# Emerald Queen

## Does my Emerald Queen have Fungus Gnats?

The adult fungus gnats are gray or dark-gray, fly-like insects about 1/8 inch long. They are attracted to light and when present in your house, swarm over the windows because of the natural light. The immature form of the Fungus Gnat, which lives in the soil, are thin whitish maggots with a jet black head, and attain a length of about 1/4 inch. The maggots are likely to be found in soils with quantities of decaying plant. The damage caused by these pest's are usually occur while they are in their maggot form as they will bury themselves in the soil and feed on the roots of the plant. The gnats themselves are more of a pest then an issue to the plant.

# How do I avoid Fungus Gnats?

Best way to keep your plant free of fungus gnat maggots is to avoid overwatering your plant. In the event that your plant is already infested with this pest, use an insecticide drench and apply it to the potting to control the problem. For the adults use of a labeled and targeted insecticide should assist in destroying them. If you want to avoid the use of chemicals to kill the larvae, by allowing the soil to dry out completely between watering they should die out.

#### Does my Emerald Queen have Mealybugs?

While Mealybugs are not usually considered a common problem for ferns, since they can occur we feel it is best to educate on how to handle the problem.

Mealybugs are white, waxy creatures that live in large colonies usually on the undersides of the leaves and/or around leaf joints. The bug is about 1/10th of an inch and has the look of cotton. Similar to other pests a sure sign that your plant is infested is if you observe that the leaves of your plant seem dry or weak (dropping). If you notice those signs the first course of action would be to isolate the infested plant from all other plants within your home. After that use a strong spray bottle with water in order to try to wash off the colonies from your plant, or wipe off the infestation with cotton buds dipped in rubbing alcohol. Take note that this may not work to get rid of all the Mealybugs



Sample Image

at one time, so keep the plant away from others while you monitor it for more insects. Another option is to buy the Mealy Bug's natural predator called the Mealybug destroyer (Cryptolaemus montrouzieri) which is a species of lady bug. This is an option for heavily infested plants, but is probably not practical unless you have a large number of infested plants. Once the Mealybugs have been killed and consumed the Mealybug destroyer will die off from a lack of a food source.

### How do I recognize if my Emerald Queen is infested with scales?

There are many species of scales that are commonly found in indoor house or greenhouse plants. Some species of the insect can have an armored shell like covering that will protect its entire form while others will have none at all. Those with the waxy shell can have its protection removed by simply scraping it away. It is easiest to tell the difference as the soft scales (no armored protection) produce honeydew while the armored scales will not. Scales feed on your plant by sucking on the plant's sap. This will promote poor growth which will eventually stunt the growth of your plant. It can also lead to your plant being infested to sooty mold.

The most practical thing to do for your first attempt at cleaning up your plant from its infestation is to use soap and water to wash off the leaves and stems. If your plant is heavily infested, you can try an insecticide spray schedule on your plant that involves 2 to 3 sprays a week every two weeks. It is usually best to discard the plant however before the infestation can spread.

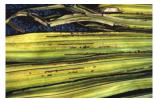
#### How can I identify if my Emerald Queen has Thrips?

There are many sub species of Thrips that can infest common indoor house hold plants. The insect is barely visible to the naked eye. In its adult form the pest is a brownish, black color with light markings on its body. The larvae can be a light yellow to orange color with black excrement on their backs. When a plant that this pest inhabits is disturbed the adult forms it can be seen to fly or run. This insect will feed on the juices of the plants leaves and/flowers. The damage that is left behind is random streaked silvered areas of the plant that are speckled with little black dots of excrement. The plants leaves and/or flowers may be blotched or drop away from the plant.

Labeled insecticides that state they can handle thrips are the best option for removal. Try a daily spray of 4 times a day for 4 days on both the plant and the soil to get rid of this pest.

#### Is my Emerald Queen suffering from Nitrogen Dificiency?

If you start seeing some discoloration and yellowing of the leaves on your plant it is usually caused from a Nitrogen deficiency. The yellowing usually starts at the tips of the leaf and works its way inwards with no particular pattern. It will consume the oldest, lower leaves first until only the newest growth stays green. Here are a few recommended tips to handle a nitrogen deficiency. If you own a fish aquarium empty some of the aquarium water you have replaced into the soil of the plant. Another solution would be to spray the leaves of the plants with a foliar fertilizer [fertilizers made especially for applying nutrients to the leaves] with a mix of about 5-10-5 (percentage of nitrogen, phosphorus, and potassium).



Sample Image

#### Is my Emerald Queen suffering from Magnesium Dediciency?

Magnesium deficiency can first be detected by observing the leaves of the plant as with most other deficiencies. If you notice orange/brown veins on the leaves that would be one of the first indications. This is further identified with withering or curling of the leaves which will eventually lead to the burnt look around the tips of the leaf. The best /organic way to treat this deficiency is to take Epsom salt and mix it in with about 2

gallons of water. After doing so take a spray bottle and gently mist the plant a couple of times a week.