

Aphids

Biology:

Developmentally, aphids are one of the more intriguing insects. Most aphid species are able to undergo asexual reproduction. Because of this, during the growing season nearly all aphids are females. Males occur only during the early spring or late summer/fall. Another unique characteristic is that aphids give birth to live young, young that already have their young nearly ready to be born! By analyzing eyespots, you can usually find three generations of aphids within a single female because the daughter has the granddaughters inside of her already. Although difficult, aphid species can be differentiated by using a key, a magnifying lens, and looking at key body parts. (see diagram)

Where and when to find them:

Aphids are literally everywhere! There is a species of aphid that will feed on any plant species you try to grow in your garden or utilize in your landscape, guaranteed. When you are scouting for aphids, you should primarily be looking in actively growing areas of the plant. Further, you need to lift up the leaves and look close, as aphids most often feed on leaf undersides and are less than 2 mm long.

Most aphid populations develop from migrants that ride the wind from the south in the spring. Due to the short generation time, damaging populations can occur nearly anytime over the course of the year, depending on weather patterns, predator populations, and insecticidal use. With aphids, if you see damage - stunting, chlorosis, misshapen leaves, etc... - you are too late. They feed by inserting their needle-like proboscis into plant tissue and sucking out plant juices. Damage occurs to plants from this direct physical damage and also from chemicals that aphids inject into the plants. Another way aphids harm plants is by disease transmission. Aphids are the only means of plant-to-plant transmission of most viral diseases.

If they're everywhere and can reproduce so fast, how can I possibly control them?

Nature tends to take care of things in its own way and aphids are a very good example. Aphids would be overrunning everything if they went unchecked. However, they are on the low end of the food chain. Most aphid damage is termed secondary damage, because it occurs after an insecticide has been utilized to kill another insect. The insecticidal application kills all of the aphids' predators and parasites, as well, leaving no natural checks for the burgeoning population.

Aphids can cause severe damage to plants, stunting them, causing loss of production, shorter life in perennials, or killing annuals. High aphid populations in sweet corn at tasseling may result in very high losses, or at flowering/fruit set in other crops. Aphid damage to young perennials can also be very severe, causing irreparable harm to many plant species. For these reasons, you should scout for aphids on your plants and utilize controls when appropriate. They are easily controlled with insecticidal soaps, superior oils, and most insecticides.

