

Horticultural Inspection Society Eastern Chapter

2004 Delaware Report

The seal features two figures, a man in a red coat and a woman in a green dress, flanking a central shield. Above the shield is a sailing ship, and below it is a dog. The shield is surrounded by a wreath and a banner at the bottom with the text 'LIBERTY AND INDEPENDENCE'.

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Nursery Inspection and Certification

Delaware's green industry is currently ranked as the state's third largest agricultural commodity with more than \$30 million in receipts annually.

In 2004, 1434 acres of production nursery stock were licensed. 724 nursery industry licenses were issued. Grower inspections totaled 296: 132 ornamental fields, 124 Christmas tree farms, and 40 greenhouses. Retailer inspections totaled 275. Three seasonal staff were hired to perform routine nursery inspections. Much of their time was diverted to the SOD National Survey and later to the chrysanthemum white rust control program. These regulatory pest issues greatly reduced the number of retail nursery inspections.

Inspections were also conducted for APHIS-PPQ-CAPS programs: 75 pine shoot beetle inspections, 22 chrysanthemum white rust inspections, 38 Sudden oak death inspections, and 6 *Ralstonia* inspections. Four greenhouses were issued Japanese beetle screenhouse certificates.

Gypsy Moth Suppression

A statewide aerial defoliation survey was conducted during late June 2004. There was no evidence of defoliation due to caterpillar feeding. In addition, staff conducted follow-up fall egg mass surveys from September to November on state-owned property, rural woodlots, and residential developments. Surveys were conducted on privately owned wooded properties when requested by landowners. One new egg mass was found during the surveys. The state had no recorded gypsy moth defoliation for the sixth year in a row.

Noxious Weed Control

There are four weeds on Delaware's noxious weed list: johnsongrass (*Sorghum halepense*), Canada thistle (*Cirsium arvense*), burcucumber (*Sicyos angulatus*), and giant ragweed (*Ambrosia trifida*). Delaware law requires that these weeds not be allowed to reach 24 inches in height or set seed. Compliance agreements are used to formulate a workable control program. The program's success is directly proportional to the number of persons contacted: 95% of persons contacted adopt a weed control plan and 90% of requests for control assistance have been successful with the initial contact.

Apiary Inspection

During 2004, 160 registered beekeepers maintained 3100 colonies of honeybees. To protect this industry from costly diseases and parasites, the State Apiarist performed brood nest inspections on 1090 colonies of honeybees located in 117 apiary locations. These inspections detected 96 colonies infected with Chalkbrood (*Ascophæra apis*), 1 colony infected with American Foulbrood (*Bacillus larvæ*), and 3 colonies infected with European Foulbrood (*Melissococcus pluton*).

Over the last five years, honeybee tracheal mite (*Acarapis woodi*) infestations have been found to infect 100% of the colonies in the state. Varroa mite (*Varroa jacobsoni*) infestations remained at a 100% level. Small Hive Beetle (*Aethina tumida*) was identified in 31 apiary locations.

To facilitate early detection of Africanized Honeybees (*Apis mellifera scutellata*), a trap line has been established and maintained along the Delaware coast. Twenty-one pheromone-baited artificial nesting cavities were deployed and monitored on a 14-21 day interval. A total of 6 swarms were captured during the 2004 season. All were determined to be of European ancestry. An Africanized Honeybee swarm has not yet been identified in the state.

Plant Regulatory Program

Chrysanthemum White Rust, *Puccinia horiana*

Chrysanthemum White Rust (CWR), *Puccinia horiana*, first appeared in Delaware in 2004. Following trace-forward information from the USDA, Delaware inspectors visited 20 businesses that had purchased chrysanthemums from a positive nursery in Pennsylvania. Plants were shipped from the nursery in August and September. 1728 chrysanthemums were inspected, 737 of which were from the positive nursery. One business had already destroyed their chrysanthemums upon notice from the PA nursery. 10 businesses had mums with CWR symptoms. All businesses with CWR opted to destroy the infected material. Delaware destroyed 866 chrysanthemums: 690 from the PA nursery and 176 mums from other sources that were co-mingled with infected stock. Four positive locations had chrysanthemums from other sources. These were inspected weekly until the mums were sold or until the first frost.

***Ralstonia solanacearum*, race 3 biovar 2**

An overseas facility shipped geraniums potentially infected with *Ralstonia solanacearum* (race 3 biovar 2) to the United States. Plants were shipped from the end of 2003 and in the beginning of 2004. The three suspect varieties were: Zonal Geranium Americana (ZGA) Coral, ZGA Cherry Rose II, and ZGA Bright Red. The USDA informed DDA about the situation in January 2004. One DE business received 600 suspect plants in September 2003. The facility received 100 ZGA Coral and 500 ZGA Cherry Rose II. Approximately 400 cuttings were made from the parent plants. Per the federal protocol, all suspect varieties were destroyed. Parent plants and cuttings destroyed totaled 1000 geraniums. Follow-up inspections were conducted at the local greenhouse in February. The plants never exhibited *Ralstonia* symptoms.

Sudden Oak Death, *Phytophthora ramorum*

As a result of the USDA National Sudden Oak Death (SOD) Survey and various USDA trace-forward results, the Delaware Department of Agriculture took 1299 leaf samples at 28 businesses. Delaware issued a Departmental Order prohibiting SOD host nursery stock from California. No plants tested positive for SOD in Delaware.

In March 2004 SOD was found in unregulated areas of California. Nurseries in those counties had not been previously surveyed. One nursery not previously surveyed was in Azusa. The USDA conducted trace forwards on host material shipped in 2003 and early 2004. Four DE

businesses received material in 2003 from the Azusa nursery. All of the 2003 material was sold. There was no trace forward information because the stock was purchased with cash. A second CA facility not surveyed was a mail-order company in San Marcos. The disease was found in one plant shipped from the company. Bonsai camellias were shipped to 30 private DE citizens from San Marcos; plants were shipped in late 2003 and early 2004. The death rate was high for the bonsai camellias. By March, the majority of camellias had already been disposed of by owners. The few plants that remained were tested for SOD; all results were negative for the disease. Since the outbreaks in Azusa and San Marcos, all California counties not previously surveyed for SOD were being inspected by regulatory officials. The Delaware Secretary of Agriculture activated a Departmental Order prohibiting entry of all California SOD hosts and associated plants into Delaware. The Order expired in July 2004. Businesses that purchased host material from CA were surveyed. In May, June, and July, 26 businesses in DE were inspected following the USDA SOD protocol. One nursery in Oregon tested positive for SOD in June. The nursery shipped host plants to seven businesses in DE. Businesses with shipments prior to June were inspected following the federal protocol. In October and November suspect material from a second Oregon nursery was inspected. This second nursery shipped host material to six DE nurseries from March through September. The stock in question was preordered for 2005, inspected during the national survey, or already sold. The Maryland Department of Agriculture also contacted Delaware regarding the second Oregon nursery. Suspect material delivered to Maryland was shipped to Delaware. One DE establishment received stock from the MD nursery in March - all suspect material had been sold. However, some of the suspect material was previously inspected during the national survey inspections. All 2004 samples taken during the initial inspections and the trace forward inspections tested negative for *Phytophthora ramorum*.

Veronica rust

In early December, the USDA and Michigan Department of Agriculture notified DDA that a Delaware business received 25 *Veronica* plants possibly infected with *Veronica* rust, *Puccinia veronicae-longifoliae*. DDA visited the business to inspect the plants, all of which were planted in the landscape. Unfortunately the plants were dormant and could not be properly inspected. The 25 plants are currently under a hold order until they can be inspected during the spring of 2005. DDA is investigating fungicide treatment options in case symptoms are found.

National Recall of China-Origin Artificial Christmas Trees with Wood Trunks

During December, DDA inspected 75 retail stores: 55 identified by USDA as possibly receiving recalled products and 20 selling similar products. Six stores had artificial Christmas trees with wood trunks but the SKU's or UPC's did not match the recall list from USDA. One store had 4 recalled trees, which were in the process of being sent back to the distributor.