

Quick Facts

- Ash plant bug is one of the most common insect pest of shade and nursery trees in our area.
- It is often difficult to see ash plant bug, but their damage is very distinctive: Yellow discoloration and brown spotting of the leaves.
- Control is only effective if done as a preventative measure or while adult Ash plant bugs are still present.

Symptoms and Effects

Premature leaf drop, ranging from a few leaves to complete defoliation, together with a burned looking appearance, stippled or distorted leaves may be the work of ash plant bugs. While they do not kill trees, infested trees look unsightly, grow more slowly, and may exhibit dieback of small branches. Trees that are repeatedly attacked will become weak and thus susceptible to other parasites, particularly borers. The ash plant bug is one of the most common insect species associated with shade and nursery trees in Ohio. All types of ash trees are susceptible, but no other species are attacked. Ash plant bugs are sucking insects, which pierce plant tissues and feed on cell liquids. Their saliva is toxic to the plant cells, and a small area around the feeding puncture becomes bleached because of the destruction of chlorophyll. Light to moderate feeding causes yellow stippling and brown spotting of the leaves. Extensive feeding causes tissue death - brown curled areas on leaves that appear burned. To distinguish ash plant bug from various leaf diseases, look for the small varnish-like brown or black excrement spots (frass) left on the underside of leaves. Ash trees grown in open, sunny sites are the most susceptible to plant bug attack. Small, newly transplanted or stressed trees are particularly

prone to severe damage. There are two generations produced each year. The spring generation does the most noticeable damage because the insects prefer the young succulent tissue. The leaves become damaged even before they are fully expanded. In addition, oviposition (egg-laying) punctures may permit diseases to enter the tree. Because populations usually continue to build on a given tree over time, a recurring problem may require remedial action.



Life Cycle

Although a number of different plant bug species are involved, their life cycles are similar. Ash plant bug eggs overwinter in small twigs and branches on the tree. The eggs hatch shortly after the buds open in the spring. Immature plant bugs (called nymphs) begin feeding immediately on the new shoots, petioles (leaf stems), and developing leaves. Within three to four weeks the nymphs mature, mate, and begin laying eggs. These eggs hatch in seven to ten days. The second generation feeds from early summer until the first heavy frost. Eggs laid in July and August don't hatch until the following spring. Adults are slightly under 1/4 inch long, varying in color from pale yellow marked with brown to almost black. They are extremely active insects, which scurry undercover or fly away when disturbed. Because of their shyness and quickness, plant bugs are often overlooked. Plant bugs' characteristic feeding damage always signals their presence.

Cultural Control

Keep trees in a vigorous growing condition. Proper fertilization with slow release multinutrient fertilizers and proper watering helps a tree withstand plant bug damage. Mulching the area directly under trees is a good way to reduce tree stresses that are induced by competition with lawns. For small trees, forceful stream of water will remove and kill many nymphs; however, adult plant bugs can return to the tree.

Chemical Control

When using insecticides, it is extremely important to always read, understand, and follow the specified label rate. To control ash plant bugs with an insecticide, make the application when leaves are expanding or when damage first appears. A treatment will only be effective if it is done when insects are present. Treatment is most effective when temperatures are above 55°F and below 85°F. The most commonly used insecticide is Orthene (acephate), but Sevin (carbaryl) and diazinon are also effective. After assessing your site and plant health your Sherdec Arborist can make specific recommendations regarding treatment for your important landscape plants.