

North Carolina Pest News

Departments of Entomology and Plant Pathology



Stephen J. Toth, Jr., editor
Volume 23, Number 8, May 30, 2008

CAUTION !

The information and recommendations in this newsletter are applicable to North Carolina and may not apply in other areas.

In This Week's Issue . . .

FRUIT AND VEGETABLES

- Potato Late Blight Outbreak in Camden County

ORNAMENTALS AND TURF

- Boxelder Bugs
- Claycolored Leaf Beetles
- Oak Leaf Rolling Weevils
- New Pesticide Product (Acelepryn) Registered

See current and archived issues of the *North Carolina Pest News* on the World Wide Web at:
http://ipm.ncsu.edu/current_ipm/pest_news.html

FRUIT AND VEGETABLES

From: Brooke Edmunds and Gerald Holmes, Department of Plant Pathology

Potato Late Blight Outbreak in Camden County

On May 28, 2008 an outbreak of potato late blight was reported in Camden County, North Carolina. According to Pasquotank County Agent Thomas Campbell, the crop is anywhere from 14 to 60 days from harvest, so the disease is early enough to impact yields if not controlled.

Late blight symptoms on foliage include dark circular lesions (Fig. 1) which expand as the disease progresses. In moist or humid conditions, the lesions will be covered in white mold growth. Yield losses can occur in the field or when infected tubers decay in storage.



© B. J. Edmunds

Fig 1. Potato foliage submitted to the NCSU Plant Disease and Insect Clinic showing circular, dark brown lesions typical of late blight infection. Photograph by B.A. Edmunds.

Late blight occasionally occurs in North Carolina (about once in every two or three years). The disease usually occurs late in the season and therefore does not affect yields. This year's outbreak is early enough to cause some concern, but its impact on yield will depend largely on future weather conditions and management practices.

Late blight spreads to neighboring fields through spores in splashing rain, wind and on equipment. Late blight is best controlled with preventive fungicide applications as it is difficult to control once established. If the diseased area is small, herbicide can be applied to kill infected plants and help reduce the spread of the disease. A zone of healthy plants around the diseased plants should be killed as well because they are likely infected, but not yet showing symptoms. Potato fields within 1 to 3 miles of diseased fields should be treated with a fungicide that can provide some systemic and curative activity. Potato fields that are further away from the diseased field should apply preventive fungicides such as chlorothalonil or mancozeb on a 5- to 10-day interval depending on weather conditions.

The *North Carolina Agricultural Chemicals Manual* lists fungicides with labeled for control of late blight of potato and is available online at: <http://ipm.ncsu.edu/agchem/6-17.pdf>.

ORNAMENTALS AND TURF

From: Steve Bambara, Extension Entomologist

Boxelder Bugs

The first boxelder bugs of the season showed up in the North Carolina State University's Plant Disease and Insect Clinic this week from the Charlotte area. Boxelder bugs (Fig. 2) feed on seeds of boxelder trees and to a lesser extent on seeds of maples and ash trees. Sometimes these bugs can become abundant. However, when boxelder bugs annoy people year after year it is usually because they have a female boxelder tree in the yard or nearby. *Ornamentals and Turf Insect Note No. 40* (<http://www.ces.ncsu.edu/depts/ent/notes/O&T/houseplants/ort040e/ort040e.htm>) provides additional information on boxelder bugs. Boxelder bugs are a more frequent complaint later in the season, but it is not uncommon to receive complaints this early. If desired, any appropriately labeled insecticide should be directed onto the bugs to kill them, not onto the tree or non-infested parts of the house.



Fig. 2. Boxelder bug. Photograph from the NCSU Plant Disease and Insect Clinic.

Claycolored Leaf Beetles

Claycolored leaf beetles, *Anomoea laticlavata*, eat young foliage and buds of some hardwood trees such as hickory. They have a broad range of host trees and shrubs and are found throughout North America east of the Rocky Mountains. I cannot find much life history information on this insect. Adults are 7 to 9 mm in length and can probably be found for about six weeks beginning around late May in Piedmont North Carolina. There probably is only one generation. I presume it is not considered a common pest of ornamentals and shade trees. The claycolored leaf beetle (Figs. 3 and 4) should be susceptible to Sevin, but you could use any insecticide labeled for leaf beetles eating foliage.

If a tree is small, a systemic insecticide could be used if the fruit is not consumed. However, by the time the product is taken up the tree, most of the foliage may be consumed. The good part is that this probably doesn't happen every year and, though it does not help the tree, should not kill it. It is reported that eggs are laid in fecal cases on the ground or on leaves and may be carried into ant nests. In a similar species, *A. flavoansiensis*, the larvae develop within the ant nest.



Fig. 3. Claycolored leaf beetle. Photograph by Lacy L. Hyche, Auburn University (<http://www.bugwood.org>).



Fig. 4. Claycolored leaf beetle. Photograph by Steve Bambara.

Oak Leaf Rolling Weevils

Oak leaf rolling weevils were received from Wake County (Fig. 5). This insect is reported as a pest in Maine and states farther north. The damage from the first generation of leafrolling weevils (*Attelabus bipustulatus*) is evident now on oaks in central North Carolina. Leaves (particularly at the tips of branches) have small holes from weevil damage as the leaf develops and larger holes chewed after leaf expansion. The female adult lays an egg and forms a rolled packet around it for the larva to feed upon. Packets usually fall to the ground but some may be left hanging on the tree. Eggs in these packets usually die. There are two generations in Maine. There may be more in North Carolina.



Fig. 5. Oak leaf rolling weevil and packets. Photograph by Steve Bambara.

New Pesticide Product (Acelepryn) Registered

I recently learned of a new pesticide, called *Acelepryn*, which is now registered in half the states, including North Carolina. This commercial product is labeled for professional applicators and may be used on ornamentals and turf on most of the common sites. It was mainly developed for turfgrass pests, but lists leaf-feeding caterpillars, lace bugs and birch leafminers on the label. It

also has a bark treatment application for clearwing borers. It works primarily as a systemic insecticide and I think we will see this label expand in the coming years. It has a very low toxicity to vertebrates, such that the label does not carry a signal word.

Thanks go to my colleague in Ohio for bringing this to my attention. The mention of the product is not intended as an endorsement. For more information on *Acelepryn*, go to the following web site: http://www2.dupont.com/Professional_Products/en_US/acelepryn/.

Recommendations for the use of chemicals are included in this publication as a convenience to the reader. The use of brand names and any mention or listing of commercial products or services in this publication does not imply endorsement by North Carolina State University, North Carolina A&T State University or North Carolina Cooperative Extension nor discrimination against similar products or services not mentioned. Individuals who use chemicals are responsible for ensuring that the intended use complies with current regulations and conforms to the product label. Be sure to obtain current information about usage regulations and examine a current product label before applying any chemical. For assistance, contact an agent of North Carolina Cooperative Extension.

Employment and program opportunities are offered to all people regardless of race, color, national origin, sex, age or disability. North Carolina State University, North Carolina A&T State University, U.S. Department of Agriculture, and local governments cooperating.

