New Feature

THE BUG LADY

ADDING POWER TO YOUR PEST CONTROL PROGRAMS

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IDENTIFYING THE ENEMY - FUNGUS GNATS

You get the call. One of your accounts is being swarmed by plague-sized proportions of tiny flying bugs! You rush to the account to evaluate the situation.

As you walk toward the suspicious plants, you see a fungus gnat! When you think you have them licked, they return to cause frustration. So what are these headache-makers?

There are many species of fungus gnats out there, but they fall into two families of flies - Mycetophilidae or Sciaridae. Adult fungus gnats are small (2.5 millimeters), grayish to black flies that resemble tiny mosquitoes and can easily be seen on yellow sticky cards. The legs are long and slender with antennae usually longer than their heads. Their wings are shades of gray.

Fungus gnats are relatively weak fliers and generally remain near potted plants often running or resting on growing media or foliage. Blaaa, blaaa, blaaa - enough of that taxonomy stuff.

Fungus gnats look like tiny mosquitoes, and are harmless to people but damaging to interiorscape plants.

With fungus gnats, you get a triple whammy! Not only do people hate to see them, but they also can be vectors for disease - that's not good! Vectors are organisms that transmit a pathogen, so fungus gnats can spread diseases from sick plants to neighboring healthy plants.

Fungus gnats vector several different fungal root rots, including Pythium and Fusarium, and even foliage pathogens such as Botrytis. If that's not bad enough, the larva is going to make breakfast, lunch and dinner out of the roots on your plants.

Life Cycle

There's good news, and there's bad news. First, the good news: Adults only live about one week. Now the bad news: In this short time, the female will deposit 100 to 150 eggs. The eggs are laid in strings of three to 40 on the soil surface and can hatch within four days of being laid.

The larvae are clear to creamy-white and can grow to about 5.5 mm long. They have shiny black head capsules. The larvae feed on tasty root hairs in the upper 1 centimeter of the media, then work their way up into the plant stem. The larvae will feed on organic matter as well.

After feeding for approximately 14 days, the larvae will pupate. The pupal case is made of silk and soil debris. In about 3½ days, an adult will emerge from the case. The total life cycle takes two to four weeks.

Shore flies are often mistakenly called fungus gnats. They are small (2 mm), black flies with reddish eyes and gray wings with clear spots. They look like miniature houseflies. Their antennae and legs are very short - a good way to tell fungus gnats from shore flies.

Prevention

What are my control options? Luckily, similar control methods can be used for most of these pesky flies.

Don't overwater. Overwatering is like laying a big steak on the floor in front of a starving dog - they can't resist it. Another way to prevent flies is to topdress pots with sand. This will greatly reduce the number of flies.

Monitoring Methods

Use these monitoring tools to learn if you have an infestation of these flies.

1. Yellow sticky cards: These are small yellow cards with sticky adhesive on both sides. Most commercial nurseries use them to monitor pest population. You can do the same. You can get holders for the cards. You might not want to use them if they will be highly visible or if you are not going to replace them.

They should be monitored about once a week. When insects stick on the cards, they stop moving, making accurate identification much easier. Keep in mind this control will only trap adults, not the larval stage of flies. A practical helpful hint: If you get the adhesive from the cards on your skin, vegetable oil will get it off and leave you with soft hands.

2. The Potato Trap: Cut chunks of potato into pieces roughly 1½-inch square. Place on the surface of the potting media. Leave the potato for a few days, then lift it up. You will quickly discover if you have larva in your soil. ■

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