Ash Seed Weevil

October 16, 2008. A brisk sunny morning! Mr. X goes out to his truck only to notice a lot of “rice” on his driveway
A first assumption was that these were the maggots of a gall midge. However, whereas fly maggots are legless and without a distinct head (usually they only possess hook-like mouthparts), upon closer examination, these “rice particles” had distinct brownish head capsules.

The tree next to the driveway was an ash. Whereas all of the tree leaves had previously dropped, most of the seed pods were retained. Thus the only source of the “rice” raining from the tree could have been the seed pods.
Beetle larvae possess a variety of body forms. White “legless” larvae are representatives of weevils. Weevils + ash trees + seed pods = **ASH SEED WEEVILS**. Upon close inspections of seed pods, many possessed larval exit holes. Pods lacking exit holes were dissected and found to contain larvae.

Ash seed weevils are nothing new, first being described in 1876. The beetles range in length from 2-4 mm. They produce one generation per year.

After seed pods have formed, beetles use their small chewing mouthparts (on the tips of their snouts) to bore into the single seed contained within each pod. One literature source indicates that beetles (next) deposit a single egg within the excavated cavity (although up to 3 larvae were dissected out of several pods collected during the current – October 16 – situation). Larvae develop throughout the summer.
By fall, some larvae drop to the ground and burrow into the soil where they overwinter. Others may spend the winter in seed pods, exiting (and entering the soil) in the spring. In the soil, the grubs eventually pupate. “New adults” emerge at a time coinciding with the production of ash pods and seeds into which they deposit eggs for the next generation.

Questions asked for which there are no definitive answers: This is the first time that Mr. X ever encountered this situation in the 30 years that he has resided at his residence. Why now and never before???? Why his ash tree and not his neighbor’s several houses removed????

The larvae in his driveway appeared the morning of October 16, 2008, following an early-morning low temperature of 30°F in the Manhattan area. Was this low temperature the cue/stimulus for the larvae to drop and seek overwintering quarters in the soil???? Why did some remain in their seed homes, or will they (too) soon exit? Or, will they remain in their seed pods until next spring before exiting and entering the soil to join those that entered the previous fall????

Are all of the larvae of one species, or one or two of the other 3 species that have been described in the literature???? Larvae are inseparable/unidentifiable --- only capture of ensuing adults might answer this question.

The bottom line is that this situation is just that: a situation. There is no cause for concern ----- merely a curiosity!

Bob Bauernfeind
Weekly Report from the Kansas State University Insect Diagnostic Laboratory:

The following samples were submitted to the Insect Diagnostician Laboratory from October 10th to October 16th.

October 13 2008 – Ellis County – Beetle larvae
October 13 2008 – Geary County – Sycamore tussock moth caterpillars around base of trees
October 13 2008 – Shawnee County – Eastern Yellowjackets in exterior wall of home
October 13 2008 – Shawnee County – Eastern Yellowjackets in exterior wall of home
October 13 2008 – Leavenworth County – Eastern Yellowjackets in exterior wall of home
October 15 2008 – Norton County – Pyralid moth caterpillar found in home
October 16 2008 – Leavenworth County – Dermestid beetle larvae and possibly eggs in home

If there are any questions regarding these samples or about the identification of any arthropod please contact the Insect Diagnostician at (785) 532-4739 or GotBugs@ksu.edu.

Holly Davis

Sincerely,

Robert J. Bauernfeind
Extension Specialist
Horticultural Entomology
phone: 785/532-4752
e-mail: rbauernf@ksu.edu

Holly Davis
Insect Diagnostician
Phone: (785) 532-4739
e-mail: holly3@ksu.edu

K-State Research and Extension is an equal opportunity provider and employer. Issued in furtherance of Cooperative Extension Work, Acts of May 8 and June 30, 1914, as amended. Kansas State University, County Extension Councils, Extension Districts, and United States Department of Agriculture Cooperating, Fred A. Cholick, Director.