

## **Treatment of Fungus Gnats in the Home**

**By Jim Douglas**

Fungus gnats are usually first noticed flying around your head. They are small non-biting insects that feed on fungus and can feed on roots in the soil of your house plants. Fungus gnats often move inside when gardeners bring in outside plants to keep them alive during the winter months. All plants brought in from outside should be isolated for three weeks to see if they have any insect problems before being put near any other house plants. Fungus gnats live near the top of house plant soil. When you walk near the plant the adult gnats will fly. In major infestations, adults will be found everywhere. When you water your plants you can often see the minute larva wiggling along on the soil surface.

Fungus gnat larva feed on small roots, and this damages the plant. Many local stores sell products which can be sprayed to kill the adults, but unless the larva are killed they become adults and the cycle starts all over. Spraying of any chemical in the home is a last resort. Spraying in an office building can be annoying and could be dangerous to anyone in the building allergic to the spray. While spraying kills the adults, it generally does nothing to the eggs and even some of the larvae.

In a situation where you control the watering of plants, allowing the top inch of soil to dry out completely will, over time, starve out the gnat population and end the problem. Careful bottom watering of the plants will keep the plants alive, but does not allow moisture into the top inch. Bottom watering works well in the home situation, but it harder to control in an office setting where as many as a dozen or more people are doing individual watering. In the office situation, everyone needs to take common action because one infested plant will soon re-infest all those plants treated.

One of the safest methods of controlling fungus gnats is use of a product containing *Bacillus thuringiensis* (Bt/H-14). This product works by killing the larva as they feed. Bt/H-14 has been specially formulated to produce death in fungus gnat larva, and consumption by humans, while not advised, would do no harm. The Bt product is diluted with water and once a week, for three weeks, is watered into the plant from the top. Removing the top half to three quarters of an inch of potting soil in each plant removes many of the larvae and eggs. Replace with a good potting soil and then treat. Several Bt products have at times been available at local hardware stores. If you can't find any locally, go on line to any search engine and type in Bt and fungus gnats and you will find suppliers of one of the Bt products. The use of Bt will not take care of the adults, but they soon disappear. You can put up yellow sticky traps, much like fly paper, near your plants, and they will catch many of the adults.

A second method of treatment is to remove a half to three quarters of an inch of potting soil on top of the container and replace it with sand. Adults will not lay their eggs on the sand so you have to treat every plant in your home the same way. This is an easy way to get rid of fungus gnats. You can spray the adults or use a sticky trap to lower their numbers. Once you have not seen any for about month you can remove the sand and replace with potting soil.

In an office situation, everyone must treat their plants, no exceptions made. Those unwilling to treat plants must take their plants home and not return them until they are free from gnats. New plants at home or in an office situation should be isolated for at least three weeks to determine if they are infected. This is a case of wanting to look the gift plant in the soil because many a wonderful gift has brought nothing but trouble to the house or office.