



Arkansas Plant Health Clinic Newsletter

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Canna

Cannas are a very reliable and showy plant in the sunny landscape. A bonus is that our hummingbirds love them. A range of cultivars vary in size from 2-6ft tall and bloom in colors ranging through the pink, yellow, orange, and red spectrum. Some cultivars also have showy red or striped foliage. The most irritating insect pest of canna is the Canna Leaf Roller. Two species of canna leaf roller are present in the Southeastern United States, the larger canna leaf roller, *Calpododes ethlius* (Stoll) (Insecta: Lepidoptera: HesperIIDae), and the lesser canna leaf roller, *Geshna cannalis* (Quaintance) (Insecta: Lepidoptera: Pyralidae). With the lesser canna leafroller, *Geshna cannalis* (Quaintance), adults are small, light brown pyralid moths and the feeding shelters of the larvae contain much dark brown frass.

With the larger canna leafroller, *Calpododes ethlius* (Stoll), adults are brownish skipper butterflies of medium size, and the larvae have an interesting behavior of flicking away frass so that their leaf roll remains free of pellets and instead, frass accumulates on the ground.

The lesser canna leaf roller appears to be more common in our area than the greater, but both have similar life cycles and management. Canna leaf rollers, as their name implies, roll canna leaves, and keep them rolled using silk produced by larva (caterpillar). This is accomplished by attaching silk before the leaf unrolls (preferred by the lesser canna leaf roller) or by attaching silk to one edge of the leaf and pulling toward the other edge (usually the larger canna leaf roller). Once rolled, the leaf provides a protective area for the caterpillar to feed. The lesser canna leaf roller caterpillars generally feed on the surface of the leaf and don't chew completely through the leaf, but the larger leaf roller feeds through the leaf. Later when the leaf opens, the feeding damage appears as holes in the leaves and ragged leaf edges. Canna leaf rollers 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 Bio Advanced 3-1 Insect & Disease Mite Control, or Bio Advanced 2-in-1 Systemic Rose & Flower Care II may be applied. Alternatively, a product applied to the leaves containing *Bacillus thuringiensis* (BT) gives control without toxicity to organisms other than members of the Lepidoptera.



**Lesser Canna Leaf Roller
Damage-*Geshna cannalis***



Photo by Sherrie Smith, University of Arkansas Cooperative Extension

**Lesser Canna Leaf Roller Larva-
*Geshna cannalis***



Photo by Sherrie Smith, University of Arkansas Cooperative Extension

**Canna Leaf Roller-Unidentified
species**



Photo by Hildegunde Simmons



Larger Canna Leaf Roller Damage-*Calpodex ethlius*



Photo by Sherrie Smith, University of Arkansas Cooperative Extension

blight caused by *Entomosporium mespili*, synonym *E. maculatum*. and *Diplocarpon mespili* New infections first appear as tiny red specks on either surface of the leaf. The bright red spots may coalesce into large maroon blotches. Older spots may have gray centers with dark purple halos. Infection can spread to twigs causing cankered areas on branches. Severe infections may result in heavy leaf drop and weakening or death of the plant. Cultural controls consist of avoiding overhead irrigation, improving air circulation, and cleaning up fallen leaf/stem debris.

Homeowners may use Ortho Garden Disease Control, or Bonide Fung-onil, or Garden Tech Daconil Concentrate, or Hi-Yield Vegetable, Flower, Fruit and Ornamental Fungicide, or Monterey Fruit Tree, Vegetable, and Ornamental Fungicide, or Fertilome Broad Spectrum Lawn and Garden Fungicide, or Bonide Mancozeb FL with Zinc, or Ferti-lome F-Stop Lawn and Garden Fungicide, or Spectracide Immunox Plus Insect and Disease Control for Gardens, or Spectracide Immunox Multi-Purpose Fungicide Spray for Gardens, or Bio Advanced Science-based Solutions All-In-One Rose and Flower Spray, or Bio Advanced Garden-Disease Control for Roses, Flowers, Shrubs.. Organic growers may use Serenade Garden Disease Control, or GreenCure, or Kaligreen, or Milstop, or Actinovate Biological Lawn and Garden Fungicide.

Red Tip Photinia

Photinias are no longer one of the landscape plants we recommend. They are extremely prone to a debilitating and unsightly leaf disease. Unfortunately, many cultivars are extremely susceptible to *Entomosporium* leaf

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**Photinia Entomosporium Leaf
Spot-*Entomosporium mespili***



Photo by Sherrie Smith, University of Arkansas
Cooperative Extension

**Photinia Entomosporium Leaf
Spot-*Entomosporium mespili***



Photo by Jennifer Caraway, University of Arkansas
Cooperative Extension

**Photinia Entomosporium Leaf
Spot-*Entomosporium mespili***



Photo by Sherrie Smith, University of Arkansas
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Apple

Apple scab, caused by *Venturia inaequalis*, is the most economically important disease of apples in the United States. Severe crop losses may occur in areas with wet, cool springs. Scab lesions may occur on fruit, leaves, blossoms, petioles, and peduncles, with the most obvious symptoms on the leaves and fruit. Lesions are often found first on lower leaves, and as leaves unfurl both sides may become infected. The spots are velvety brown to olive green with feathery edges. As the lesions age and become hardened, leaf malformation may occur. Leaves that become completely covered with lesions yellow, shrivel, and fall from the tree prematurely. Infected fruit gets the same lesions and can become deformed and cracked. The fruit lesions eventually become dark brown to black circular rough spots. Applications of Fruit tree sprays every 7-10 days should be made from the tight cluster stage until terminal shoot growth ends in midsummer. All fallen leaves and fruit should be cleaned up. Dormant pruning of infected terminals aids in removing primary inoculum but is time consuming and can affect yield. This disease also affects crabapples. For ornamental trees, sanitation and the application of fungicides containing chlorothalonil are effective if started early.

Apple Scab-*Venturia inaequalis*



Photo by Sherrie Smith, University of Arkansas Cooperative Extension

Apple Scab-*Venturia inaequalis*



Photo by Sherrie Smith, 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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