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THE INSPECTOR'S FORTE:

To Make Professionalism a Part of Every Effort.

<http://www.uky.edu/Agriculture/NurseryInspection> *Editor's Note*

Hey everybody!! The Southern Chapter HIS has a website. I wanted to pass this address to you so you can check it out. It is <http://kornet.org/hissouth>. Please send me information, photos of things that you want to put in the newsletter. I have email and I would love to have the information.

I do want to get your email address. The reason is so that I can set up a distribution list. I will use it to send updates of what is going on around the region. Plus, it would be more up to date than the newsletter. I could send it out as often as needed and it would not cost a dime of postage to do it. It will only work if you send me the information to put on it. By the way, if you have internet access, you can see the newsletter online!! It will feature color photos as compared to the black and white in the newsletter. If you would prefer to receive it by internet only, then please let me know. It is put on the web in PDF format. That means it will print exactly what you see on the web page. Adobe Acrobat Reader is a free download and you can get it from my web site with the newsletters on it. The address is:

<http://www.uky.edu/Agriculture/NurseryInspection>.

The address is case sensitive so you need to type it exactly.

The 1998 Survey in Chicago for the Asian Longhorned Beetle

Stephan C. White, Plant Protection and Weed Control Program
Kansas Department of Agriculture

I consider myself very fortunate to have been allowed to participate in the Asian Longhorned Beetle (ALB) survey in Chicago this past fall. My supervisor, Tom Sim, who is the administrator of the Plant Protection and Weed Control program at the Kansas State Department of Agriculture came

Editor Motto: There is no information too trivial!

back from a Plant Board meeting and announced that the USDA needed assistance conducting surveys for the newly discovered infestation of ALB in Chicago.

Cherie Copeland and myself volunteered to participate. We planned for a two-week stay in the windy city beginning the last week of September. Upon arrival we eventually found our way the headquarters of the ALB team, which is housed just north of downtown Chicago in a public works building. USDA project coordinator, Joe Schafer, updated us along with other volunteers on the current status of the infestation, the life history of the beetle, and methods for identifying infested trees.

After a quick lunch, we were led on a tour of Ravenswood, one of the more heavily infested suburbs. Here we saw tree after tree, primarily Norway and sugar maples from 8 to 14 inch caliper, which were flagged for removal. Maples are the primary street trees planted in this and many other neighborhoods in this area. It was not unusual to see one or two street trees in front of every home. In the heart of the infestation, nearly every street tree was slated for removal.

We were amazed to see a newly infested, four-inch caliper boxelder with oviposition sites scattered every couple of inches apart. It was the first year this tree was infested as there were no adult exit holes on it. Standing under some larger trees, we observed borer sawdust, 'raining' from above, collecting in spider webs and on the ground and leaves of plants below. The most common tree attacked was Norway and sugar maples; there were a lot of these but boxelder, which is less common, appears to be a favorite species for the ALB. Other commonly infested trees that we saw included silver maple and elms.

The last stop on the tour was identified as "ground zero." This is a shop that constructs the rear doors for semi-truck trailers. They have imported the hinges and other hardware for these doors from China for over 10 years. The wood crates that this hardware was shipped in are thought to be the source of the original infestation, which is believed to have begun five to seven years ago.

At this point, we joined various survey crews that had been working in the area since the infestation was discovered in mid-summer.

Our assignment was to enter every property of every block in the quarantine zone to inspect and record every potential host tree. We inspected host trees for evidence of borer infestations and recorded the species, diameter, and location (front or backyard) of each.

It was unnerving at first walking into people's private property unannounced, especially for those of us from more rural areas of the country. Eventually, we discovered that when we were "caught", *everybody* knew exactly why we were there. Why? The Illinois Department of Agriculture and the U.S.D.A had plastered the television, radio, and newspapers with information about the ALB, its source, and its importance. In my opinion, this was the most important lesson learned. Every

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homeowner and businessman knew about the beetle, why it was important, and why we were looking for it. While many were saddened to know that they would be losing trees around their homes, they realized that their loss was the only means of keeping this pest from spreading across the Midwest.

When we entered a property, we inspected every host plant for evidence of infestation such as ground frass, oviposition sites, and adult emergence holes. The oviposition sites appeared as dime-sized depressions that the adult beetle chews in the bark prior to depositing a single egg between the bark and the cambium layer of the tree. Peeling back the bark on these sites will sometimes reveal a rice grain size egg and a dark brown stained area. Only 50% of the eggs survive. The eggs hatch in 7-14 days into a small larva that feeds in the cambium before it eventually tunnels toward the heart of the tree. When the larva feeds, it ejects frass in the form of sawdust from the oviposition site. In some cases, frothy white foam is also present at the oviposition site.

The larvae feed for 10 to 18 months and are the primary overwintering stage. The pupal stage lasts about a month. The adults appear in early summer and continue to emerge until cold weather sets in. Adult emergence holes are nearly perfect circles about the diameter of a dime. Some homeowners, who saw an opportunity to have the city remove unwanted trees from their backyard, drilled holes in these trees in an attempt to fool inspectors.

The survey teams consisted of two to four people. Two-way radios provided a valuable communication link between team members divided between the front and backyards. Usually, one individual who stayed on the street side of the property did the recording; one or two surveyed the backyard and relayed information to the recorder. It was important to have one person in front to answer questions of curious residents. An extra person to answer questions was an asset that allowed the rest of the team to proceed onto the next property.

There are three quarantine areas. Ravenswood area of North Chicago is an affluent neighborhood located on the near north edge of town and is the area thought to be first infested. The quarantine area includes about 10 square miles. To the west is Addison, a quarantine area of roughly 2 square miles. The third infestation is in Summit, located just west of Midway Airport. It encompasses about 1 square mile. In all, approximately 500 trees were identified as being infested and were slated for removal in January.

Cherie had to return at the end of two weeks; I was able to stay on another week. I also returned for two weeks in December to assist a USDA research team from Massachusetts that was using Global Position Satellite receivers to plot the exact location of all host trees within an eighth of a mile from the center of more heavily infested areas. They needed people who could identify the trees as they had very little experience in this respect. The data from this study will be used to map the location of the trees and plot movement of the beetle in future years. The GPS apparatus consisted of a large orange backpack with a saucer shaped antenna located on top of a two-foot pole. Wires from the

backpack led to a handheld unit where measurements were taken and recorded. The folks wearing the GPS equipment attracted people like noctuids to UV lights.

All in all, I really enjoyed the five weeks I participated in the project. It was a wonderful learning opportunity and a nice escape from the routine activities back home. Both Cherie and I learned a great deal not only about Asian longhorned beetles but also about how the USDA conducts eradication programs. We met a lot of wonderful people from numerous state and federal agriculture agencies. We were also able to visit several world class museums and a Bears football game. If you get a chance to work on this project in future years, I heartily recommend you do so.

New Armored Scale Insect Introduction In Miami Area

F. W. Howard, Thomas Weissling and Dearmand Hull

Contributed by Cherie Copeland, Kansas Department of Agriculture

Ornamental cycads (Cycadaceae) in a section of Miami are highly infested with a recently introduced armored scale insect. Cycads are gymnosperms that have leaves reminiscent of palm fronds. They are popular for landscapes and interiorscapes where a tropical look is desired.

Heavy scale insect infestations on cycads were noticed about a year ago and initially were thought to be the magnolia white scale, *Psuedaulacaspis cockerellii* (Cooley), which has long been a pest of cycads and is almost identical in appearance to the introduced insect. But entomologists began to suspect that they were dealing with a different species because of the intensity of the outbreak and because plant species known to be hosts of *P. cockerellii* adjacent to the highly infested cycads were not infested. After careful examination of many specimens and extensive literature research, Dr. Avas B. Hamon, the scale insect taxonomist with the Division of Plant Industry, Florida Department of Agriculture and Consumer Services, Gainesville, identified the species as *Aulacaspis yasumatsui* Takagi. Dr. Douglass R. Miller, Systematic Entomology Laboratory, USDA-ARS-SEL, Beltsville, Maryland confirmed Dr. Hamon's identification.

Aulacaspis yasumatsui was previously known from Thailand and southern China on Cycadaceae and apparently is restricted to plants of this family. Undoubtedly, the insect was introduced via infested cycads from that region. There are many exotic species of armored scale insects in the United States, especially in Florida. Probably all of them have been introduced on live plant material. Armored scale insects are typically about 2 mm in diameter and tend to occupy sites along leaf midribs, in crevices in stems, etc., and so may easily go undetected by plant collectors and phytosanitary inspectors. At present, *A. yasumatsui* is undergoing a population explosion and has spread throughout an area of at least several square kilometers, but the extent of this infestation has not yet been determined precisely. Many of the infested cycads are almost completely coated with a white crust that includes a high proportion of dead scales as well as scales of live insects. Much of the crust consists of masses of male scales, which are

much smaller than female scales and give the appearance of a layer of fine snow. There were about 500 live and dead male scales per square centimeter on some leaflets. Counts of live mature female scale insects were made on a cycad with a typical infestation. There were per up to 100 per leaflet and much greater numbers of dead scales. We have examined thousands of these scales without observing parasitoid exit holes. A species of predaceous beetle (Coccinellidae) and an apparently predaceous species of mite (Acarina) have been observed on highly infested cycads, but so far these occur sparsely and have negligible effects on the scale insect infestation.

Some observations suggest that species of *Cycas*, a genus native to the Old World, are most susceptible, while African cycads other than *Cycas* and all New World genera appear to be less susceptible. Cycads are important items in the Florida nursery industry, are widely grown in the landscape throughout the southeastern U. S., and are shipped to markets in cooler regions for use in interiorscapes. *Cycas revoluta* (king sago-palm) and *C. rumphii* (queen sago-palm) are the two most popular ornamental cycads. (Cycads in cultivation formerly identified as *C. circinalis* have recently been determined to be *C. rumphii*). The world-famous Fairchild Tropical Garden, Parrot Jungle, and Montgomery Foundation, all of which have important cycad collections, are in the infested area. Some of the unusual and beautiful cycads in these collections are of high monetary value, and some are endangered species in their native habitats.

Horticulturists and pest control personnel in the area report that common methods of scale insect control with systemic insecticides, contact insecticides against crawlers, and oils have not been sufficiently effective in reducing these infestations. In some cases, they felt that they controlled populations temporarily but the cycads were quickly reinfested.

We are conducting studies to develop chemical control methods for this scale insect. These are urgently needed in the short term. Biological control with natural enemies, particularly parasitoids obtained from the native home of the scale insect, would probably be the most effective long-term method. This would necessitate explorations for these organisms in Southeast Asia.

What's Happening In Nebraska?

Vicki Wohlers, Nebraska Department of Agriculture

Please bookmark the following web address: www.ianr.unl.edu/pubs/index.htm. This is the website of the University of Nebraska Cooperative Extension Catalog of Publications and Computer Programs. Thousands of topics are addressed in University of Nebraska Cooperative Extension NebGuides, NebFacts, and Extension Circulars.

Latest Bunch of Members

Cherie Copeland, Kansas Department of Agriculture

May 14, 1999

Here's the latest bunch of members.

Sharon Dobesh - \$5.00 Bruce Cummings - \$5.00
Rt4 Box 26 6311 N 50 W
Adrian, MO 64720 LaPorte, IN 46350
816 297-4078 219 324-6819 fax 219 326-1743

Patrick Henry - \$5.00 Daniel Keane - \$5.00
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Reed City MI 49677 Saginaw MI 48603
616 832-1821 517 758-1778 fax 517 758-1484

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Traverse City, MI 49684 Allegan, MI 49010
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David Blackburn - \$10.00 Tom Hill - \$10.00
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Portage, MI 49024
616 428-2575

H.I.S e-mail addresses

Here is a list of the H.I.S. email. If you or someone that you know is not on the list, please send that to me and I will add you to it. Also, if you see a typo on this list, let me know too. If you do not want your name on this list for any reason, let me know and I will take it off.

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Interstate Nursery Inspection

Vicki Wohlers, Nebraska Department of Agriculture

May 14, 1999

MEMO TO: Nursery Inspectors

FROM: Vicki Wohlers, Nursery Programs
Nebraska Department of Agriculture
Bureau of Plant Industry

SUBJECT: 1999 Interstate Nursery Inspector's Training

I would like to extend an invitation for you to join us at the Horticultural Inspection Society, Central Chapter, 1999 Interstate Nursery Inspector's Training. This will be held June 21-24, 1999 in Omaha, Nebraska and will be hosted by the Nebraska Department of Agriculture.

I have included a tentative schedule of events. Please contact me at (402) 471-6854, or by e-mail at "vickibw@agr.state.ne.us" **by June 11, 1999** if you will be able to attend. I have a block of rooms reserved at the Super 8 Motel, 14355 S Hwy 31, Gretna Interchange (Interstate 80 -

Hwy 31, Exit 432); (402) 332-5188. Room rates will be: Single: \$44.89 plus tax, Double: \$52.09 plus tax. You will need to call in your own reservations and tell them the block of rooms is under the name "INTERSTATE NURSERY INSPECTOR'S TRAINING".

Past interstate nursery inspections have been a valuable tool for continuing education for nursery inspectors. I look forward to seeing you in June!

**HORTICULTURAL INSPECTION SOCIETY,
CENTRAL CHAPTER
INTERSTATE NURSERY INSPECTOR'S TRAINING**

**HOSTED BY
NEBRASKA DEPARTMENT OF AGRICULTURE**

JUNE 21-24, 1999

Please contact Vicki Wohlers, Nebraska Department of Agriculture, (402) 471-6854, or by e-mail "vickibw@agr.state.ne.us" **before June 11, 1999** if you will be able to attend.

PROPOSED SCHEDULE:

Monday, June 21, 1999

Travel to Omaha, Nebraska; I have a block of rooms reserved at the Super 8 Motel, 14355 S Hwy. 31, Gretna Interchange (Interstate 80 - Hwy. 31, Exit 432); (402) 332-5188. Room rates will be: Single \$44.89 plus tax, Double \$52.09 plus tax. You will need to call in your own reservations and tell them the block of rooms is under the name "INTERSTATE NURSERY INSPECTOR'S TRAINING".

Tuesday, June 22, 1999

8:00 a.m. - 9:00 a.m.: Meet at Super 8 meeting room - registration, welcome, introductions, etc.

9:00 a.m. - 11:30 a.m.: Group inspections at Mulhall's Nursery, 3615 N 120th St, Omaha, NE (90 acre nursery)

11:30 a.m. - 1:00 p.m.: Lunch

1:00 p.m. - 5:00 p.m.: Continue with group inspections

5:00 p.m. - ?: Return to hotel, dinner, etc.

Wednesday, June 23, 1999

8:00 a.m. - 8:30 a.m.: Load vans to travel to Clarkson, Nebraska (approximately 1 hour, 40 minutes from Omaha)

10:15 a.m. - 12:00 noon: Group inspections at Bluebird Nursery, 519 Bryan St, Clarkson, NE (Large greenhouse producer of 100's of varieties of perennial plants).

12:00 noon - 1:00 p.m.: Lunch

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1:00 p.m. - 3:30 p.m.: Continue with group inspections.
3:30 p.m. - 4:00 p.m.: Load vans to return to Omaha.

5:30 p.m. - ?: Dinner, etc.

Thursday, June 24, 1999

8:30 a.m.: Meet and travel over to Brewer's Crescent Nurseries, 1116 Old Lincoln Hwy, Crescent, Iowa (approximately 40 minutes from Super 8); John Crouch, Iowa Department of Agriculture nursery inspector will host.

9:15 a.m. - 11:30 a.m.: Group inspections at Brewer's Crescent Nurseries, Crescent, Iowa.

11:30 a.m. - 1:00 p.m.: Lunch

1:00 p.m. - ?: Continue with group inspections and departure OR depart on Friday

Friday, June 25, 1999

Travel home.

Editor's Comments:

I want to thank **Stephan White, Vicki Wohlers and Cherie Copeland** for contributing an article for the newsletter. Without you this would be much more difficult.

Please send articles for the newsletter, it is YOUR newsletter. I would like to have information of what is going on in your state. Highlights from any of the inspectors, supervisors, department heads, etc. Let everyone know what is going on this spring, summer, fall and even winter. I will publish as often as is necessary...provided I have the information to put in the newsletter. In other words, promote what you are doing to the rest of the members. By the way, the newsletters, except for the one with the state reports, are available on the web at: www.uky.edu/Agriculture/NurseryInspection/