure has been proven to attract male moths of this pest.

C. Survey Dates

March 29, 2007 - November 8, 2007.

D. Taxonomic Services

Taxonomic services for the Summer Fruit Tortrix Moth Survey were provided by:

Heather Faubert, Research Assistant
University of Rhode Island, Dept. of Plant Sciences
9 E Alumni Ave. Ste. 7
Kingston, RI 02881
Phone: (401) 874-2750
Fax: (401) 874-2494
E-mail: hfh@uri.edu

E. Benefits and results of Survey

Conducting an early detection-sampling program to ascertain whether the Summer Fruit Tortrix Moth is presently infesting Rhode Island's orchards and educating fruit producers and workers on the problems associated with SFTM are the primary benefits of the survey. A total of 108 samples were collected from 20 sites. SFTM was not detected at any of the sites surveyed.

F. Compare actual accomplishments to objectives established for the period.

A total of twenty sites throughout the five counties were trapped at organic, conventional and abandoned orchards. All traps were examined on a bi-weekly basis. Trapping coincided with all aspects of both generations' activity periods. Informational documentation was researched and created by the SSC, and was dispersed at all sites.

G. Objectives Not Met

All objectives were met for this survey except the use a PDA data collection as outlined in section I and final sample collections and trap removal were not completed until November 8, 2007 due to personnel changes. Data was not entered into NAPIS until late due to having a new SSC and needing assistance from the PSS.

H. Any Cost Overruns

There were no cost overruns for this survey.

I. NAPIS database submissions:

Adoxophyes orana (Summer Fruit Tortrix Moth): January 25, 2008.

Fruit Tree Tortrix Moth, (*Archips podana*)

A. Survey Methodology

A survey of all five RI counties using bucket traps and species-specific pheromone attractant lures are being implemented to sample for the Fruit Tree Tortrix Moth. Trapping is being conducted at orchards with host material along with the Summer Fruit Tortrix Moth. Traps are checked on a biweekly basis to collect specimens.

B. Rationale Underlying Survey Methodology

FTTM eggs are deposited in groups on leaves and emerge in early spring and proceed to roll up leaves and devour them. Third instar larvae hibernate in a cocoon woven at the base of leaves or fork in a branch. Adult flight occurs from late May through July, with rare but occasional appearances in early September. Trapping utilizing bucket traps ensures that the moths collected can be identified. The species-specific lure has been proven to attract male moths of this pest.

C. Survey Dates

May 10, 2007 - July 29, 2007.

D. Taxonomic Services

Taxonomic services for the Fruit Tree Tortrix Moth Survey are provided by:

Heather Faubert, Research Assistant
University of Rhode Island, Dept. of Plant Sciences
9 E Alumni Ave. Ste. 7
Kingston, RI 02881
Phone: (401) 874-2750
Fax: (401) 874-2494
E-mail: hfh@uri.edu

E. Benefits and results of Survey

Conducting an early detection-sampling program to ascertain whether the Fruit Tree Tortrix Moth is presently infesting Rhode Island's orchards and educating fruit producers and workers on the problems associated with FTTM are the primary benefits of the survey. All samples tested negative for the presence of the Fruit Tree Tortrix Moth.

F. Compare actual accomplishments to objectives established for the period.

A total of twenty sites throughout the five counties were chosen at organic, conventional and abandoned orchards. Twenty-five samples were collected from these 20 sites. All traps are examined on a bi-weekly basis. Trapping coincided with all aspects of this moth's activity periods. Informational documentation was researched and created by the SSC, and was dispersed at all sites.

G. Objectives Not Met

All objectives were met for this survey except the use a PDA data collection as outlined in section I and the final samples were not submitted for identification until September 7, 2007 due to personnel changes. Data was not entered into NAPIS until late due to having a new SSC and needing assistance from the PSS.

H. Any Cost Overruns

There were no cost overruns for this survey.

I. NAPIS database submissions:

Archips podana (Fruit Tree Tortrix Moth): January 25, 2008

Part III Surveys

Pine Shoot Beetle, (*Tomicus piniperda*)

A. Survey Methodology

Lindgren Funnel Traps fitted with two PSB lures were deployed at a total of 10 sites for the Pine Shoot Beetle Survey. This pest was recently discovered in Windham County CT, so RI traps were set in natural areas, tree farms and nurseries with host material along the CT and Massachusetts borders. Surveying is conducted from mid-February to mid-May in an effort to attract these pests during their first flight in search of brood material. One trap was installed at each site using two alpha-pinene vials on each trap. All traps were checked on a bi-weekly basis throughout the survey duration. All sites were visually inspected using binoculars at the end of the trapping period in search of shoot symptoms consistent with Pine Shoot Beetle infestation.

B. Rationale Underlying Survey Methodology

Trapping using Lindgren funnel traps and alpha-pinene is the detection method in the Pine Shoot Beetle manual.

C. Survey Dates

March 6, 2007 - May 21, 2007

D. Taxonomic Services

Taxonomic services for the Pine Shoot Beetle Survey were provided by:

Heather Faubert, Research Assistant
University of Rhode Island, Dept. of Plant Sciences
9 E Alumni Ave. Ste. 7
Kingston, RI 02881
Phone: (401) 874-2750
Fax: (401) 874-2494
E-mail: hhf@uri.edu

E. Benefits and results of survey

No symptoms were found at any of the sites. All traps were removed by May 21, 2007 with the survey duration being a total of 76 days. A total of 26 samples were collected during the survey and submitted to URI for identification. All samples were negative.

The number and placement of the traps within the state shall yield competent data in determining the presence or absence of this pest in RI, and assist in controlling this pest within the quarantine area.

F. Compare actual accomplishments to objectives established for the period.

On March 6, 2007 the first Lindgren Funnel Traps were deployed for the Pine Shoot Beetle Survey. Traps were installed in production nurseries, Christmas tree plantations, and wood product/mulch dealers, natural areas such as parks, containing host trees around the state. Educational information compiled, including a pest alert created by the RISSC was disseminated at each site with regard to all surveys being conducted during 2007 with special attention paid to the Pine Shoot Beetle.

G. Objectives Not Met

All objectives were met for this survey except the use a PDA data collection as outlined in section I, and trap placement started after February 15th due to personnel limitations.

H. Any Cost Overruns

There were no cost overruns for this survey.

I. NAPIS database submissions:

Tomicus piniperda (Pine Shoot Beetle): September 12, 2007

Chrysanthemum White Rust, (*Puccinia horiana*)

A. Survey Methodology

Visual surveys of Chrysanthemum plants for signs of CWR will be performed at five greenhouses, garden centers or commercial growers. There will be three main survey periods corresponding to early spring forcing and importing of Chrysanthemum seedlings/plugs, the summer local growing season, and fall when mature plants are sold. The three survey periods will be timed with regards to weather conditions and contact with local importers and growers but will most likely take place in July and September. A minimum of five sites that deal in large quantities of ‘mums,’ grow them in greenhouses, and/or import ‘mums’ from US states or countries where CWR has been found, will be chosen for sampling throughout RI’s five counties. A visual detection survey of the tops of leaves for light buff to white pustules will be implemented for all host material. Educational material will be distributed at all sites upon inspection.

B. Rationale Underlying Survey Methodology

Visual survey by trained inspectors is an effective method of detection for this disease.

C. Survey Dates

July 27, 2007; August 6, 2007; August 7, 2007

D. Taxonomic Services

Taxonomic services for the Chrysanthemum White Rust Survey are provided by:

___ AGDIA, INC.

30380 County Rd. #6

Elkhart, IN 46514

Phone:(800) 622-4342

Fax: (574) 264-2153

E. Benefits and results of Survey

The primary benefits of the survey will be to ascertain whether Chrysanthemum White Rust is presently infesting Rhode Island’s Nursery trade and to increase public/industry awareness. Data collected on the inspection of greenhouses, garden centers and other commercial growers will aid federal and state level decision makers in their efforts to control this economically damaging fungus. Early detection of this disease and distributional data will aid RIDEM and APHIS in making regulatory decisions to eradicate or manage this pest should it be found. No Chrysanthemum White Rust was found as a result of this survey.

F. Compare actual accomplishments to objectives established for the period.

Educational materials were disseminated beginning in March. Five greenhouses and nurseries were inspected in Newport, Providence, and Washington County. A total of 50,870 chrysanthemums were inspected at these sites for symptoms. No plants showed symptoms, and no samples were collected as part of this survey.

G. Objectives Not Met

The survey was to be started in April, however no nurseries were carrying any stock. In addition, only 3 of Rhode Islands counties were surveyed because the largest producers/nurseries carrying Chrysanthemums were located in those counties as opposed to the original five counties planned. Data was not entered into NAPIS until late due to having a new SSC and needing assistance from the PSS.

H. Any Cost Overruns

None

I. NAPIS database submissions:

Puccinia horiana (Chrysanthemum White Rust): January 25, 2008

Swede Midge (*Contarinia nasturtii*)

A. Survey Methodology

RICAPS conducted a visual inspection and a trapping survey at vegetable farms producing host crucifer crops. Conventional growers will be included in the survey, however the focus will be placed on the organic farms. Field researchers will be to inspect host plants for symptoms of infestation (brown, corky scarring; distorted or twisted leaf stalks; dead tissue at the growing point; crumpled heart leaves or multi-stemmed plants caused by the destruction of the growing tip) around field edges, near buildings and other areas sheltered from the wind. Symptomatic plant tissue will be examined with hand lenses or field microscopes. If symptomatic plants appear to be without larvae, plants or plant parts will be placed in black plastic bags and exposed to the sun for the emergence of larvae. Samples will be collected and expertly identified. The trapping survey will be conducted by deploying two Jackson traps baited with pheromone lures at each of the ten sites. Swede Midge typically has three generations per year with the peak activity occurring in late June, late July through early August, and again in late August into early September. Informational documentation will be researched and created by the SSC, and dispersed at all sites.

B. Rationale Underlying Survey Methodology

The Swede Midge is a weak flier and most introductions are caused through transplantations. Jackson traps baited with pheromone specific lures have been found to be effective at detecting Swede Midge at low populations; often before any crop damage occurs.

C. Survey Dates

Trapping Survey: June 14, 2007 - September 7, 2007.

Visual Survey: July 27, 2007 – September 7, 2007

D. Taxonomic Services

Taxonomic services for the Swede Midge Survey are provided by:

Heather Faubert, Research Assistant
University of Rhode Island, Dept. of Plant Sciences
9 E Alumni Ave. Ste. 7
Kingston, RI 02881
Phone: (401) 874-2750
Fax: (401) 874-2494
E-mail: hhf@uri.edu

E. Benefits and results of Survey

Protecting the integrity of US agriculture markets, specifically conventional vegetable growers with the main focus on organic crucifer crop growers, is the main function of this survey. Severe infestations can cause immense crop loss, therefore thorough inspections of host crops by RICAPS field researchers have the potential to reduce the possibility of this pest being transmitted to other farms through transplants and soil and subsequent crop loss. In addition, the project will result in increased public and grower awareness of this potential pest and how to mitigate the risks through educational outreach. Data collected on the inspection of organic host crops will aid federal and state level decision makers in their efforts to control this economically damaging pest. No Swede Midge was detected during this survey.

F. Compare actual accomplishments to objectives established for the period.

Two Jackson traps baited with pheromone lures were set at a total of five farms with hosts. A total of 3-4 visual inspections of the hosts occurred at all trapping locations throughout the trapping season. A total of 12,348 host plants were inspected for Swede midge symptoms. A total of 54 samples were collected of which 11 samples considered possible suspects and were sent to the identifier for further confirmation. None of the suspects were positive.

G. Objectives Not Met

Data was not entered into NAPIS until late due to having a new SSC and needing assistance from the PSS. All other objectives were met for this survey except the use of a PDA data collection as outlined in section I.

H. Any Cost Overruns

There were no cost overruns for this survey.

I. NAPIS database submissions:

Data was entered into NAPIS on January 25, 2008. All samples were negative for *Contarinia nasturtii* (Swede Midge).

Appendix A:

Plant Board Report

Date of Search: 02/13/08

Time of Search: 06:19 PM EST

Date Range: 01-01-2007 thru 12-31-2007

State: RHODE ISLAND

Sort Order: Pest Scientific Name

* For nursery records, plant counts may have been recorded in lieu of sites.

Target Pest	Counties	Sites*Plants	Traps	Positive	Negatives
SUMMER FRUIT TORTRIX		5	20	0	20
TRAP					
ADOXOPHYES ORANA					
TRAP;INTERNAT.PHER.LTD (IP UNITRAP)					
FRUIT TREE TORTRIX		5	20	0	20
TRAP					
ARCHIPS PODANA					
TRAP;INTERNAT.PHER.LTD (IP UNITRAP)					
SWEDE MIDGE	2	10	0	10	
TRAP					
CONTARINIA NASTURTII					
TRAP;JACKSON					
SWEDE MIDGE	2	12348	0	12348	
GEN. PEST OBSER.					
CONTARINIA NASTURTII					
GENERAL PEST OBSERVATION; LAB CONFIRMED					
SIBERIAN MOTH	4	20	0	20	
TRAP					
DENDROLIMUS SUPERANS SIBIRICUS					
TRAP;MILK CARTON PHEROMONE (MODIFIED)					
BROWN MARMORATED STINK BUG		1	1	1	0
UNSPECIFIED					
HALYOMORPHA HALYS					
UNSPECIFIED					
BARK BEETLE; A	5	54	0	54	
TRAPPING					
HYLURGOPS PALLIATUS					
NATIONAL EXOTIC WOODBORER/BARK BEETLE					

REDHAired PINE BARK BEETLE	5	54	0	54
TRAPPING				
HYLURGUS LIGNIPERDA				
NATIONAL EXOTIC WOODBORER/BARK BEETLE				
SIXTOOTHED BARK BEETLE	5	54	0	54
TRAPPING				
IPS SEXDENTATUS				
NATIONAL EXOTIC WOODBORER/BARK BEETLE				
SPRUCE BARK BEETLE	5	54	0	54
TRAPPING				
IPS TYPOGRAPHUS				
NATIONAL EXOTIC WOODBORER/BARK BEETLE				
ASIAN GYPSY MOTH (AGM)	2	23	0	23
TRAP				
LYMANTRIA DISPAR SSP.				
TRAP;MILK CARTON PHEROMONE (GYP MOTH)				
JAPANESE PINE SAYWER BEETLE	5	54	0	54
TRAPPING				
MONOCHAMUS ALTERNATUS				
NATIONAL EXOTIC WOODBORER/BARK BEETLE				
MEDITERRANEAN PINE ENGRAVER	5	54	0	54
TRAPPING				
ORTHOTOMICUS EROSUS (IPS EROSUS)				
NATIONAL EXOTIC WOODBORER/BARK BEETLE				
SUDDEN OAK DEATH; RAMORUM BLGT	5	17493	0	17493
VISUAL				
PHYTOPHTHORA RAMORUM				
P RAMORUM NATIONAL NURSERY SURVEY				
SIXTOOTHED SPRUCE BARK BEETLE	5	54	0	54
TRAPPING				
PITYOGENES CHALCOGRAPHUS				
NATIONAL EXOTIC WOODBORER/BARK BEETLE				
CHRYSANTHEMUM WHITE RUST (CWR)	3	50870	0	50870
VISUAL				
PUCCINIA HORIANA				
GENERAL NURSERY INSPECTION				
EUROPEAN WOODWASP	5	18	0	18
TRAP				

SIREX NOCTILIO				
TRAP;LINDGREN				
PINE SHOOT BEETLE; A	5	54	0	54
TRAPPING				
TOMICUS DESTRUENS				
NATIONAL EXOTIC WOODBORER/BARK BEETLE				
PINE SHOOT BEETLE (PSB)	3		10	0 10
TRAP				
TOMICUS PINIPERDA				
TRAP;LINDGREN				
PINE SHOOT BEETLE (PSB)	5	54	0	54
TRAPPING				
TOMICUS PINIPERDA				
NATIONAL EXOTIC WOODBORER/BARK BEETLE				
EUR. HARDWOOD AMBROSIA BEETLE	5	54	0	54
TRAPPING				
TRYPODENDRON DOMESTICUM (XYLOTERUS D'CUS)				
NATIONAL EXOTIC WOODBORER/BARK BEETLE				