

THE GRANITE GARDEN

Facing the challenge of keeping our plants alive in spite of rocky soil, deer and other critters...

By Barbara Hosmer

Fungus gnats! These pesky little bugs are in my house ever since I brought a few plants indoors. You can see them flying and jumping on the soil surface of some of my plants, and not every bug spray will kill them.

Only about 1/8 inch long and kind of mosquito-like in appearance, fungus gnats develop in potting soil and reproduce continuously, with a generation completed in a month. The adult gnats, while annoying, do not cause much damage to plants. But the larvae in the soil feed on plant roots and can kill tender seedlings and will cause established plants to decline. Plant symptoms may be sudden wilting, loss of vigor, poor growth, yellowing and foliage loss.

Adult fungus gnats live only 7 to 10 days, but each female lays 100 to 300 eggs, which hatch in about 5 days and feed as larvae for up to 14 days before becoming less destructive adults. They like moist organic-rich plant soil, so the first measure you want to employ is to let your potting soil dry out between waterings. (This works for many plants, but I am trying to grow seedlings that need to stay moist.)

Bug sprays that contain pyrethrins as the active ingredient are helpful in killing the adult gnats. Not all sprays that are for "flying insects" seem to work, so check the labels. A more environmentally friendly method is the use of bright yellow sticky cards that the bugs stick to. Called Tangle-Traps, these cards work on whiteflies and aphids too. I am trying these, but I don't know if they are working fast enough.

To kill the larvae, there are several solutions that you can buy or make at home that will work, but you will need to be persistent in your efforts. If you are facing a major infestation, look for products containing Neem or *Bacillus thuringiensis* var. *israelensis* (H-14).

There is an organic product called Organocide which claims to kill many problem insects including the gnat larvae. The active ingredient is sesame oil. You can find out more on their website at www.organiclabs.com. Wet the soil thoroughly and frequently for it to slow down



the gnat population.

Another remedy I am trying is a recipe from Sturtz and Copeland. Although the adults still need to be trapped on the sticky cards or sprayed with the pyrethrin bug spray until they're gone, I have high hopes that this will be the best long-term "solution."

MIX: one quart warm water with 5-6 drops of anti-bacterial soap, 3 drops of sudsy ammonia and one teaspoon of rubbing alcohol. Pour 1/4 to 1/2 cup into the soil every time you normally water your plants. It may be helpful to slightly moisten the soil first with just water, then pour on the solution.

If you have successfully fought a battle with fungus gnats, perhaps you could share your strategy with the rest of us. Next year I will try to be much more selective about which plants get to come indoors and will start using the soil treatments before the plants move inside!