



EAB Threat Prompts Precautionary Quarantine on Ash Products in Houston County

MDA implements measure to avoid shipments of potentially infested firewood, ash products to other counties.

Minnesota Department of Agriculture (MDA) officials have announced a state quarantine on firewood, ash trees, and ash tree products in Houston County. The precautionary measure is designed to prevent the spread of emerald ash borer, a highly destructive tree pest recently discovered in Victory, Wisconsin, just across the Mississippi River from Houston County.

While officials have not confirmed the presence of emerald ash borer (EAB) in Minnesota, the extent and proximity of the Victory infestation increases the likelihood of an EAB infestation in Houston County.

"Emerald ash borer is a very difficult pest to find, but the evidence suggests the Victory infestation has been in place for several years," MDA Plant Protection Division Director Geir Friisoe said. "Because the beetle can move several miles a year on its own, a precautionary quarantine is warranted to reduce the risk EAB poses to Minnesota's 900 million ash trees."

While EAB spreads slowly on its own, it can hitch a ride to new areas when people transport firewood or other wood products infested with the larvae. For this reason, prohibiting the movement of potentially infested products such as firewood and ash nursery products is a common tool used to slow the spread of the pest.

Since its accidental introduction into North America, EAB has killed millions of ash trees in 10 eastern states. The metallic-green adult beetles are a half inch long, and are active from May to September. Signs of EAB infestation include one-eighth inch, D-shaped exit holes in ash tree bark and serpentine tunnels packed with sawdust under the bark. EAB larvae kill ash trees by tunneling into the wood and feeding inside the tree.

Details about EAB can be found on MDA's website at: www.mda.state.mn.us. The Minnesota Department of Natural Resources (DNR) also has information at: www.dnr.state.mn.us/invasives/terrestrialanimals/eab.

MDA and DNR officials urge all Minnesota citizens to take several steps to help keep EAB from spreading:

- Don't transport firewood, even within Minnesota. Don't bring firewood along on a camping trip.
- Don't buy or move firewood from outside Minnesota.
- Watch for signs of infestation in your ash trees. If you suspect your ash tree could be infested by EAB, visit www.mda.state.mn.us/plants/pestmanagement/eab.htm and use the "Do I Have Emerald Ash Borer?" checklist on the MDA's EAB web page.

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Hosta Virus X: What is it, and What Should you do About it?

Written by: Mark Gleason and Zhihan Xu, Department of Plant Pathology, Iowa State University; and Robin Pruisner, State Entomologist, Iowa Department of Agriculture and Land Stewardship

What is HVX?

Hosta virus X (HVX) is a recently recognized disease of hosta, having been described first in 1996. This virus has spread so widely in recent years that it is now regarded as a major problem in hosta production and marketing.

Hosta virus X has shown potential to severely disrupt the hosta trade. Outbreaks during the past few years have led to regulatory actions in U.S. nurseries and retail outlets, including stop-sale orders, the destruction of tens of thousands of plants, and major financial losses. Publicity about HVX is threatening to blemish hosta's public image as a relatively trouble-free perennial.

What do HVX symptoms look like?

The most common symptoms of hosta virus X are mottling and irregular green or blue color on leaves. The mottling appears to "bleed out" from the main leaf veins into surrounding tissue. After long-term infection, leaves can be stunted, twisted or puckered. Rings of concentric circles can sometimes develop, as well as bleaching or necrosis of leaves or leaf margins. An excellent set of photos of the range of HVX symptoms on hosta can be found at the Hosta Library website (<http://www/hostalibrary.org/firstlook/HVX.htm>). The bottom line is that the symptoms of HVX are quite variable, and are often easy to overlook. You may want to bookmark the site above, to consult it when you encounter suspicious plants.

Since the symptoms of the virus sometimes look so similar to the normal variegation in leaf color of certain healthy hostas, diseased plants can be inadvertently sold and spread through the marketplace. For example, before much was known about the virus, some HVX-infected plants were named as new varieties. It turned out that varieties such as 'Breakdance,' 'Eternal Father' and 'Leopard Frog' looked different from their parents only because they were HVX-infected. For a more complete list of varieties whose distinctive characteristics occur because of infection by HVX, consult the "Hosta Library" website (<http://www/hostalibrary.org/firstlook/HVXTable.htm>).

Once these disease carriers were introduced, the virus was transmitted to healthy hostas. Some of these varieties have been withdrawn from the market, but continue to infest landscape plantings. It would be advisable to remove and destroy all landscape plants of these varieties. It is possible that what were mistakenly classified as new hosta varieties were at least partly responsible for HVX becoming so widespread among other hosta varieties, too.

Hosta virus X infects many other hosta varieties, too. The Hosta Library maintains a list of the varieties that have been most commonly affected in the U.S. marketplace, as well as a list of varieties that have been infected less commonly (<http://www.hostlibrary.org/firstlook/HVXTable.htm>).

It's true that some healthy hosta varieties have mottling patterns similar to those created by hosta virus X. However, healthy plants usually don't have mottling patterns that follow the leaf veins – the telltale symptoms of the virus. Instead, the mottling patterns of healthy plants are spread out evenly over the leaf surface. Healthy plants of most varieties also lack sunken and wrinkled leaves.

Where did HVX come from?

The original source of HVX is unknown. In the past few years, however, nursery inspectors, plant producers, and plant diagnostic clinics began seeing HVX-infected plants far more frequently. Although most of the virus-positive hosta samples were from commercial nurseries and "big

box" retail chain stores, the virus has also become more common in home gardens.

How does HVX spread?

Hosta virus X can be spread by transferring sap from the infected plants to healthy plants. This can happen when dividing crowns or trimming old leaves and flowers. Even clipping off flower scapes runs the risk of transmitting the virus.

Traditional propagation of hosta entails making vegetative divisions of crown using knives or other tools – an ideal opportunity for HVX to spread. Tissue culturing, an increasingly important way to propagate hosta, does not protect against HVX transmission; conducting the tissue culture process with infected source plants will result in infected plantlets. Recent evidence suggests that HVX can also be seed transmitted, although the frequency with which this occurs is not known.

A bit of good news: almost all of these methods of HVX spread involve human activities. Unlike many other viruses, HVX apparently cannot be transmitted by insects, nematodes, fungi, or other vector organisms. Why is this good news? Because human activities can be changed more readily than insect vector activity can be controlled. If we make a few basic changes to the host production cycle, the HVX threat can be brought under control. Serious virus threats to propagation of other crops have been controlled in the past by coordinated public-private efforts.

To read the entire article please click the news link on the INLA website at: www.iowanla.org.

Hosta Virus X: From a Regulator's View

Written by: Robin Pruisner, State Entomologist, IDALS

Hosta virus X poses an interesting situation for the Entomology and Plant Science Bureau at the Iowa Department of Agriculture and Land Stewardship (IDALS). Here, I discuss, with complete candor and honesty, the situation as I see it.

Via Iowa law and subsequent departmental rules, annual inspections for nursery stock are mandated for Iowa nursery stock growers.

Iowa Administrative Code (IAC chapter 46) defines nursery stock as, "Hardy, cultivated or wild woody plants, such as trees, evergreens, shrubs and vines, and small fruits such as strawberries and raspberries. Nursery stock dug from the wild and offered for sale or movement should be so labeled." Note that this definition does not include annuals or perennials – hostas sold in Iowa have no inspection requirements. However, nursery stock dealers and business, like greenhouses, that do not sell nursery stock can request inspections. In 2007, IDALS conducted nearly 40 such inspections.

After much discussion among IDALS staff, Iowa State University specialists, as well as bantering this issue with INLA board members, I've set the direction for the hosta virus X issue in Iowa. Because it is impossible under current regulations, to implement mandatory inspections on plants other than nursery stock, IDALS can not justly regulate for hosta virus X among all businesses in Iowa that sell hostas. Therefore, IDALS will not, *unless requested to do so*, inspect for hosta virus X – nor issue a stop sale, or order destruction, for this plant pathogen.

To read the entire letter written by Robin Pruisner, please click the news link on the INLA website at: www.iowanla.org.

Thank you to our Newest 2009 Members!

Thank you to those who have recently paid their 2009 INLA membership dues, we appreciate your support of the Iowa Nursery and Landscape Association! INLA strives to promote certified Garden Center and Landscaping professionals.

Al Carey Landscape
Al Carey - Waukee, IA

Bluebird Nursery Inc.
Jane Hey - Clarkson, NE

Breitbach Tree Farm
Jeff Breitbach - Dubuque, IA

Central Iowa Lawn & Landscape
E. Dean Hofsommer - Ames, IA

Fleming Landscape & Irrigation, Inc.
Mark Fleming - Cedar Rapids, IA

Goode Greenhouses Inc.
Jim Goode - Des Moines, IA

Green Gables
Ann Grimm - West Bend, IA

lowagardencoach.com
Anne Larson - Des Moines, IA

Kirkwood Community College
Wendy Johnson - Cedar Rapids, IA

Mike's Lawn Service Inc.
Les Wilshusen - Storm Lake, IA

Mississippi Valley Stihl
Sheila Elsey - Peoria, IL

O'Grady Chemical Corp
Mary Junge - Van Horne, IA

Outdoor Designs Inc.
Shawn Davis - Charles City, IA

P&B Lawncare LLC
Mike Bird - Newton, IA

Pace Supply
Dennis St. Germain - Fairfax, IA

R-Del Distributing
Bob Loynachan - Pella, IA

Tri State Companies
Todd Bowman - Grimes, IA

Wells Hollow Landscaping LLC
Matthew Wells - Waverly, IA

Wright Outdoor Solutions, Inc
Allen Hansen - West Des Moines, IA

Austin Eischeid - Carroll, IA

Thank you again to our newest 2009 members! Please note that the INLA dues year ends June 31, 2009. INLA will send out 2009-2010 membership invoices in July. Please call the INLA office at 515.262.8323 or 800.383.1682 if you have any questions.

Looking for Assistance!

The Danish Immigrant Museum in Elk Horn, Iowa is looking for assistance to help them develop their campus site to honor the design/style of Jen Jensen and his use of native plants. They have developed a long range plan for this project in terms of design, fundraising, maintenance, and overall installation on this project. They are looking for help to work with them over the next several years to implement this plan and need help in these areas to make it a reality. They are looking for assistance in the design/drawings, installation,

fundraising, and possible donation/ assistance of acquiring plant material. This is a great opportunity to help a good cause and preserve our ancestry in Iowa. If you are interested and able to help on this long term project, please contact:

The Danish Immigrant Museum
Elk Horn, Iowa
www.danishmuseum.org
Bruce Bro – Director of Development
dkdevdir@metc.net
515-314-2190 (Cell Phone)

Upcoming Events

What: Perennial Plant Symposium & Trade Show

Date: July 19-24, 2009

Location: Marriott at Union Station, St. Louis, Missouri

Features: The weeklong educational program includes lectures, workshops, tours and a trade show. The symposium is dedicated to education and networking for the perennial industry.

Web:
www.perennialplant.org

Email:
ppa@perennialplant.org

Marketplace

Wanted: The City of Kanawha (100 miles north of the Des Moines west mix-master) needs to replace two red splendor flowering crabs. If you are located in the north central Iowa area and have these trees available please contact Ray Bassett at:
rayb@kanawhainsurance.com

ANLA Testifies in House Hearings on Federal Crop Insurance

Mr. Steve Bennett of Riverbend Nurseries (TN) represented the American Nursery and Landscape Association at a hearing held by the House Agriculture Subcommittee on General Farm Commodities and Risk Management concerning the Federal crop insurance program. The hearing was called to solicit feedback from growers on the effectiveness and operational efficiency of the program.

Mr. Bennett shared some of the challenges that Riverbend, and many other nurseries, experienced working with the crop insurance program following the 2007 Easter weekend freeze. He commented, "At present, the federal crop insurance program falls short of adequately addressing the extreme diversity and unique situations presented by a free-market segment of agriculture that grows thousands of varieties - in every state. Despite these challenges, federal crop insurance programs remain a valuable component of the nursery industry's risk management practices."

Mr. Bennett complimented the Committee on their past successes improving the program, including:

- Utilizing a grower's wholesale price list as the basis for coverage valuation based upon proof of market. Now, a grower who buys up may use their own price lists, while those who purchase only a catastrophic coverage policy are limited to the USDA Risk Management Agency's price list;
- Coverage for plants grown in smaller than three-inch containers;
- Having field grown and containerized plants treated as separate crops

He also provided additional recommendations for improvements to the program, based on the special considerations necessary for insuring and valuing diverse nursery crops, as opposed to the row crops that have guided the development of many Federal crop insurance policies and practices. For the full testimony, visit the www.ANLA.org.

U.S. Economy: Manufacturing, Confidence Increase

Written by: Bob Willis and Courtney Schlisserman, Bloomberg, May 1

Measures of U.S. manufacturing and consumer confidence last month unexpectedly jumped to their highest levels since the credit crisis intensified in September, indicating the economy is on the mend.

The Institute for Supply Management's factory index rose to 40.1 from 36.3 in March; readings less than 50 signal a contraction. The Reuters/University of Michigan final index of consumer sentiment jumped by the most in more than two years, climbing to 65.1.

The figures may be the clearest signal yet that Federal Reserve and Obama administration efforts to lower borrowing costs and unclog lending are starting to pay off. The worst economic slump in at least half a century is still likely to persist for months as companies from Caterpillar Inc. to Chrysler LLC and General Motors Corp. continue to cut back.

"The recession's end may be drawing closer," said Chris Rupkey, chief financial economist at Bank of Tokyo-Mitsubishi UFG Ltd. in New York. "This is clearly good news and policy makers and the president's economics team will breathe a sigh of relief."

U.S. stocks rose helped by the confidence and manufacturing figures. The Standard & Poor's 500 index closed up 0.5 percent at 877.52.

Treasury securities fell, pushing the yield on the 10-year note to 3.15 percent at 4:53 p.m. in New York from 3.12 percent late yesterday.

Factory Orders

A separate report from the Commerce Department showed factory orders dipped in March after a February gain, suggesting any manufacturing recovery is likely to be gradual.

Companies cut stockpiles last quarter at the fastest pace on record, bringing forward the day when production and employment stabilize and help right the world's largest economy.

Economists forecast the ISM's manufacturing measure would increase to 38.4, according to the median of 67 projections. Estimates ranged from 35 to 42.2. The Michigan sentiment index was projected to rise to 61.9, according to the median of 52 estimates. Forecasts ranged from 57.3 to 64.

The ISM's gauge of new orders climbed to 47.2, the highest level since August, from 41.2 the prior month, and the measure of export orders improved to 44 from 39. The production gauge increased to 40.4 from 36.4.

'Encouraging' Report

"This is the first report we've seen in quite some time we can call very encouraging," Norbert Ore, chairman of the ISM factory survey, said in a conference call from Atlanta. "It certainly looks like the worst is over."

The group's employment index rose to 34.4 from 28.1.

The Labor Department is scheduled to release its April employment report on May 8. U.S. employers may have eliminated more than 600,000 jobs for a fifth consecutive month, according to a Bloomberg survey.

The consumer sentiment gauge rose from 57.3 in March, posting the biggest gain since October 2006. The index reached a three-decade low of 55.3 in November.

Record-low mortgage rates, cheaper gasoline and surging stock prices are providing some relief to the beleaguered American consumer in the face of mounting unemployment and tumbling home prices.

Christina Romer, head of the White House's Council of Economic Advisers, told lawmakers yesterday that "glimmers of hope" for an economic recovery were emerging. Still, she added, "in the short run, we are still in for more bad news."

Slump Deepened

The U.S. economy contracted at a 6.1 percent annual rate in the first quarter, worse than economists forecast, marking the weakest performance since 1957-1958. Inventories dropped at a record \$103.7 billion rate in the first three months of the year, which some economists said may set the stage for better results this quarter.

Consumer spending rose at a 2.2 percent pace last quarter following its longest slump in nearly three decades. Still, economists surveyed by Bloomberg in the first week of April forecast spending will slump again in the second quarter before picking up in the second half.

Automakers have been the worst hit among manufacturers. Chrysler yesterday proceeded with a Chapter 11 bankruptcy filing to reorganize into a more viable carmaker in a partnership with Italy's Fiat SpA.

Chrysler will idle most of its factories on May 4 while in court because suppliers are halting shipments. Regular production may resume when the company emerges, or sooner if it resolves supply issues, Tom LaSorda, a company president said yesterday. LaSorda also announced his retirement.

Replenish Stocks

Still, cutbacks in inventories are helping others. Dow Chemical Co., the largest U.S. chemical maker, said yesterday global demand has improved each month since December and customers have now used up their stockpiles. Its shares rose the most in at least 28 years in New York trading.

"There are some signs that the pace of global economic decline is moderating," Dow's Chief Executive Officer Andrew Liveris said in a statement. "It's prudent to expect that 2009 will still be a recessionary year globally, and we are not counting on material improvements in economic conditions in the near term."