

How To Manage Houseplant Pests

By Leah Rinaldi

Houseplants are a great option for vegetation if you do not have any outdoor space, or if you simply like to be surrounded by greenery during the cold months. Pests of houseplants can be a real pain, however, and can even threaten the existence of your favorite potted companions. Luckily, we have some great tips on how to manage some of the most common pesky house invaders.

Most common pests:

- **Greenhouse Whitefly:** whiteflies suck the sap out of plants. Plants infested by greenhouse whiteflies may drop leaves prematurely and have reduced vigor. They most commonly infest tomatoes and poinsettias.
- **Mealybugs:** mealybugs also suck sap from plants, while at the same time excreting a sticky honeydew. Mealybugs tend to prefer such plants as coleus, cactus, lantana, hoyo, jade, and poinsettia.
- **Spider Mites:** spider mites feed on the plant's sap and produce small wounds on the plant's exterior. The leaves tend to look slightly off in color and can appear gray or bronze. Spider mites also web, so large infestations may have very visible webs. Ivy, dracaenas, figs, hibiscus, and Norfolk Island Pine, are among the plants spider mites prefer.
- **Aphids:** aphids, also sap feeders, can cause wilting and distortions of new growth with big enough populations. They are most commonly found on ornamental peppers, hibiscus, chrysanthemums, and many garden plants and herbs.

Prevention:

- Check all plants thoroughly before purchasing them and bringing them into the house. Keep them separate from other houseplants for the first few weeks to avoid introducing new pests to the other plants.
- Make sure all windows are screened because some pests, like aphids, are found on both indoor and outdoor plants, and can migrate between the two.

Control:

- **Greenhouse Whiteflies:**
 - Young whiteflies can be hand picked off leaves, or sprayed with insecticidal soap, (e.g., Oil-Away™ or Eco-Oil™). The young whiteflies are most commonly found on the underside of the lower leaves. Make sure when using an insecticidal soap, to avoid

breathing in the mist.

- Adult whiteflies can be trapped using yellow colored sticky cards or tape. Sticky cards can be purchased at various gardening stores or websites including www.wormsway.com, which has two yellow sticky card products, one of which is biodegradable. Sticky cards can also be made at home by applying a thin layer of one part Vaseline and one part dishwashing soap to a yellow board. Face the boards or the tape toward the infested plant, but away from the sun (as to not melt the adhesive). The cards must be washed or replaced periodically to get rid of debris and other insects.
 - Vacuuming is also a good solution that is best used on smaller plants. Vacuuming works best when done in the early morning, or at other times when the air is cool. This is when the insects are most sluggish and easiest to catch. Once caught, put the bag containing the vacuumed bugs into the freezer overnight to kill them.
- **Mealybugs:**
 - Individual mealybugs can be killed by rubbing them off the plant with your fingers or a cotton swab. Dipping the cotton in alcohol first is extra effective. This tactic works best on smaller populations and will not get rid of mealybugs that are in the root-feeding stage. If you do choose to use alcohol, make sure you test a small area on the plant to insure it will not become injured.
 - Insecticidal soap is useful for killing the mealybugs that feed on the plants below the soil line. Mix the soap as a drench according to the directions on the bottle. Then pour it slowly on the plant and soil. Let the plant sit in a soap filled saucer until the soil is sufficiently wet. This can be repeated a week later. Check the root ball every week to make sure the mealybugs are disappearing.
 - Mealybugs can be managed with biological controls. The mealybug destroyer *Cryptolaemus montrouzieri*, or crypts, are a type of orange lady beetle that feed on mealybugs.
 - **Spider Mites:**
 - Early detection of spider mites is key to spider mite management. To detect spider mites, simply take a piece of white paper or cardboard and strike some of the plant foliage on it. The spider mites will be visible and can be seen walking across the paper.
 - Severely infested plants should be disposed of whenever possible, since cross infestation is particularly common with spider mites.

- Spider mites do not survive rainy weather. Dosing the infested plant with a forceful jet of water (from a hose or a kitchen sprayer) can perform the same function as rainy weather. Regular spraying is usually required to keep the spider mites under control. One advantage to spraying is that it can increase humidity, which favors the needs of beneficial spider mite predators.
- There are a number of biological controls that can be used against spider mites. Predatory mites of the family *Phytoseiidae* are important natural predators of spider mites and can completely eliminate spider mites under certain conditions. They should not be used, however, for heavy indoor infestations or individual infestations. For these situations the lady beetle, *Stethorus punctillum*, is the most suitable.
- Insecticidal soaps and vegetable based horticultural oils can be used to kill spider mites. Insecticidal soaps are most useful in the warm season while horticultural oils work well in the fall and spring. Infested plants should be covered thoroughly with the oils and soaps since they work by contact only.

■ Aphids:

- Spraying with water is a useful method of controlling aphids as well as spider mites. Spraying may need to be done every few days in order to keep the aphid population under control. Adding a small amount of dishwashing soap to the water spray can be particularly effective. It is advisable to do the spraying early in the day so that the leaves are dry by nightfall; this can help prevent disease in the plant.
- Prune or pinch off heavily infested leaves or sections of the plant. While it does not eradicate the problem, pruning can provide a temporary solution until natural predators can attack the aphids.
- Aphids are very sensitive to nitrogen levels in plants. An aphid outbreak can be triggered by quick-release fertilizers that are high in nitrogen levels. Avoid encouraging fast plant growth with such fertilizers. To control aphids, make sure you use a slow release fertilizer with moderate nitrogen levels.
- The two most common biological controls for aphids are the lady beetle, *Hippodamia convergens*, and the green lacewing, *Chrysopa rufilabris*.
- An insect killing fungus, *Beauveria bassiana*, is also known to manage aphids. Two common strains are commercially available under the product names Naturalis-O and Botanigard. Spray the infected plant thoroughly with the fungus, making sure as much of it comes in contact with the insects as possible. It may be necessary to repeat the application a few times in order to effectively control the aphids.



Identifying Your Houseplant Pest

Greenhouse Whiteflies:

- Whitefly eggs are found on the underside of leaves in clumps of 200 to 400 eggs. The eggs are clustered together in circles and are a greenish-white cigar shape. Once hatched they become translucent.
- In their adult stage the greenhouse whiteflies have wings and measure approximately 1/16 in. or 1.5 mm.
- Three or four days after emerging from the egg they lose their legs and tightly attach themselves to the leaves like a scale.

Mealybugs:

- Mealybugs have three stages: eggs, nymphs, and adult.
- They spend about a week in the egg stage and about four weeks in the nymph stage.
- Female adults are soft-bodied sucking insects, while male adults sprout wings.

Spider Mites:

- Spider mites are more closely related to spiders than insects. They have four pairs of legs, a single oval body region, and no antennae. They also have the ability to produce a fine web.
- Spider mites are very small, reaching a mere 1/50 in. (0.4mm) in length when fully matured.

Aphids:

- Superficially, aphids resemble human lice, although they are of no relation.

For a cited version, see:

www.beyondpesticides.org/alternatives/factsheets