THE PLANTER'S PALETTE
Plants for garden artistry

FUNGUS GNATS

Host Plants and Description

Fungus gnats are pests of greenhouse transplants and potted plants, particularly seedlings and cuttings. Adults are very small, slender flies, measuring only 1/8 to 1/10 inch in length. They are dark gray or black in color, and have very long legs. Larvae are white, threadlike maggots, 1/8 to 1/4 inch long with black heads. Larvae live in the soil, where they feed on peat moss and other organic matter, as well as on plant roots.

Plant Symptoms / Damage

Fungus gnats are rarely a problem on established garden plants, but larvae can cause enough damage to the roots of cuttings and seedlings to stop growth. Plants lack vigor and leaves may yellow without any visible damage to the top growth. Small feeding roots and root hairs might be eaten off, and the larvae can frequently be seen tunneling through the soil around the plant. Look for adults running over the soil or flying between plants.

Control

The best control is to allow the soil to dry out as much as possible between watering. Remove debris around the plants to eliminate shelter for the insects, and suspend yellow sticky traps, bought or made with yellow boards and a sticky product such as Tanglefoot, above the plants to catch adult gnats as they fly.

occurs because the normal flow of water and nutrients is disrupted by the gall. The bacterium enters the plant through a wound. Initially, the gall is white or tan, rounded and soft; eventually it turns dark brown and develops a corky exterior and a woody interior. Crown gall can be distinguished from an insect gall by cutting it open. The interior of crown gall is a solid mass, while an insect gall will be separated into compartments.

Many woody plants are susceptible to this disease. (See a partial list below.) In general, evergreens are resistant to it, as are annuals and perennials.

Crown gall is difficult to control. Try to prevent it by avoiding unnecessary injuries. Keep plants healthy with regular watering and fertilizing. Pruning the gall out is counterproductive, as it only increases the number of wounds, allowing more of the soil-borne bacterium to enter the plant. Badly infected plants should be removed, destroyed and replaced with resistant varieties. (A list follows.)

Plants Susceptible to Crown Gall	Plants Resistant to Crown Gall
Apple	Bald Cypress
Birch	Barberry
Cherry	Beech
Crabapple	Deutzia
Dogwood	Boxwood
Elm	Ginkgo
Euonymus	Golden-rain tree
Grape	Holly
Honeysuckle	Hornbeam
Lilac	Larch
Peach	Littleleaf Linden
Plum	Magnolia
Raspberry	Pine
Rose	Serviceberry
Walnut	Spruce
Willow	Tulilptree
	Yellowwood
	Yew, Japanese
	Zelkova