

ENTOMOLOGY NEWS

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Kansas Department of Agriculture—Plant Protection and Weed Control

GOING DIGITAL TO IDENTIFY EMERALD ASH BORER

Kansas and Massachusetts working with Dr. Amy Roda (USDA-APHIS-PPQ-CPHST) are collaborating on a new approach to identify EAB in the field using handheld digital microscopes in a pilot program.

Currently when a suspect EAB is located in a new county, the specimen is collected and mailed to a USDA identifier. The microscope project is being developed to identify EAB specimens in the field, eliminating species of beetles that resemble them. Using pictures taken in the field with the microscopes allow images in the field to be immediately sent to an identifier.

If the specimen is determined by the identifier to be a potential new county record, the specimen is collected and sent to the identifier for further confirmation. Non-target beetles are left on the trap or discarded.

The hope is to quickly identify EAB in the field, and eliminate collecting beetles that do not fit the EAB criteria.

Kansas has also used the camera to identify pests of grapes, unknown Lepidoptera and unknown foliar feeding beetles.

CEDAR BARK BEETLE PHLOEOSINUS DENTATUS

Recently two of our astute PPWC staff noticed flagging on many junipers during nursery inspections. Placing the samples in a rearing chamber we were able to determine the damage was caused by the cedar bark beetles.

Cedar bark beetles typically colonize broken branches and trees stressed by drought, soil compaction, stem breakage, animal damage, and other similar factors. Beetles feed on twigs prior to brood production. Twigs are hollowed out and their tips die as a result. Dead twig/branch tips (often called flagging) may be scattered throughout a tree's crown. (Forest Health Protection-Rocky Mountain Region 2011)



Field Application of the Digital Microscope:
Greg Chrislip, State Entomologist PPWC and
Amy Roda, PhD, Supervisory Entomologist
USDA APHIS PPQ CPHST

Brown Marmorated Stink Bug: PPWC staff has identified two specimens of BMSB located in Kansas. Both samples were located during EAB surveillance, one on a purple prism trap (Shawnee Co.) and the second on the tangle foot band on one of the EAB trap trees. (Wyandotte Co.).



2013 KHAPRA BEETLE SURVEY

The Khapra beetle is considered to be one of the most destructive pests of seeds and grains.

The 2013 Survey for Khapra beetle has ended with currently no findings of the beetle. The bait from the traps will be kept for an additional four weeks to watch for possible emergence of beetles. Common grains pests found during the survey included meal moths and saw-toothed grain beetles.

Thirty five international stores and four commercial storage facilities were trapped in eight counties (Douglas, Geary, Johnson, Leavenworth, Riley, Saline, Sedgwick, and Shawnee). Each location had two traps.



Spotted Wing Drosophila

GRAPE SURVEY UPDATE

Our grape commodity survey is ongoing, but early trap checks have not indicated the presence of the six targeted insect species. The insects include summer fruit tortrix, European grape vine moth, European grape berry moth, silver Y moth, Egyptian cottonworm and cotton cutworm. In addition two diseases are also being monitored, Australian Grape yellows and Pierce's disease. Twenty seven samples have been sent for Pierce's disease testing and eleven for Australian yellows testing. Currently 53 vineyards are taking part in our survey.

The native gray tree frog pictured on the left, thought our traps made a great place to find an easy meal and visited the trap on a regular basis.

SPOTTED WING DROSOPHILA

Our South central inspector was contacted by the Sedgwick Co. extension office about growers having issues with blackberries. Cheri was able to rear flies from the samples taken from a grower and identified them as Spotted Wing Drosophila (SWD). They attack undamaged fruit which sets them aside from most vinegar flies. Host plants: sweet cherries, peach nectarine, plum, grapes, blueberries, blackberries, raspberries, strawberries and more. SWD is not a regulated pest.

