

Fruit and Berry Pests

Which insects will chew holes in your raspberry leaves? Which bugs snack on apples? Here is a primer of the most common fruit and berry pests.



An integrated pest management (IPM) plan can provide home gardeners the techniques to raise quality fruit with a minimum use of pesticide.

Many homeowners grow a variety of backyard fruits and are rewarded for their efforts. The diverse nature of the home landscape tends to keep insect and disease populations at lower, more manageable levels. Successful home fruit growers should not have the goal of killing every insect and eliminating every disease, but rather aim to produce sound, attractive fruit while accepting a small amount of damage.

Pest control is best achieved through a variety of preventive measures, including selecting cultivars best-suited for your area that resist pests (and diseases), good cultural practices (such as pruning and fertilization), sanitation, correctly identifying problems and effectively applying pesticides when needed.

Overwintering and Early Season Pests

Aphid populations can build up throughout the spring, and may result in sticky honeydew, leaf curling and even shoot malformation. Aphids are commonly associated with vigorous growth on young trees.

Scales are insects with protective hard shell-like coverings that suck juices from trees and vines. Like aphids, their feeding may also result in honeydew and heavy populations may weaken or even kill twigs and branches.

Especially on apples and strawberries, spider mite populations can build up by late spring or early summer as temperatures rise. Mite feeding causes leaf speckling with visible webbing. In most sea-

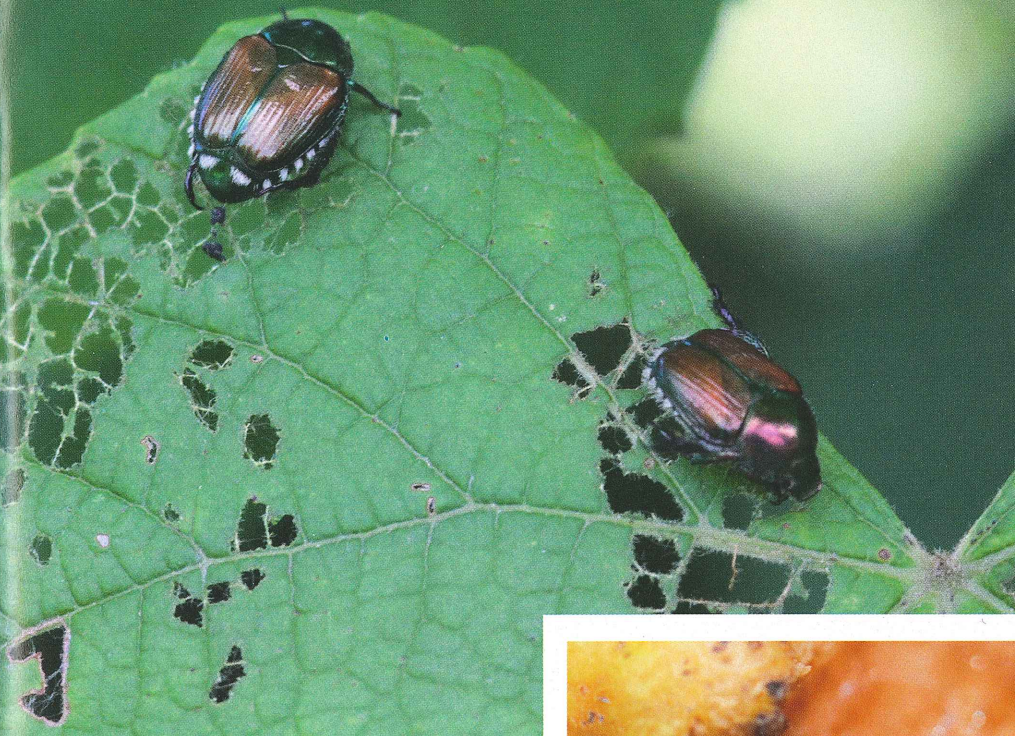
sons, natural enemies keep spider mites in check. If spraying is needed, avoid broad spectrum pesticides that also kill beneficial insects.

For these and other early season pests, a preventive dormant treatment can be very effective and will not harm beneficial insects. If aphids, scale or spider mites were a problem the previous year, spray with horticultural oil at the dormant to delayed dormant stage (when buds swell). The oil smothers the pests and their eggs while not injuring the plants.

In-Season Foliar and Fruit Pests

Numerous beetles, flies and moths lay eggs that hatch into larvae (worms) that attack developing fruit. Apples and stone fruit probably require the most preven-

Japanese beetles will devour grape leaves from the middle outward, avoiding the veins, leaving them looking like skeletons.



tive applications of pesticides to protect the fruit from both insects and diseases. Multipurpose fruit sprays are convenient because they contain both fungicides and insecticides. However, when pest damage is seen, it is often too late to treat with successful results for that year's crop.

Most home strawberry, grape, blueberry, blackberry and raspberry plantings will not require a preventive schedule of pesticides if sanitation and appropriate cultural practices are followed, which reduce their need. When using any pesticide (organic or synthetic), always read and follow label instructions.

As a foliar pest, the Japanese beetle is quite recognizable with its shiny, metallic-green and copper coloration. Beetles emerge in late June or early July and feed on foliage and fruits of numerous plants, but grape (cultivated and wild) is one of the preferred hosts. The larvae are grubs and are serious pests of grass roots. High populations will skeletonize leaves, so preventive sprays may be warranted. With small plantings, either physically remove them or spray as needed.




Moisture-loving slugs especially damage strawberries, but also fruit like this pear. Be sure to harvest often, and do not delay gathering fallen fruit.

Slugs are not insects, but are an annoying problem when they feed on strawberries and fallen fruit. Be sure to keep berries picked and fruit gathered. Slugs thrive in moist conditions, so control weeds, avoid thick mulch and reduce moisture under strawberries to keep insects, slugs and diseases from developing. Slug baits are available, if needed.

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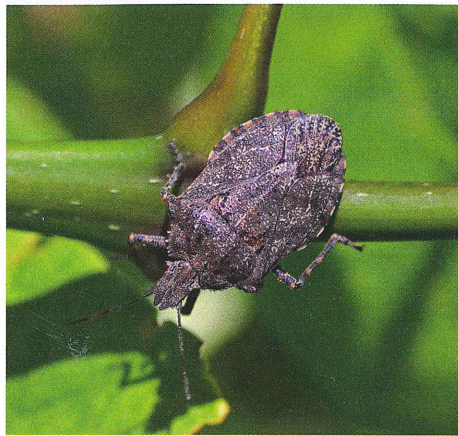
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Emerging Pests

Two new invasive pests that attack tree and small fruits are now found in our region. The first is the very mobile brown marmorated stink bug, which damages many types of ornamentals and food crops, especially grapes and tomatoes. It has marble-like coloration and the typical shield-shape of stink bugs. On tree fruit, feeding with its piercing-sucking mouthparts causes discolored, corky areas under the fruit skin. They also can be a nuisance pest invading homes in autumn.

Another new pest to our area is the spotted wing drosophila, which attacks thin-skinned fruit just prior to harvest. Contrary to other fruit flies, which are attracted to rotting or damaged fruit, this pest lays its eggs directly into intact fruit. The eggs hatch and the maggots destroy the fruit, especially raspberries, blackberries, blueberries, cherries, strawberries and grapes. There is active university research and monitoring underway to better understand this emerging pest problem.

Fruits of Your Labors

Backyard fruit trees might not be for everyone. Each homeowner needs to determine the level of input they need to prevent and protect their fruit from the ravages of insects (and diseases), and this often requires the use of pesticides. However, there is a definite sense of accomplishment and satisfaction in growing and enjoying your own fresh fruit. What could be better than strolling in your own yard and enjoying a tree-ripened apple with its sweet juices running down your chin! 🍏

Douglas A. Spilker, Ph.D., is a consulting ornamental plant pathologist and entomologist, garden writer and lecturer. Dr. Doug can be reached at askdrdoug@gmail.com.



TOP LEFT: The brown marmorated stink bug has become a serious fruit pest throughout much of eastern United States, but also can be a nuisance pest invading homes in autumn. **TOP RIGHT:** Spotted wing drosophila is a new pest. **ABOVE:** Ladybug nymphs resemble little black alligators. Since they eat aphids, nymphs are friends of gardeners and should be protected.

Stock Market

Growing backyard tree fruit can be enjoyable, but routine maintenance like spraying, thinning, pruning and harvesting can be challenging. There is a worthwhile trend toward planting smaller trees, with many cultivars available with either dwarfing or semi-dwarfing rootstock. For example, mature dwarf apple trees do not reach over 10-12 feet, and semi-dwarf trees commonly only reach 15-18 feet. Not only do they take up less yard space, but most tree maintenance can be done safely from the ground. These smaller trees commonly bear fruit earlier than standard trees, but the dwarfing attribute does not affect fruit size or quality. Be sure to study nursery catalogs for cultivars recommended for your area.