



Production Times

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Got Chilli Thrips?

By Juanita Popenoe

◆ Production Times is brought to you by

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Everyone is talking about them, but have you actually seen them? Potential crop yield loss from the Chilli thrips is projected to be \$3 million, and that is not including ornamentals. They are the latest exotic insect to cause major havoc to ornamentals since the pink hibiscus mealybug (PHM). And, like the PHM, if inspectors find one in a nursery, it means quarantine. So wouldn't it be better if you find them first?

They are half the size of the Western Flower Thrips, with the same narrow body, but the adults have a dark stripe down the back. The immatures look like very small golden colored thrips (about two times the length of a two spotted spider mite). They get in rose buds, but are not usually found in the open flowers where you find Western Flower Thrips. Most of Chilli Thrips damage is caused on the young leaves that become misshapen with purplish discoloring where the thrips have rasped. They can be found on the tops of the leaves of some plants like cucumber and strawberry, but are generally on

the undersides of leaves.

The worst thing is that they can kill plants, and many rose growers are getting very discouraged by the continuous defoliation they cause. Winter Park rose garden was devastated by repeated defoliation caused by Chilli Thrips. They also like to eat ligustrum, pittosporum, Indian hawthorn, viburnum, plumbago, impatiens, lisianthus, snapdragon, and zinnia to name a few. The damage can look like broadmite damage with stunted and distorted new growth. Dr. Osborne has found them in just about every big box store he has visited and they quickly spread to all the plants nearby.

What can be done? Keep an eye out for the damage. Use sticky cards or tap the leaves over white paper and look for small yellow thrips running around on the paper. Bring them to the plant clinic for identification. The free plant clinic at MREC does not report any findings to regulatory agencies – only to the grower.

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Looking for a job? We need applicants for refilling Vera Gasparini's position—Orange County regional extension agent for greenhouse and foliage production. If you or someone you know might be interested, please check out the application information at <https://jobs.ufl.edu/applicants/jsp/shared/frameset/frameset.jsp?time=1174491976588>.



What is Happening to Loropetalum?

By Juanita Popenoe

Recently a large landscaping firm decided to no longer use loropetalum. Why is this happening to a great Florida Friendly plant? Many people growing loropetalums are amazed to hear there are any problems. There are several possible reasons that loropetalums seem to be having problems for some. Two years ago the first problem found was supposed to be eryiophyid mites. Microscopic mites were apparently causing distorted, stunted new growth on 'Ruby' loropetalum, but not on other cultivars. Unfortunately, 'Ruby' was 80 percent of the loropetalum plantings. Research on the mites indicated that Sevin would control the mites, but then another experiment turned up some very interesting results. Dr. Gary Leibe and Dr. Amy Shoher found that as long as copper sprays were used on the plants, large populations of the microscopic mites could be found, but there were no distorted, stunted leaf symptoms. It seemed to be a simple problem of lack of a micronutrient that was actually causing the problem. Using Kocide in a typical spray program overcame the copper deficiency.

However, there are still some other unexplained problems with loropetalum. Several growers have claimed that loropetalum will not grow when reclaimed water is used for irrigation. Loropetalums are known to be salt intolerant, but the problem has not been fully evaluated. Dr. Tom Yeager said in his

research there were no differences in growth of loropetalum irrigated with reclaimed water or tap water. Could differences in reclaimed water or the tap water used in the research be the answer?

Dr. Al Ferrer at Seminole County Extension has reported widespread plant defoliation caused by the fungus *Pseudocercospora*, even during our current drought. The symptoms, illustrated in the photos below, vary from irregular brownish spots to irregular red/yellow spots, possibly with cultivar. For color photos, see the newsletter on line at cfextension.ifas.ufl.edu. Little is documented about this disease on loropetalum. Dr. Strandberg at the MREC says that *Pseudocercospora* can survive in the moisture from nightly dew and could require sprays every 4 days if it is anything like *Pseudocercospora* on celery. Chemical control recommendations can be found at <http://edis.ifas.ufl.edu/IG012>.

Right now there are no complete answers, but some recommendations: use cultivars other than 'Ruby,' make sure to maintain proper copper levels, avoid salty water, and try to select propagation material from mother plants that do not show disease symptoms (and are hopefully more resistant to *Pseudocercospora*). Check the salts in your irrigation water as part of your Best Management Practices, or bring a sample to the plant clinic for a free check.



Loropetalum leaves with red/yellow spotted *Pseudocercospora*.



Loropetalum leaves with brown spotted *Pseudocercospora*.



Loropetalum with probable copper deficiency.



Planning Irrigation Upgrades and Need \$\$?

By Juanita Popenoe

If you are planning some irrigation upgrades for increased water use efficiency or other Best Management Practices (BMP) upgrades at your nursery, you should apply for cost share money. Currently the BMP implementation teams are providing 80/20 cost share up to \$15,000 per nursery per year in the central Florida area. Steve Cox is the head of the BMP implementation team. If you are interested, contact him at (321) 231-4851 or Rance Ellis at (321) 231-4853 and set up a BMP assessment. The team will come and evaluate your nursery with the BMP manual, and help you decide what can be done for the cost share money. The BMP assessment does not obligate you to do anything, and it may be worth your while to have them assess your nursery and practices to see how you measure up. If you decide to go ahead with some improvements, you must submit a proposal with a signed notice of intent to follow BMPs. Your proposal will then be evaluated by a committee to determine how much money you will receive. After the proposal is accepted, and the proposed changes are made, just submit the invoices to Steve Cox and the money is yours. It is a way to help more people adopt Best Management Practices, and is a win win program for everyone. Already several growers in the Orange County area have benefited from the \$200,000 available, and more money is expected with the next financial year starting July 1st. Growers who have applied (and have already received money) include Mercer Botanicals, Phoenix Foliage, Blodgett Nursery, Anehiem Nursery, Pecketts, Apopka Plant Outlet, Junior Nursery, Korus Nursery, Brothers Foliage, Plow Boys, Wades Greenhouse and Jacks Tropical Gardens. Talk to them about how easy it is to follow Best Management Practices and receive cost share money.

Eligible practices for the cost share include: heavy-use area stabilization, plant rearrangement (to group plants according to water use requirements), chemigation infrastructure, storage, staging and potting areas (construction of concrete floors and roofs for these areas), vegetative buffers, roof top management (gutters to divert water from rooftops to storage or safe areas), low volume irrigation, precision application equipment, grade stabilization, on-site water detention/retention, irrigation emitter uniformity, and alternative practices (other proven water quantity and quality practices).

These eligible practices are the BMPs identified as the most important to cleaning up water by reducing fertilizer run off and reducing water waste. By adopting as many of the BMPs as you can and signing a notice of intent to continue to use these BMPs, you will automatically have the water and pesticide management plans that are required for consumptive use permits, be able to apply for cost share money and benefit from the presumption of compliance with state water quality standards. This will save you from any liability in the future about water pollution. Best Management Practices are not difficult and you may be surprised at how many you are already doing. We are planning programs at nurseries throughout the three county area to show what is involved in a BMP assessment and how mobile irrigation labs can help you increase the efficiency of your irrigation system. In addition we are building BMP toolkits to give away at these programs that include all the equipment you need to monitor your practices. Keep an eye out for the flyers for the program in your area and check out a BMP manual at <http://hort.ifas.ufl.edu/bmp/containerBMP.pdf>



Our website is under construction!

[Http://cfextension.ifas.ufl.edu](http://cfextension.ifas.ufl.edu) is being changed to reflect the new Solutions For Your Life program from the University of Florida. It will be changing daily as we include new features and information. The plant clinic link will have a webpage with photos of all the submissions and diagnoses. The newsletters, plant fact sheets and local programs can all be found there as well as links to much more information.

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If you find you have them, they are not that difficult to control. In greenhouses you can try insect excluding screen, but it has not been proven successful with insects this small. Remove susceptible weeds, especially castor bean, from outside the greenhouse. Destroy infested plant material. The thrips lay their eggs in the leaves and then pupate in soil. Leaving infested debris around allows them to complete their life cycle. Chemicals can prove effective. Abamectin, acephate and pylon (only for greenhouses currently, but a special license for outdoors is in the works), and spinosad (Conserve) work. Neonicotinoids will knock them down, and sprays are better than drenches, but you have to get good coverage. Synthetic pyrethroids are not so effective and not good on the biological controls that work very well. Homeowners now

have access to spinosad and there is a concern that resistance will occur with overuse. The best control has been found with the predatory mite *Amblyseius swirskii*. It aggressively eats white flies, broadmites and Chilli Thrips. You can purchase them from Kopperts or Biobest in little sachets that cost about 65 cents each (but there is a minimum order). These have been so successful in the research greenhouse that there is no need for chemicals. Dr. Osborne is interested in studying their effectiveness in the landscape, so if you are interested in trying them out, Dr. Osborne is looking for cooperators. Don't let Chilli Thrips destroy our nurseries and landscapes. They are not difficult to control, only to see! Check out Dr. Osborne's web site at <http://mrec.ifas.ufl.edu/lso> for excellent photographs and even videos of the pest so you can identify them before the inspectors do.

2007 Planning Calendar

Links to most programs and agendas may be found at: <http://cfextension.ifas.ufl.edu> or the UF Extension Calendar at <http://calendar.ifas.ufl.edu/calendar/index.htm>

April

24.....Review and Exam. Right of Way and Aquatic licenses. Contact Maggie Jarrell (352) 343-4101.

May

16.....Small Farm Program. MREC, Apopka. Contact Maggie Jarrell (352) 343-4101.

16-17...Floriculture Field Day. Gainesville. www.fngla.org

24.....Pest Management Update. MREC, Apopka. Contact Maggie Jarrell (352) 343-4101.

24.....Review and Exam. O&T and Private Applicator pesticide applicator licenses. Kissimmee. Contact Jennifer Welshans (321) 697-3000.

June

6CEU Day and WPS Train the Trainer. MREC, Apopka. Contact Richard Tyson (407) 665-5551

3-5.....Florida State Horticulture Society Annual Meeting. Palm Beach Gardens. <http://www.fshs.org/>

9-12....Trees Florida Conference and Trade Show. Palm Harbor. <http://treesflorida.com>

July

28Review and Exam. Limited Certification Licenses. Tavares. Contact Maggie Jarrell (352) 343-4101.
