

# 1 North Dakota Nursery News

A Newsletter of Information Relevant to the North Dakota Nursery Industry  
A Publication of the NDDA, Division of Plant Protection

Volume 4, Issue 1

January 11, 2000

## Gypsy Moth Catches In ND Becoming A Yearly Event

**F**or the third consecutive year, gypsy moths were caught during the summer trapping survey. While last year's catch was located in Theodore Roosevelt National Park, this years catches were located in Shelters Grove campground, in Ramsey county and on the state capital grounds in Bismarck. We continue to trap moths in campgrounds around the state. Because these insects are such good hitchhikers, they most likely traveled with vacationers as they moved from infested areas of the United States to North Dakota. The hitchhiker can travel as eggs, larvae, or pupae on a car, camper or camping gear. An intensive survey in 1999 throughout Theodore Roosevelt National Park, around the area of the 1998 moth catch, revealed no further catches. The same kind of intensive survey will take place in Ramsey and Burleigh counties during the 2000 trapping season. The NDSU Extension Service and the ND Dept of Agriculture released a new pamphlet this Year entitled "**GYPSEY MOTH – A Threat To North Dakota.**" Copies of this pamphlet can be obtained from the ND Forest Service, NDSU Extension Service or the ND Dept of Agriculture.

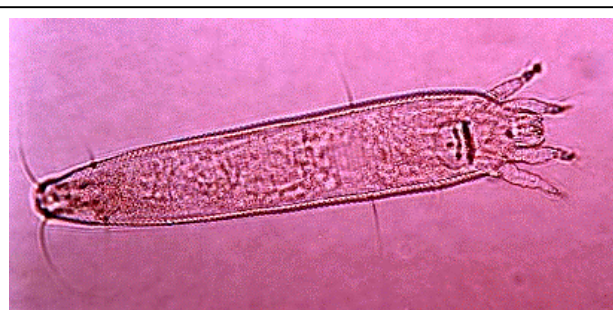
## INSIDE THIS ISSUE

- 2 Japanese Beetle Trapping Begins In ND
- 3 Upcoming Horticultural Meetings
- 4 Get Your Products On The Web
- 4 Executive Order on Invasive Species
- 5 Asian Beetle Spreads As New Species Arrive

## New Pest Alert

### Eriophyid Mites Causing Problems for Trees and Shrubs in ND and MN

**E**riophyid mite problems have recently been reported in both North Dakota and Minnesota. In North Dakota an unknown pest was found causing gall formations on the upper and lower leaf surfaces of the American Cranberrybush, *Viburnum trilobum* 'Bailey Compact'. Infested shrubs were first observed in the early 1990's near the ND Peace Gardens, and have since been found throughout the state. Infestations have also been observed across the border in Minnesota and Montana. Marcus Jackson, NDSU Extension Forester, who has been tracking the damage across the state, has recently isolated the pest responsible for gall formations on the Cranberrybushes. Jackson working with USDA, Systematic Entomological Laboratory Researcher, Dr. Ronald Ochoa, have determined that the mite is a *Cecidophyes* species. Related species play an important role in virus transmission. The role of this species in virus transmission is currently unknown; however, virus-like symptoms have been observed in some of the *Viburnum* shrubs in the state.



<http://www.ars-grin.gov/cor/mite.html>

*A microscopic view of an eriophyid mite.*

*continued on page 3*

## Japanese Beetle Trapping Begins In North Dakota, None Found

**A** Domestic Japanese Beetle harmonization plan was approved by the National Plant Board in August of 1998. This voluntary plan defines the shipping requirements and certification protocols for nursery stock shipments moving between states to prevent the movement of Japanese beetle. Infested states and states that have not conducted surveys to demonstrate their Japanese Beetle status are required to meet certain certification standards.

As a result of this harmonization plan, the ND Department of Agriculture began a trapping survey for adult beetles. This past year, department personnel placed 32 traps throughout the state. The traps combined a mating pheromone and a floral lure to attract the beetles to the traps. Trapping concentrated on population centers, airports, nursery operations and golf courses. No beetles were caught.



Adult Japanese Beetle



Japanese Beetle Larva

The Japanese beetle is a non-native, leaf feeding beetle related to the common June beetle that affects numerous trees and shrubs. The adult beetle is less than ½ inch long and has a metallic –green body and bronze-colored outer wings. The larvae, or grubs, are found in the soil where they feed on the roots of grasses and other weeds. They may be found in the rootball of B&B or container material. Bareroot nursery stock poses no risk. ♣

## Noxious Weeds: A Problem That Continues To Spread

**N**ursery Growers are reminded that under NDCC 63, it is everyone's responsibility to control noxious weeds and prevent their spread. Control recommendations are available from NDSU Extension. Refer to the reference list for available publications. The weeds that are currently on the states noxious weeds list are:

1. Absinth Wormwood
2. Diffuse Knapweed
3. Leafy Spurge
4. Purple Loosestrife
5. Spotted Knapweed
6. Canada Thistle
7. Field Bindweed
8. Musk Thistle
9. Russian Knapweed
10. Yellow Starthistle

If you produce field-grown nursery stock, vegetation control is necessary, either by mechanical or chemical control. Plan your layout carefully to avoid overcrowded conditions that result in improper maintenance of your field stock. Monitor your nursery growing location regularly for weeds, as well as locations bordering your growing area. Noxious weed infestations, particularly leafy spurge, can limit your ability to move nursery stock. Consult extension publications on chemical control as well as other management strategies. You may also wish to consider the suitability of biological control to reduce leafy spurge pressure in your area. Act quickly when dealing with weeds. Don't wait until you have a major infestation. ♣

## Nursery Dealer Reminders

Because of the federal quarantine affecting barberry, Nursery Inspectors need to check dealer paperwork. When you receive barberry plants from out-of-state nurseries, be sure that you obtain the required federal permit that accompanies the shipment. Make a copy of the certificate and the invoices containing barberry. If you could keep these documents in a separate inspection folder, dealer inspections could be less time consuming. If you are planning to sell barberry you need to apply, on a yearly basis, to the ND Dept of Agriculture for a permit.

## Upcoming Horticultural Meetings and Workshops

1. American Nursery & Landscape Association – The Management Clinic: Spring Training For Your Mind. Feb 3-6, 2000 Louisville, Kentucky. For Information call (202) 789-2900
2. The American Horticultural Society – A Celebration of Great American Gardeners. March 16-18, 2000 Houston, Texas. For Information call (703) 768-5700.
3. Perennial Plant Association – Annual Symposium July 30 through Aug 5, 2000. Toronto, Ontario. For Information call (614) 771-8431.
4. International Horticultural Exhibition 2000. April 18-21, 2000. Tokyo, Japan. For Information call 81-3-3434-0093 or Fax 81-3-3434-8076.
5. International Society Of Arboriculture- Midwestern Chapter Annual Meeting. Jan 26, 2000 Waterloo, IA For Information call Jim @ (573) 635-2569.
6. ND Urban & Community Forestry Association, 13<sup>th</sup> Annual Tree Care Workshop. Feb 10-11, 2000 Bismarck, ND. For Information call (701) 228-5486
7. North Dakota Nursery Growers Assn, 33<sup>rd</sup> Annual Convention and Trade Show. Jan. 30 through Feb 1, 2000. Fargo, ND. For information call (701) 293-1997
8. Agroforestry Specialty Products Conference, “Squeezing More Out of Your Land” March 7-8, 2000. Grand Forks, ND. For information, Call Marcus Jackson @ (701) 231-8478

### ***ND Nursery News To Go Online***

Past and present newsletters will soon be available on line through the State of North Dakota's Web Page, specifically it will be located in the web page of the ND Dept of Agriculture, under the heading of The Plant Protection Section. This site will also offer information on Nursery Laws and Regulations, Applications, Permits, Phytosanitary Certification and other helpful links. The ND Dept of Ag website is available for viewing at [www.agdepartment.com](http://www.agdepartment.com).

In another unrelated eriophyid mite infestation, the Minnesota Department of Agriculture, Nursery Inspection Unit, recently reported a mysterious condition affecting Black Hills Spruce. The unusual condition reported was distorted growth of needles. The needles appeared to be cemented together. As a result of this condition, many of these trees were unmarketable. After a difficult diagnosis, it was determined that eriophyid mites were causing the damage. In other states, similar symptoms and damage of this pest have also been reported on Fir, Hemlock, Juniper, and Pine.

Eriophyid mites are highly specialized plant feeders, and very host specific. As a result of their feeding, they cause a wide variety of symptoms including; russetting, bronzing, gall formations, leaf blistering, webbing, stunting, twig and stem distortions, and premature leaf drop. The mites are very small and nearly invisible to the unaided eye. The mite is rather oddly shaped. Unlike most mites, they have a spindle shaped body and only two pairs of legs. Their life cycle includes a complex cycle of alternation of generation which include two forms of the mite. One form consists of an over-wintering secondary female and the other form consists of both sexes. Early in the fall, the over-wintering females leave dying gall formations and move to the terminal buds (this varies depending on species, as some over-winter under bark scales). The females do not lay their eggs until after hibernation. These over-wintering females catch a ride out of the terminal bud with the growth of the leaves. Gall formations begin with the feeding of the mite, once the mite enters the gall she lays her eggs and then dies. As the eggs hatch, the male mites and primary females fill the galls. This is but one life cycle of an eriophyid mite, there are many mites for which the life history is not yet known.

Control is difficult because the mites linger in the bud scales and quickly enclose themselves in the newly forming gall. Although some suggest dormant oils, and other miticides, there currently are no effective control measures for this pest. ♣

## Attention Nurseries With Specialty Products, Get Your Products On The Web

**A**re you a grower of specialty products, or a producer of any type of product that you would like to market? Is your business looking for a way to present your product on the Internet? If you answered yes to either question, you should log on to the Internet site [www.shopnd.com](http://www.shopnd.com).

The North Dakota Department of Agriculture has developed a new Internet shopping site at [www.shopnd.com](http://www.shopnd.com). This exciting new Internet site puts North Dakota products right at your fingertips. With more than 424 products featured, you can find exactly what you're looking for by using the site's directory. This shopping site allows customers to purchase products online through secure credit card transactions. It also provides information on North Dakota companies and services.

All products shown on shopnd.com are sold by Pride of Dakota member companies. Pride of Dakota is a brand recognition program administered by the Department of Agriculture. Any final product that is made in the state of North Dakota is eligible for membership. Companies pay an annual fee to belong to the program based on their number of full-time employees.

For more information on [www.shopnd.com](http://www.shopnd.com) or the Pride of Dakota program, please call the Department of Agriculture at (701) 328-2231. ♣

## Executive Order on Invasive Species May Impact Nursery Industry

**E**arlier this year, the Clinton Administration issued an executive order on invasive species. The order attempts to organize efforts to limit the introduction of invasive species, aid in control, and minimize ecological and economic damage they may cause. This executive order can be viewed on the web at: [www.nbii.gov/invasive/](http://www.nbii.gov/invasive/). Invasive plants refer to many types of plants and have been called by many names including exotics, aliens, nonnatives, nonindigenous and weeds. Some characteristics that all invasive species have in common are their ability to out-compete native species, profuse seed production, and early maturation. A sampling of a few species that the Brooklyn Botanical Garden lists as invasive include; Common Fox Glove, Baby's Breath, Purple Loosestrife, Oriental Bittersweet, Japanese Spirea, Multiflora Rose, Common Buckthorn, Privet, Burning Bush, Russian Olive, Cotoneaster, Japanese Barberry, Siberian Elm, White Poplar, Paper Mulberry, Norway Maple, and Amur Maple. Invasive plants compete with agricultural crops, timber production, and threaten biodiversity. It is still not certain how this executive order will affect the nursery industry, but it could possibly limit the introduction and production of new plants due to quarantines. This issue warrants careful monitoring to assure that a reasonable balanced outcome occurs. ♣

## Agroforestry Specialty Products Conference

**T**his conference is intended to aid landowners and green industry professionals in exploring income opportunities, specifically through specialty products harvested from native plants and trees in North Dakota, Northern Minnesota, and Southern Manitoba. The conference will cover agroforestry perspectives, specialty wood products, edible products, production challenges, strategic marketing, native fruit production, wood utilization, and woodlot production. Exhibitors will be present throughout the conference. Speakers will be professionals from around the area. Three forums will be scheduled for the conference including: Growers, Wood Products, and Marketing, with question and answer sessions to follow. The conference will be held, March 7-8, 2000, at the Ramada Inn located in Grand Forks, ND. Registration cost of the conference is \$25, a block of rooms will be held at the Grand Forks Ramada Inn at a special rate for a limited time. For Information call Marcus Jackson @ (701) 231-8478.

## Asian Beetles Spread As New Species Arrive

The advance of Asian Longhorned beetle, which we have been reporting on since the spring of 1997( Vol 2 and Vol 4), continues to spread despite quarantine efforts. The Asian long-horned beetle has spread to the Cook County Forest Preserve, which is located in a Chicago suburb. The infestation was discovered in November of 1999. Since the beetle was first discovered in Chicago in July of 1998, A total of 1,144 trees have been destroyed in Chicago, and 77 destroyed in near-by suburbs. This recent spread is the first time in this infestation that the beetle has been reported to have infested a densely forested area. A federal quarantine was enacted on Nov. 26, 1999 for a 200 acre area including the forest preserve and surrounding area. In the New York Quarantine areas, infested trees continue to located and destroyed. A total of 4346 trees have been destroyed thus far in Brooklyn, Manhattan, Amityville, Queens and Islip. Beetle catches have been reported from 26 warehouses in 14 states. These infestations have been traced to raw lumber used to package imports from China.

Other longhorned beetle interceptions have recently been reported in shipments from China, including the brown fir longhorned beetle (*Callidiellum villosulum*) and the Citrus Longhorned Beetle (*Anoplophora chinensis*). These isolated catches were reported, from many US locations, on wooden stems of artificial Christmas trees, bamboo and bonsai nursery stock.

If you suspect you have found an Asian long-horned beetle, or any other suspicious longhorned beetle, immediately contact the ND Dept of Agriculture. ♣



## Publications for your Reference Library

Several NDSU Extension publications are available to provide assistance with pest control in tree plantings and advice on managing weed problems. The publications currently available are:

1. Leafy Spurge Control Using Flea Beetles. 1999. **(W-1183)**
2. Know Your Knapweeds. 1999. **(W-1146)**
3. Disease Control in Cherries, Plums and other Stone Fruits. 1995. **(PP-689)**
4. Fruit Insect & Disease Control Guide. 1992. **(E-299)**
5. Transplanting Trees and Shrubs. 1998. **(F-1147)**
6. Diseases of Apples and Other Pome Fruits. 1995. **(PP-454)**
7. Disease Management in Home Grown Cucumbers, Melons and Squash. 1991. **(PP-656)**
8. Disease Management in Home Grown Tomatoes. 1995. **(PP-659)**
9. Annual & Perennial Flower Selections for North Dakota. 1999. **(H-322)**
10. Planting Trees and Shrubs. 1998. **(H-531)**

The information in some of these publications may be common knowledge to those in the business, but it could be of great use to your customers, many of these publications can be copied and distributed to customers in need. Share the knowledge. ♣

North Dakota Nursery News  
North Dakota Department of Agriculture  
Division of Plant Protection  
600 East Blvd., Dept. 602  
Bismarck, North Dakota 58505-0020

David R. Nelson, (Bismarck)  
State Entomologist (701) 328-4765  
E-mail - [danelson@state.nd.us](mailto:danelson@state.nd.us)  
Fax (701) 328-4567

Phillip A. Mason, (Fargo)  
Plant Protection Specialist (701) 239-7295  
E-mail - [pmason@ndsuent.nodak.edu](mailto:pmason@ndsuent.nodak.edu)  
Fax (701) 231-8557

