

Fungus Gnats and Houseplants
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Identification of household insects is one of my roles in Extension, along with answering garden and landscape questions. During winter, fungus gnats is one insect encountered in homes.

While I am a horticulturist, when I have questions outside my area of expertise I turn to University specialists. Nebraska Extension is the front door to the University of Nebraska at Lincoln, our land grant university. For insects, I consult with entomologists as needed.

Fungus gnats are fairly harmless and considered a nuisance pest. Adults are delicate, one-eighth inch long black flies seen flying around houseplants or lights and windows near houseplants.

Adults do not bite pets or people and do not harm plants. Females can lay up to 200 eggs in their short lifetime of three to four weeks. They are attracted to moist soil and lay eggs on the potting mix of plants.

Larvae are wormlike and translucent with black heads. They live in the potting mix and feed on algae and fungus that grows in too wet growing mediums. They may feed on plant roots but are considered a minor houseplant insect.

High organic matter potting mixes, fertilizers and overwatering, especially during fall and winter when indoor plants are not actively growing, encourages population growth.

To reduce fungus gnat numbers, avoid overwatering plants and allow the mix to dry between watering. Larvae tend to remain in the upper two inches of soil, so allow at least this much of the mix to become dry before watering again.

Ensure good drainage by using containers with holes and a well-drained potting mix. After watering, pour excess water out catch basins. If a plant has not been repotted recently, the mix may have broken down, becoming compacted and having more organic matter making repotting helpful.

To trap fungus gnat adults, place yellow sticky traps near the soil surface or on the container edge. Such traps are available at garden stores. Trapping helps monitor for insects and reduce numbers when females are trapped prior to egg laying.

To monitor for larvae, place a one-fourth inch thick slice of potato on the surface of the potting media. Look at the underside of the slice for signs of larvae and discard these to help reduce larvae.

If fungus gnats persist after repotting and reducing watering, insecticides labeled for indoor use on houseplants may be needed. Do not apply insecticides to leaves. Apply them to the surface of the potting mix to kill adults as they emerge.

According to Colorado State University, the most effective insecticides are those that persist. They list a number of pyrethroid-based insecticides that contain the active ingredients bifenthrin, cyfluthrin, permethrin, and lambda-cyhalothrin.

Short-persisting contact insecticides like those containing pyrethrins, insecticidal soaps, oils, and neem, do not provide sufficient long-term control and require repeat applications every couple of days.

The systemic insecticide imidacloprid will kill fungus gnat larvae if applied to the growing medium. This active ingredient is available in a number of houseplant insecticide formulations as granules, slow-release spikes, and in combination sprays. Read and follow all label directions.

Source: Colorado State University