





### Arkansas Plant Health Clinic Newsletter

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**Ricky Corder** 



#### Buckeye

Buckeye Blotch, caused by Guignardia aesculi, creates an unsightly problem on most horse chestnut and buckeye species. However, injury to the plant is minimal because the damage occurs late in the season. Symptoms first appear on leaves as water-soaked areas, which turn reddish-brown to brown with yellow borders. These spots coalesce, causing large blotches, which curl the leaves. By late summer, the whole plant appears scorched. Fallen leaves harbor the spores; so, a thorough cleanup of twigs and leaves is important in control of Buckeye Blotch. As with other leaf spot diseases, infection is intensified by humid conditions. Improving air circulation by keeping weeds and other plants away from valuable specimens helps to reduce disease. Fungicides containing mancozeb or chlorothalonil are effective applied at bud break during wet springs. Reapply at intervals specified on the label if wet conditions persist. For new plantings, select plants with resistance to Guignardia Blotch such as bottlebrush buckeye (Aesculus parviflora).

# Buckeye Leaf Blotch- Guignardia aesculi



Photo by Sherrie Smith, University of Arkansas Cooperative Extension

## Buckeye Leaf Blotch- Guignardia aesculi



Photo by Sherrie Smith, University of Arkansas Cooperative Extension







### Oak

**Ricky Corder** 

Multiple samples of heavily galled oak leaves have been arriving at the Plant Health Clinic. They come with the complaint of browning and falling leaves. The culprit is a tiny gall wasp. The Jumping Oak Gall is caused by Neuroterus saltatorius, a wasp belonging to the Cynipid group of wasps. Signs of infestation by Jumping Gall Wasp are spots with a brown center, purple margin, and a yellow halo on the upper leaf surface. A tiny round gall, the size of a pinhead is found on the underside of the leaf. Inside the gall resides a wasp larva. There are about 600 species of gall wasps in the United States. Depending on the species, roots, stems, twigs, leaves, buds, or flowers are attacked. The galls are formed when a gall wasp lays an egg on the plant tissue, stimulating the plant to produce the gall in response to the injury. The result is food and shelter for the wasp larvae that live protected inside the gall. These small wasps are harmless to people. The Jumping Oak Gall has two generations a year and attacks the white oak group. Females emerge in the spring from the ground and lay eggs on the leaves. The eggs hatch. Males and females mate, and the females lay eggs, resulting in the second-The galls get their name generation galls. "Jumping Galls" because when they drop off the leaves to the ground the larvae inside hit the insides of the gall, causing it to jump to find crevices in which to overwinter. Heavily infested leaves turn brown and fall from the tree prematurely. This happens late enough in the growing season to do no lasting harm to healthy mature trees. However, since they spend part of their lifestyle in the ground, lawn insecticides may reduce numbers. Jumping Oak Gall outbreaks typically last for one or two years and then decline as natural controls reduce gall wasp numbers again.

# Oak Jumping Oak Gall-Neuroterus saltatorius



Photo by Sherrie Smith, University of Arkansas Cooperative Extension

## Oak Jumping Oak Gall-Neuroterus saltatorius



Photo by Sherrie Smith, University of Arkansas Cooperative Extension







Sherrie Smith Ricky Corder

# Oak Jumping Oak Gall-Neuroterus saltatorius



Photo by Sherrie Smith, University of Arkansas Cooperative Extension

#### Oak Jumping Oak Gall Wasp-Neuroterus saltatorius



Photo by Sherrie Smith, University of Arkansas Cooperative Extension

#### Canna

by Ricky Corder

Two species of canna leafroller are present in the Southeastern United States: the larger canna leafroller, *Calpodes ethlius* (Insecta: Lepidoptera: Hesperiidae), and the lesser canna leafroller, *Geshna cannalis* (Insecta: Lepidoptera: Crambidae). The lesser canna leafroller appears to be more common in our area than the greater, but both have similar life cycles and management.

Canna leafrollers, as their name implies, roll canna leaves and keep them rolled using silk produced by the larva (caterpillar). This is accomplished by attaching silk before the leaf unrolls (the preferred method of the lesser canna leafroller) or by attaching silk to one edge of the leaf and pulling it toward the other edge (usually done by the larger canna leafroller). Once rolled, the leaf provides a protective area for the caterpillar to feed. The lesser canna leafroller caterpillars generally feed on the surface of the leaf and do not chew completely through the leaf, but the larger leafroller feeds through the leaf. Later when the leaf opens, the feeding damage appears as holes in the leaves and ragged leaf edges.

Canna leafrollers only feed on plants in the genus Canna and close relatives; so, other plants in the garden are not threatened. This also makes management a little easier because dead plant material can be cut to the ground in winter and disposed of, which reduces the number of overwintering larvae and pupae. Systemic insecticides such as Merit or Bayer Advanced Tree and Shrub Systemic Insecticide may be applied.







### Sherrie Smith Ricky Corder

Alternatively, a product applied to the leaves containing Bacillus thuringiensis (BT) gives control without toxicity to organisms other than members of the Lepidoptera (butterflies and moths).

### Lesser Canna Leafroller damage (note the silk tying the leaf)-Geshna cannalis



Photo by Ricky Corder, University of Arkansas Cooperative Extension

#### Lesser Canna Leafroller larva-Geshna cannalis



Photo by Ricky Corder, University of Arkansas Cooperative Extension

This bulletin from the Cooperative Extension Plant Health Clinic (Plant Disease Clinic) is an electronic update about diseases and other problems observed in our lab each month. Input from everybody interested in plants is welcome and appreciated.

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