Emergency Quarantine for Thousand Cankers Disease
Oklahoma Department of Agriculture, Food, and Forestry

The Oklahoma Department of Agriculture, Food, and Forestry has issued an emergency quarantine on the importation of all walnut (*Juglans* spp.) and other regulated articles originating in areas infested with Thousand Cankers Disease (TCD) of walnut. The insect-fungal pest complex that is lethal to walnut trees has been detected in at least 8 western states and recently confirmed in eastern Tennessee. The quarantine prevents movement from infested areas of nursery stock, unprocessed lumber, logs, wood chips, mulch, firewood, and other products created from walnut trees. Oklahoma joins Missouri, Kansas, Nebraska, and Michigan in establishing the TCD quarantine.

TCD is spread by the walnut twig beetle, a tiny insect that bores holes into walnut trees. The beetle carries a fungus that forms thousands of cankers under the bark of the host tree and kills a tree within 2-3 years after initial infection. Early symptoms include leaf yellowing, wilting, and tree crown thinning which are symptoms often confused with other pests and environmental factors.

Black walnut trees have been reported in nearly every county of Oklahoma and should TCD spread to our state and the region of native black walnut trees it will cause economic, ecological, and sociological effects. Because control options are not known at this time, preventing the movement of walnut from infested areas into Oklahoma is the primary means of limiting the spread of TCD. The quarantine will restrict movement of walnut from known infested states and protect the black walnut in Oklahoma and its native range in eastern states.
QUARANTINED AREAS:
The entire states of Arizona, California, Colorado, Idaho, Nevada, New Mexico, Oregon, Utah, Washington, and any other state or foreign country known to be infested.

REGULATED PRODUCTS:
1. All plant and plant parts of the genus *Juglans* including but not limited to nursery stock, budwood, scionwood, green lumber, and other living, dead, cut, or fallen, including logs, boards, firewood, stumps, burls, roots, branches, bark, mulch, chips, and lumber for wood packing material.
2. All life states of the walnut twig beetle (*Pityophthus juglandis*).
3. The fungal pathogen *Geosmithia morbida* sp. nov.

CONDITIONS AND RESTRICTIONS:
1. All regulated articles originating from quarantined areas are prohibited entry into or transition through the State of Oklahoma unless accompanied by a phytosanitary certificate from the state of origin declaring, “The article was officially inspected after harvest and found free of the fungus *Geosmithia*, the walnut twig beetle, and bark, and the articles were stored in such a manner to remain free of the walnut twig beetle in storage and transit.”
2. Regulated articles originating in an area not known to have thousand cankers disease but in transit through an area known to have thousand cankers disease shall be regulated articles.
3. Regulated articles to be used for research purposes may move under a compliance agreement with ODAFF Plant Protection Section.
4. Interstate and intrastate movement of regulated articles and all living stages of the walnut twig beetle (*Pityophthus juglandis*) and the thousand canker disease fungal pathogen, *Geosmithia morbida* sp. nov. for scientific or experimental purposes may move under compliance agreement and scientific permit.

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**Fall Armyworms Should Be On Our “Scouting Radar” in Pasture and Seedling Wheat**
Tom A. Royer, Extension Entomologist

On August 27, Dr. Doug Johnson, Extension Entomologist at the University of Kentucky reported on the numbers of fall armyworm moths he caught in his pheromone traps in western Kentucky. In his own words, he said “I do not wish to be the little boy crying wolf, but his event is unprecedented in the years that the University of Kentucky - Integrated Pest Management (UK-IPM) program has collected pheromone trapping data.”

On August 20, his trap counts averaged 52 moths per trap week. On Aug 27, counts rose to 1,038 moths per trap week. He said in the 15 years he has been trapping, the most he had ever
trapped was 300+ per trap week. I have also received reports of notable fall armyworm numbers in eastern Texas.

Large moth flights can turn into large numbers of eggs laid in fields, which hatch into hungry caterpillars. Although Kentucky is a long drive from Oklahoma, we can use these reports as an early warning for possible fall armyworm threats to Oklahoma pastures and winter wheat fields. Fall armyworms can kill seedling wheat and decimate a pasture (especially fescue grass pastures) in short order, so both need to be watched carefully from now through mid-October.

Scouting fall armyworms in pasture is easy. Get a wire coat hanger, bend it into a hoop, place it on the ground, and count fall armyworms in the hoop. Examine plants at several locations along the field margin as well as in the interior. Look for “window pane” leaves and count all sizes of larvae. The hoop covers about 2/3 of a square foot, so a threshold in pasture would be an average of two or three ½ inch-long larvae per hoop sample.

In wheat (once it has emerged) scout for fall armyworms by examining plants in several (5 or more) locations in the field. Fall armyworms are most active in the morning or late afternoon. Look for “window pane” leaves and count all sizes of larvae. As with pasture, examine plants along the field margin as well as in the interior, because they often move in from road ditches and weedy areas. The suggested treatment threshold is 2 to 3 larvae per linear foot of row in wheat.

If the treatment threshold is exceeded, it is much easier to “get them” with an insecticide application when they are small (less than ½ inches). For control guidelines and information on registered insecticides for fall armyworm, consult OSU Fact Sheet CR-7193 Management of Insect Pests in Rangeland and Pasture and CR-7194 Management of Insect and Mite Pests of Small Grains.

Dr. Richard Grantham  
Director, Plant Disease and Insect Diagnostic Laboratory

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