



**Enjoy your
indoor
house plants
this winter
by keeping
them pest free**

Now that many of us are settled in for winter, there is more time to focus on the plants we have indoors.

A really good pest scouting of the plants and identifying any pests, be they insect, arachnid, or various diseases, is the best start to indoor plant care. If a pest is identified, quarantine that host plant until the pest can be controlled and the plant is deemed pest-free, then move them to their winter location. This will help prevent transferring the pest through the whole collection of plants indoors.

Here is a short list of commonly problematic pests in our warm, dry, indoor winter environment of Wyoming. Conditions indoors, warm or cool, moist or dry, affect the success or failure of potential indoor plant pests.

Spider mites

The **twospotted spider mite** is one of the most common indoor pests. They can be a problem in drier outdoor conditions, and they may make their way indoors on a gardener's sleeve, pant leg, or even on a plant. Mites prefer hot, dry conditions and thrive on water stressed plants in warm locations. Keeping plants well-watered is one way to combat them. Even giving affected plants a good shower to wash off many of the tiny arachnids and increasing

Humidity Tray

Placing a humidity tray under a plant or near a plant grouping can create an inhospitable environment for spider mites. (The increased humidity may also be beneficial to humans as well.) A humidity tray can be a saucer or tray with rocks, gravel, or marbles up to a level lower than the rim of the container. Fill with water to a level just below the top of the stones so moisture evaporates but the plant can't take up water or is not sitting in standing water.

the humidity of the plant canopy can go a long way towards minimizing an infestation.

If the mite population is to the point damage is seen on plants, there will be yellowing of the leaves in a stippling pattern caused by their piercing, sucking feeding. There will be webbing, usually on the underside of the leaves, and there may be little black spots of excrement in the webbing. This level of infestation may warrant chemical control. These include miticides, insecticidal soaps, or products like neem oil.

Fungus gnats

The **fungus gnat** is likely the most common pest of indoor house plants. The gnat is often mistaken for a fruit fly and looks like a small house fly. Several of them would fit on a typical pencil eraser. The adults are mostly a nuisance and cause few problems for a plant. The immature form of this insect—larvae, or maggots, are a much bigger concern; they live in the potting soil and feed on the decaying roots of overwatered plants. They can also be found on plants that are under-watered and then overwatered. The large fluctuation between watering can cause roots to decay. They can easily be introduced to a household through infested commercial potting soil or new plant purchases.

The best solution is to determine how much water each individual plant needs and then give them that much once a week or on a schedule that works for you. If you find the plant is dry when you go to water it after a week, then give it a bit more water than you gave it the week before. If you find that the soil is still moist on the top surface, reduce the amount you give it so the soil surface dries out before you water a second time. If given too much water and they do not have roots capable of surviving in saturated water, the roots will begin to decay and become a

food source for these tiny white worms. Maintaining a consistent watering schedule will cause the larvae to fail, and the life cycle of this pest will be interrupted.

For more serious control measures, a systemic insecticide can be applied to the soil that can eliminate the pests but is often offensive-smelling to humans. Insecticidal soaps can work but may add to the moisture in the soil until the soil is allowed to dry. Some species of beneficial nematodes prey on the larvae. They can be purchased and watered into pots – care must be taken in handling and applying nematodes. They are living creatures and will be killed if allowed to dry out too much, etc. Repeated applications may be needed. Trapping with yellow sticky traps works for adults. The use of a cut quarter or half a potato placed on the soil surface may attract the larvae that can then just be removed from the soil surface and discarded.

Aphids

Aphids can also be pests on indoor plants. Normally, these are brought indoors on plants that have enjoyed the summer season outdoors. A good inspection before the plants are brought indoors followed by an intense shower of water to remove the pests will help. Aphids also have piercing and sucking mouthparts, which they use to drain liquids and nutrients from plants. This activity can actually lead to another problem. Honeydew, their excrement, is very high in sugar content. It leaves a shiny, sticky surface below where the insects are feeding and can be the perfect environment for a fungus called black sooty mold to grow. The sticky surface may be the giveaway there is an aphid problem. It will potentially coat any surface below the aphid feeding sites.

Plants may benefit from a systemic insecticide applied before being moved indoors. Insecticidal soaps can work but may need to be repeated as these insects reproduce every seven to 10 days.

Scales, mealy bugs

Scales and **mealy bugs** are two more insect pests that also have piercing, sucking mouth parts. They can both leave honeydew messes below them, but they each have a covering on their bodies that helps protect them from control measures such as insecticidal sprays. These insects can be cleaned off plants without using insecticides by using cotton swabs and rubbing alcohol. This method works well in conjunction with a second method, such as a systemic insecticide or consistent treatment of a contact insecticide. They can reproduce rapidly because they lay multitudes of eggs.

Diseases

Diseases are another problem you may see on your indoor plants; however, since we have a typically dry environment, we don't have as many problems with diseases as seen in more humid locations. Getting a handle on watering practices and keeping the water off the foliage will minimize the effects of many fungal and bacterial diseases. A periodic cleaning of the leaves will minimize disease like sooty mold and also give you the opportunity to inspect the plant for other pests and treat as appropriate before the problem becomes overwhelming.

Keeping the watering consistent week to week will minimize the potential for root rot and keep plants healthy enough to fight off most pests.

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Donna Hoffman is the University of Wyoming Extension horticulture educator in Natrona County where she was a nine-year 4-H member. In the summer between seventh and eighth grade while on a 4-H exchange trip, she spent \$2.98 on a sale bin book about the care of houseplants, which she still has. She has been diagnosing plant problems ever since. She can be reached at (307) 235-9400 or dhoffman@natronacounty-wy.gov.