

Calendar Year: 2005

State: Connecticut

Name of Project: Viburnum Leaf Beetle Exotic Survey

Project Category: Part II

Pest: Viburnum Leaf Beetle (*Pyrrhalta viburni*)

Project Coordinator: Donna Ellis, State Survey Coordinator, University of Connecticut, Department of Plant Science Unit 4163, Storrs, CT 06269

I) Objectives and Need for Assistance

The Eastern Pest Survey Committee recommended the viburnum leaf beetle (*Pyrrhalta viburni*) as high priority for survey in the eastern U.S. for calendar year 2005. This exotic insect has been a high priority pest since 2001. Although previous surveys conducted in Connecticut for viburnum leaf beetle in 2001 and 2002 were negative, this exotic pest was recently confirmed in western Massachusetts in 2003 (new Massachusetts state record) and at two nurseries in central Connecticut during 2004, representing new state and county records, respectively. Based on the new occurrence records for viburnum leaf beetle that were just confirmed in Connecticut in 2004 and the importance of viburnum to both the green industry and as an important native plant in natural areas, a visual detection and delimiting survey is proposed for 2005 to determine the range of this potential new pest of ornamental and native viburnum species.

II) Results or Benefits Expected

Viburnum leaf beetle has recently been found in Connecticut and in neighboring Massachusetts. With the value of viburnum to the nursery industry as a landscape shrub and also because of its significance to wildlife in natural landscapes in Connecticut and the eastern region, results from the survey and accompanying educational outreach will provide relevant information to target groups and the public to determine the range of this potentially damaging pest in Connecticut. Further, educational outreach will provide information on viburnum leaf beetle identification, biology, and management options if control is needed. A rapid response network of cooperators and stakeholders will be established and implemented to provide locality data of pest occurrences and to recommend management options.

III) Approach

Plan of Action and Work to Be Accomplished. A visual survey of ornamental and native viburnum species is proposed during 2005. The Project Coordinator and/or an undergraduate student will inspect a minimum of 24 nurseries and/or private or public properties between May and September where viburnum is grown, sold, or planted in four central Connecticut counties. The four counties will include Middlesex and New Haven Counties, two south central counties where viburnum leaf beetle was confirmed in 2004, and Hartford and Tolland Counties, two north central counties that are adjacent to the counties where this exotic pest was detected the previous year. Plant will be inspected for evidence of adult or larval beetle feeding damage or egg caps deposited by female beetles on plant stems. Educational information will be compiled and distributed to nursery growers, Integrated Pest Management (IPM) nursery crop personnel, nursery inspectors, property owners, and the general public during the survey period.

Personnel. D. Ellis, the Project Coordinator, will be funded by APHIS to conduct the survey. An undergraduate student from the University of Connecticut will be hired on a part-time basis. Under the supervision of the Project Coordinator, target suspects will be collected and screened at the University of Connecticut. Specimens identified as viburnum leaf beetle will be confirmed by the Collections Manager at the University of Connecticut prior to submitting data into NAPIS.

Equipment Needed. Departmental vehicles from the University may be available to make site visits during the survey period, although operational costs are requested (see **Travel Needs**). Use of laboratories and offices will be provided by the cooperator. No funds are requested for equipment.

Travel Needs. In-state travel funds are requested from APHIS for rental of state vehicles or use of departmental vehicles from the University to make site visits during the survey period. During the survey period, ten site visits will occur within Connecticut at a cost of approximately \$60 per trip.

Supplies. Computers, printers, and digital cameras will be provided by the cooperator. APHIS funds are requested to provide operational costs for these items (paper, toner cartridges, digital storage disks, software, etc.) and to prepare educational materials for the outreach component of the project. Trapping and monitoring supplies, including collection vials, hand lenses, and hand pruners are requested from APHIS funds.

Contracts. None.

Quantitative Projection of Accomplishments to be Achieved and Criteria for Project Evaluation. Educational outreach materials, including fact sheets, reports, and/or email notifications, will be provided to nursery growers, garden center managers, educators and researchers, and the general public to increase their level of knowledge about viburnum leaf beetle, to enable them to identify this exotic pest if it is found in new locations, and to provide management recommendations for any positive occurrences. Presence/absence data and distribution information for any positive records obtained from the proposed survey will be extremely valuable in learning about the range of this potential new exotic pest in Connecticut. A communication network will be established to exchange pertinent and timely information on new and existing occurrences of viburnum leaf beetle.

Target Dates for Accomplishments. Educational materials on viburnum leaf beetle will be compiled between January and April 2005 and will be disseminated throughout the project period. Visual surveys will be conducted between May and September 2005. Suspect larvae and adults will be collected during the survey period and identified by the Project Coordinator by November.

Data Collection and Maintenance. The State Survey Coordinator will enter presence/absence survey data for viburnum leaf beetles into the NAPIS database in accordance with CAPS Eastern Region Guidelines:

- All survey data from the viburnum leaf beetle survey will be entered into the NAPIS database.
 - a. First record for the State and/or County will be entered within **48 hours** of confirmation of identification by a qualified identifier.
 - b. All other required records, both positive and negative, will be entered **within two weeks** of confirmation.
 - c. All records are to be entered into the NAPIS database by **December 1** of the year of survey so that these data are included in the yearly Plant Board Report.

Project accomplishments will be described in semi-annual narrative progress reports submitted in accordance with dates set forth in the APHIS Cooperative Agreement. Project results will also be disseminated via educational outreach to target groups described above (please see **Quantitative Projection of Accomplishments** section). Project results will therefore be archived in the narrative progress reports and the submitted NAPIS data.

List of Contributing Parties Who Will Work on the Project

1. Donna R. Ellis, Extension Educator, University of Connecticut, will serve as CAPS State Survey Coordinator of the University of Connecticut's and The Connecticut Agricultural Experiment Station's efforts and conduct CAPS surveys. A part-time technician may be hired to assist with surveys and educational outreach.
2. Patricia M. Douglass, State Plant Health Director, USDA/APHIS will provide informational support and federal guidance.

IV) Geographic Location in Which Project is to Take Place

The project will take place in the state of Connecticut, on public and private properties. The type of terrain will include retail or wholesale nursery or garden center properties and woodlands.

Unusual Features Which May Impact on Project or Activity. None.