

Tools to Navigate - The Fuchsia Gall Mite crisis

Excerpts from previous AFS bulletins

After fuchsia gall mites arrived in the United States around 1981 or 1982 the American Fuchsia Society fuchsia growers experienced a new pest that disfigured the leaves & flower buds causing fuchsia popularity in the U.S. to significantly decline for many years.

Gall mite history: Definition of a Gall. This information is from the **Helen Crocker Russell Library, Plant Doctor, J. Charmain Guiliani**. *A gall is most fascinating object*. It is a plant structure formed by abnormal plant tissue growth, caused by the irritation produced by bacteria, fungi or insects. The growth is a reaction to a parasitic attach on or in the plant's cells. Galls usually occur on the stems, leaves, or flowers buds but can occur on other parts of the plant. Most galls on leaves are caused by small insects-like pests or mites. **They lay eggs on leaves and flower buds** that are forming in the spring. The insect secretes a peculiar fluid from its mouth, which stimulates the cells of the tissue to divide rapidly thus instigating abnormal development, or a gall. The larva becomes completely enclosed in an almost perfect sphere furnishing the larva with starch and other nutritive material. The damage is mostly aesthetic and localized to a specific part of the plant.

U.C. Berkeley, Cooperative Extension. In **1982** after several months of running tests on fuchsias with live gall mites, released the following statement;

U.C. it is suggested that all gall growth be removed, and a very thorough spray application be applied. Repeat this process several weeks later. It is hoped that this "eradivative" type of program will **reduce the number** of gall mites to such **low numbers** that several months of **gall free growth** might be enjoyed.

GALL, Mite Resistant fuchsias were hybridized by Peter Baye, Ph. D botanist. Peter Baye received his Ph.D. in Plant Sciences from the University of Western Ontario, Canada in 1991. As a longtime member of AFS his **botanist knowledge** has been a significant factor recognized by the American Fuchsia Society and his leadership has provided AFS members new hope that their fuchsia hobby could again regain popularity. The gall mite problem is all about ***visually seeing the disfigured plant material on your plant***. Mother Nature's bugs, insects and fungus are everywhere in the garden and part of everyday fuchsia culture.

What is gall mite resistant fuchsias? A gall mite resistant fuchsia is a plant that is made of a tougher plant fiber that does not easily swell, disfigure or gall when fuchsia gall mites inject their fluid into the plant tissue when feeding. A fuchsia is resistant or susceptible **depending on plant (genetic) variations**. The gall mite resistant concept reminds us that various degrees or amounts of plant damage are inevitable and a normal part of Nature.

Important point: One day Peter Baye happened to stop by Rodney & Janis Bergquist's house for a visit. I took the opportunity to explain to him that I was so frustrated trying several things including toxic systemic products to kill all the gall mites on my plants. He

said, "YOU ARE WORKING TOO HARD TRYING TO KILL ALL THE GALL MITES ON YOUR FUCHSIAS". He said, "even if you were lucky enough to kill all the gall mites on your fuchsias this week, the neighbors and other fuchsia growers have not killed all the gall mites on their plants. The local hummingbird visits many neighborhood gardens including fuchsias grown in the wild and will possibly reintroduce a new generation of gall mites on the next visit to your garden. Realistically, you'll probably get a new batch of gall mites on your plants as soon as someone gives you a new cutting or you buy a new plant".

The only realistic non- toxic method of control is learning to cut off the disfigured plant material as soon as you notice it. Then follow-up with some type of nontoxic spray solution to reduce the number of gall mites left on your plant. It's called plant maintenance, its what gardeners do, right? Simply cut off the visual disfigured plant material and the ugly visual problem goes away.

Most AFS members have only considered how horrible the gall mite plant damage can become. However, **Peter Baye said, "it doesn't have to be all ugly gall mite plant damage or no plant damage at all, which is not realistic. As a fuchsia society, you need to be somewhere in between"**. In 2010 he said, "the American Fuchsia Society needs to regain control over fuchsia's as a hobby and get excited again about growing fuchsias. In today's fuchsia culture, especially in California, it's unrealistic to believe, that you can be a fuchsia grower and not perform the required plant maintenance."

In Summary: We all want perfect unblemished fuchsias, but that's not the real world is it? There is no magic bullet. If you are not entering your plants in a show, competition, or a plant sale then your fuchsias are just another garden plant. Simply cut off the visual disfigured plant material **and the ugly problem goes away.**