



HOUSE PLANT CARE: COMMON PLANT PESTS

If your plant looks as though it is sprouting tiny cotton balls, or if your feet stick to the floor when you walk close to the plant, you probably have an insect infestation. Common plant pests like aphids, mealybug, and scale use piercing-sucking mouth parts to ingest the plant's sap, weakening or destroying the plant. The sap these insects take in is excreted by them as a clear, sticky liquid that, with a large insect population, can coat the leaves and stems of the plant, eventually to the dripping stage.

All green plants are susceptible, although certain pests favor one type of plant over another. A healthy plant, growing in a favorable environment is more resistant than a plant that is under stress from poor cultural care. Keeping plants clean (misting or showers, removal of dead foliage, etc.) will also help prevent some pest problems, especially spider mites. When you water, prune, or repot your plants, take some time to look them over for pests, so that you can treat them before the problem becomes critical.

Five common insects to watch for are described below, along with suggested treatments in order of environmental safety. Recommended treatments range from hand-picking or soapy-water baths to soil-applied systemic pesticides. The severity of the infestation is a factor in determining which method of treatment to use. For mild infestations or for treating only a couple of plants, some of the home remedies will usually suffice. If these are unsuccessful, and a pesticide is needed, read chemical labels carefully, as some plants are easily damaged by use of the wrong chemical or misapplication. Soaps, oils and chemical pesticides may do some cosmetic damage to certain plants, so you may want to do a test on a small area of the plant. Damage may take two or three days to show up.

Isolate infected plants as soon as an infestation is discovered. Wash your hands, pruners, or other implements, after handling an infested plant. It is easy to spread a problem from one plant to another.

It is important to identify the pest before grabbing a pesticide, as unwarranted chemical use is expensive, hazardous to you and to the environment, and may contribute to the insect's resistance to the pesticide. Recognizing plant pests and catching an infestation at an early stage will greatly increase the appearance and life span of your plants.

APHIDS are oval or pear shaped soft-bodied insects, usually green, but also yellow, black, brown, pink, gray or white. Most are wingless, in size up to 3/8". They reproduce approximately every two weeks in warm season, from 1 to 30 offspring. Found in large numbers on flower buds and newer growth, they weaken plants and destroy flower buds by sucking sap from the plant. The sticky secretion ("honeydew") is a good medium for the growth of brown sooty mold, which can interfere with photosynthesis. Aphids do not usually kill a plant, but cause cosmetic damage, and can spread plant diseases. Their presence is often signaled by their droppings or by their casts (skins shed during molting).

- Hard spray of water may dislodge aphids or hand-remove with cotton swabs dipped in rubbing alcohol
- Predator insects: Lady bug beetle larvae
- Insecticidal soap or horticultural oils will easily kill aphids
- Many chemical pesticides are labeled for use on aphids.



MEALYBUG is an oval, wingless soft scale insect with a white cottony wax coating. They can be as large as 1/4" in size, and are usually found on the undersides of leaves, in leaf axils, or on twigs and branches. Mealybug eggs, found in cottony egg sacks resembling the tips of cotton swabs, hatch every 6 to 10 weeks, with 1 to 100 offspring. Mealybug can dwarf a plant, cause wilting, and eventually kill the plant. They also produce "honeydew", a sticky secretion on which brown sooty mold will grow, interfering with photosynthesis.

- Hand-remove with cotton swabs dipped in rubbing alcohol, prune off heavily infested plant parts
- Predator insect: Lacewing (*Chrysopa rufilabris*) or Pirate bug (*Orius insidiosus*)
- Insecticidal soap or horticultural oils (mealybug hide, so repeat at regular intervals)
- Many chemical pesticides are labeled for use on mealybug



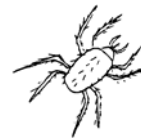
SCALE are soft or hard bodied insects in shades of brown, as well as green, white, gray or black. Soft scale may be as large as 1/4", with hard scale up to 1/8". Mature scale appear as round or oval bodies adhered to the undersides of leaves, or on plant stems. The adult scale attaches to the plant and sucks the sap. When mature, the female produces up to 1000 eggs, then dies, often leaving the now empty shell still attached to the plant. The immature, nearly invisible nymphs ("crawlers") move about the plant and are the most vulnerable to soap, oil, or pesticide sprays. Scale can weaken a plant, causing yellowing or stunted growth, and eventually death. Their secretion ("honeydew") is a good medium for the growth of brown sooty mold, which interferes with photosynthesis.

- Hand-remove scale, wiping the spot where it was attached with a cotton swab dipped in rubbing alcohol
- Predator insect: Pirate bug (*Orius insidiosus*) or Lacewing (*Chrysopa rufilabris*)
- Horticultural oils (repeat at regular intervals to catch "crawlers" as they emerge)
- Many chemical pesticides are labeled for use on scale



SPIDER MITES are spider relatives, usually less than 1/16" in size, and oval in shape. The most common house plant pest is the two-spotted spider mite, a pale yellow to green in color, with many black bristles on body and legs. Also common is the red spider mite. They are usually found on the undersides of leaves, where they spin fine webs for protection. Females lay 80 to 100 eggs every 2 to 3 weeks, which appear as very fine white salt crystals. A bad infestation can be spotted when webbing begins to cover the upper surfaces of the plant, stretching from leaf to leaf and stem to stem. Leaf damage is a fine stippling, where the chlorophyll has been sucked out of the leaf, the whole leaf eventually turning brown and drying up. They plant will die from leaf loss, or from disease transmitted by the mites.

- Hard spray of water will remove webs, regular mistings with water will discourage re-infestation
- Predator insect: *Phytoseiulus persimilis* or Pirate bug (*Orius insidiosus*)
- Insecticidal soap (gently wipe undersides of leaves with sponge dipped in soapy water to remove eggs) or horticultural oils
- Chemicals labeled as miticides



THRIPS are tiny winged insects, usually less than 1/16" in size, with a long, slender body. Eggs usually hatch in 3 to 4 days, maturing within about 20 days. Adults and nymphs scrape plant tissue and suck the juices released. Damage to plants includes browning of flower petals or leaf discoloration or deformity. The presence of thrips on flowering plants is often signaled by "pollen trails", as these insects also feed on pollen. The "Ficus" thrips (Cuban Laurel Thrips) produces a tell-tale folded leaf, with eggs laid inside the fold. Thrips do not usually kill a plant, but their activities may introduce viruses that can kill.

- Hard spray of water may dislodge thrips, garlic plants or garlic spray may repel thrips; blue sticky traps near plants may trap insects.
- Predator insect: Pirate bug (*Orius insidiosus*), *Amblyseius cucumeris*, or Lacewing (*Chrysopa rufilabris*)
- Grow regulators or other chemicals labeled for Thrips control.



WHITEFLY is a tiny white flying insect, less than 1/8", resembling a tiny white moth. They are usually found on the undersides of leaves. Eggs (20 to 25 per female) mature in two months, and the oval nymphs appear as flattened almost transparent ovals attached from beneath by waxy fibers. Both nymphs and adults suck the sap, causing yellowing and leaf drop. The adult whitefly is difficult to control since it can readily fly from plant to plant.

- Agitate plant outside to dislodge adult whitefly, then quickly bring plant inside; remove eggs on undersides of leaves with a damp sponge
- Whitefly traps (sticky yellow cards trap adults attracted to the color)
- Predator insect: *Encarsia formosa*, *Delphastus pusillus* or Lacewing (*Chrysopa rufilabris*)
- Insecticidal soap or horticultural oils will kill nymphs
- Orthene or any pyrethrin chemical

