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Issue 13, May 18, 2020

# Arkansas Plant Health Clinic Newsletter

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## Birch

Although alarming to homeowners, Spiny witch-hazel gall aphids *Hamamelistes spinosus,* do no serious harm to healthy trees. The first symptoms are birch leaves with distorted corrugations or bumpy ridges. Infested leaves turn brown and fall from the tree. However, control is not usually warranted because healthy trees produce a new crop of leaves to replace those destroyed by the aphids. The life cycle of this interesting aphid takes two full years to complete. Eggs are laid on witch-hazel in June and July. The eggs hatch in the spring and the nymphs feed on the flower buds. The feeding activity causes a spiny gall to form on the affected witch-hazel. Winged aphids develop inside the spiny galls, then leave and fly to birch. This generation gives birth to a scale-like generation, which hibernates on birch until the following spring. At bud break the scale-like aphids feed on the new leaves, causing them to form corrugated galls. When the aphids mature into winged adults, they migrate back to witch-hazel.

## Birch Spiny Witch-hazel Gall Aphids-*Hamamelistes spinosus*

**Photo by Colin Massey University of Arkansas Cooperative Extension**

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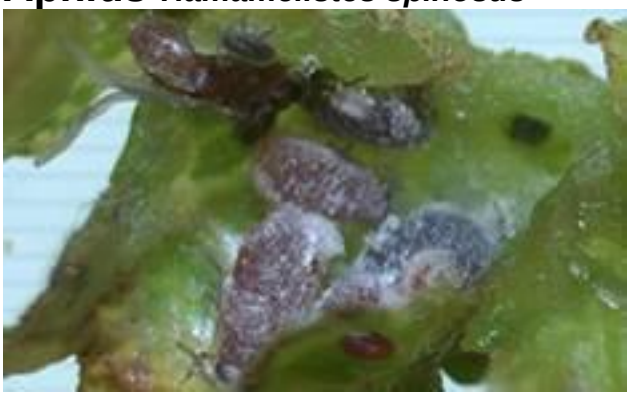

**Photo by Sherrie Smith, University of Arkansas Cooperative Extension**

## Birch Spiny Witch-hazel Gall Aphids-*Hamamelistes spinosus*

**Photo by Sherrie Smith, University of Arkansas Cooperative Extension**

## Peaches and Nectarines

Leucostoma Canker is a serious disease of peach, nectarines, and sweet cherries. It is also known as Perennial Canker, Cytospora Canker, or Valsa Canker. Symptoms on small twigs begin as sunken, discolored spots, usually around leaf scars or winter killed buds. The lesions often have alternating zone lines. With age the lesions darken and begin to exude amber gum. Cankers on main branches and crotches are typically elliptical with large amounts of oozing gum. Cracks open in the infected bark showing blackened tissue beneath the bark. During the growing season the lesion may develop a callus around it as the tree tries to wall off the infection. However, the fungus invades the tissue again when the tree is dormant and cannot actively resist infection. Management of Leucostoma is based on cultural practices to prevent canker formation. Good site selection is critical. Deep, well-drained soil and good air circulation help limit disease. Training of young trees during the first season to prevent narrow crotch angles helps prevent predisposing conditions for the disease. Good borer control is very important as the insects allow entry points for the fungus. Cankers on large limbs and trunks should be removed in midsummer and burned. All diseased bark surrounding the canker and 3-5cm of healthy tissue around the canker should be removed. Tools must be dipped in alcohol or a 10% bleach solution between cuts. Removing cankers should only be attempted when dry weather is expected for 3 days in a row.

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## Peach Leucostoma Canker-
***Leucostoma spp.***

**Photo by Sherrie Smith, University of Arkansas Cooperative Extension**

## Peach Leucostoma Canker-
***Leucostoma spp.***

**Photo by A.L. Jones, APS Image Library**

## Brown Rot of peach/nectarine/plum

Brown Rot is one of the most serious and pervasive fungal diseases of stone fruits. Brown rot attacks peaches, nectarines, apricots, cherries, and plums. Two species of Monilinia have been identified as causative agents in the United States: *Monilinia fructicola,* and *M. la*xa. Monilinia causes twig and blossom blight in early spring. Flowers turn brown and become a gummy mass. The infection travels down and can girdle the twig. Lens-shaped lesions can form on branches and the trunk. The infected tissue becomes covered with grayish-tan spore mass that provides secondary inoculum for additional infections. Brown rot appears on ripening to mature fruit as a rapidly growing, firm brown decay. The fruit becomes covered with the grayish-tan spore masses and eventually mummifies on the tree. Immature fruit that is infected remain on the tree and mummify also.

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Since Monilinia overwinters on mummified fruit, twigs, and cankers, sanitation is very important in the home orchard. However tedious a procedure, it is helpful to clean up as much infected tissue as possible. Homeowners may use Ortho Home Orchard Spray, or Bonide Fruit Tree Spray, or Hi-Yield Captan 50WP, or Bonide Captan 50WP, or Spectracide Immunox, or Bonide Fung-onil Multipurpose Fungicide Concentrate. Commercial growers may use Abound, or Quadris Top, or Topguard, or Pristine, or Captan, or Indar, or Eagle, or Fontelis, or Propimax, or Tilt, or Scala, or Gem, or Fontelis, Adament, or Ziram Granuflo. Timing of the first sprays is of the utmost importance. Begin at pink bud in the spring and follow label for repeat sprays.

## Peach Brown Rot-*Monilinia fructicola*

**Photo by Sherrie Smith, University of Arkansas Cooperative Extension**

## Peach Brown Rot-*Monilinia fructicola*

**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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