

Tucson Orchid Society Newsletter

August 2016

Monthly Meeting: Wednesday, August 17, 7:30 PM

Featured Speaker: Wes Addison Orchid Diseases and Pests

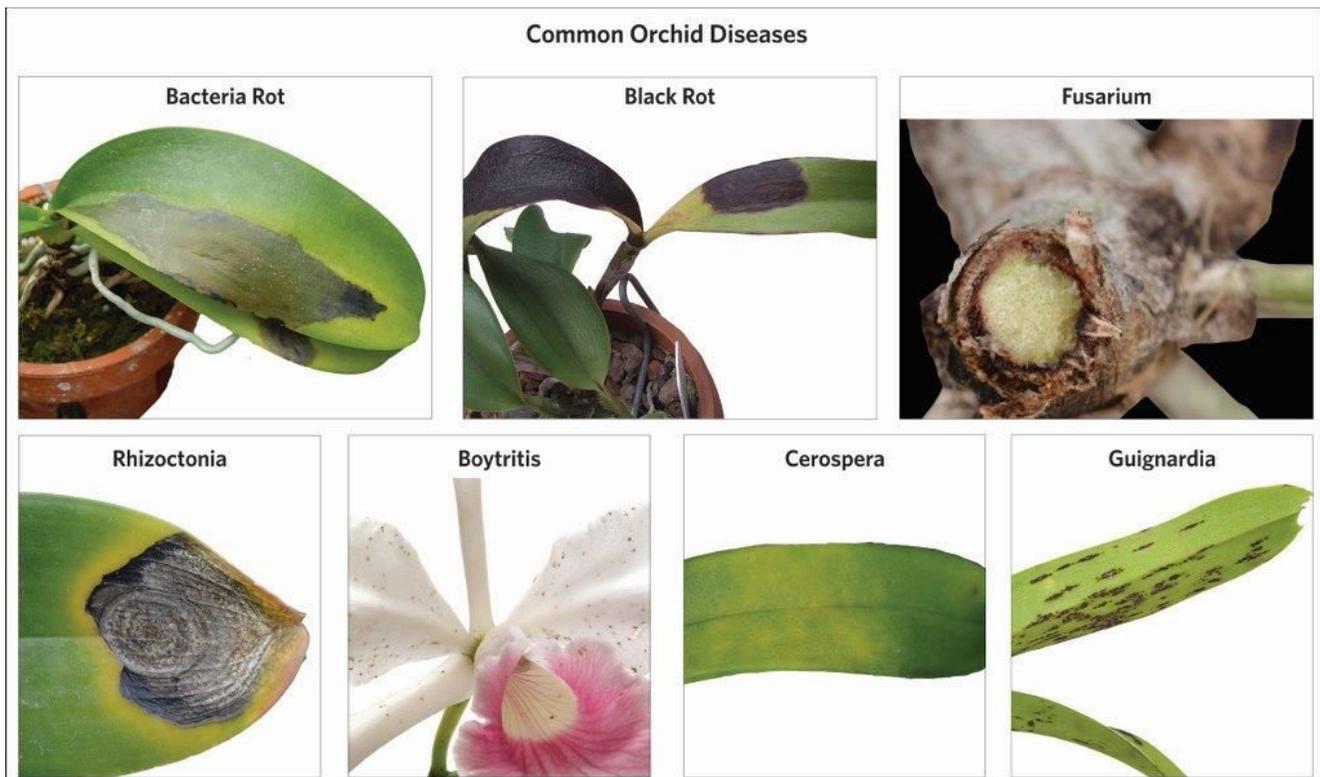
Wes Addison will be leading an **interactive discussion on orchid diseases and pests** for our August program. Wes has been growing orchids since 1985. He grows phalaenopsis, dendrobiums, paphiopedilum, cattleya and a smattering of other genera. Wes has been a member of the Orchid Society since 1989. Here is how Wes describes the program:



Last year around this time we had a discussion on orchid pests and treatments to eliminate them (see [Pests and Pesticides](#) in the August 2015 TOS Newsletter). This meeting we are going to talk about the various **diseases that orchids can be infected with**. I, along with most growers of orchids, am constantly looking at my plants to assess their health. The more orchids we have, the less likely it is that we will discover problems before they become epidemic.



I consider the **identification of various diseases** to be the most difficult part of treating them. Is it a bacteria, fungal or virus that is undermining our beautiful plants? It seems that with pictures we should be able to identify these problem diseases, but the reality is that so many of them look alike. I will try to better inform all of us as to **how to identify these killers**.



Once you have identified what your disease problem is you then need to **determine if it can be treated**. Some diseases are easily treated. Other diseases can't be treated and you need to dispose of the plant. Are the **diseases transmittable** and how does that transmission occur? Do all the plants in proximity need to be treated or can the **individual plant** be treated? Will the **disease recur** after treatment and how soon? These are just some of the questions I'll try to answer during the discussion.

Since this is a disease and pest presentation, I will have a **separate table set aside** to place plants on that have pests and diseases. **Bring in your problem plants** so that we can see exactly what we are dealing with. One last thing to mention: no matter how good you are at identifying diseases the only sure way to know what you are dealing with is to **have the plant tested**.

I hope to see you at the meeting.

President's Corner by Judy Forester

Growing orchids in Arizona in the **summer is tough**. Last month temperatures soared when a breaker popped and this month a table collapsed leaving my plants in a heap. My husband, Doug, fixed the table and replaced a fuse in my little sweatshop. **Carolyn Addotta wasn't as lucky**: she had a mechanical failure which fried most of the plants in her greenhouse. Most of us have had similar experiences. Doug found a thermometer that monitors the greenhouse temperature and humidity and can be viewed on our **smart phones and computers** (see article below). I like being able to see the range of temperatures and humidity both daily and weekly. Perhaps I will be able to grow my plants a bit better with this information and have some peace of mind as well.

Mark opened his greenhouses and garden for TOS in July. Wow! He has the most **incredible plants** in Tucson. Thank you, Mark.

This month will be the last of our summer culture programs. Sheri's July presentation on killing bugs on orchids was really valuable for everyone. She has provided her notes in this issue in case you want to print them for future reference. Thank you, Sheri. TOS is very fortunate to have so **many experienced growers** that are willing to share their knowledge.

Our annual fundraiser auction will be the first Wednesday in November. So it's time folks to check your plants and divide the crowded ones and **set some extras aside** for the auction! It is also time to think about plants that you have been wanting to add to your collection!



Greenhouse Open House

There are **no tours scheduled yet for August or September**. Please talk to the President if you are interested in showing off your growing space.

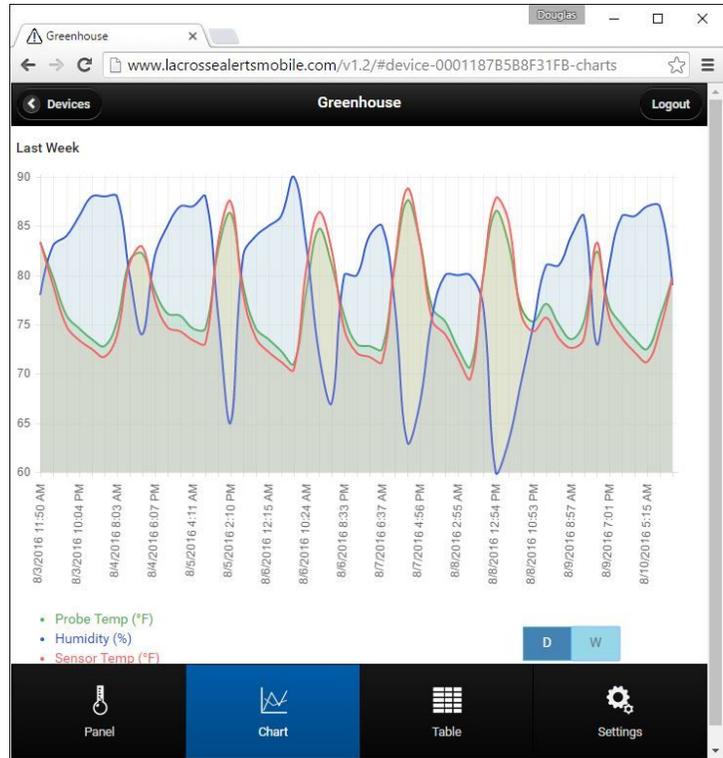
Remotely Monitoring Your Greenhouse

Doug Forester

I built Judy a greenhouse from scratch in 2001 because the house was overgrown with orchids - and it seemed like a pretty straight-forward thing to do. Needless to say, when you have to bury it 3 feet in the ground because of HOA rules, nothing is simple. But build it I did and it has been well used for the past 15 years!

In that time, there have been **multiple occasions** when the swamp cooler that keeps it cool stopped working. Everything from motor burnouts, broken belts, circulating pump failures, blown fuses, and frozen bearings on the blower all had the same effect: **no cool air for the greenhouse.**

We've been lucky that for all of the otherwise catastrophic failures, we happened to be home and could handle the problem. But what if we hadn't been home and ready to fix the problems?



I have been looking for a **technical solution** to that problem for years, and finally found a pretty good one. It's a remote temperature and humidity sensor connected via wifi to the internet (via my home wifi router). It's made by La Crosse Technology and is called the Weather Direct. It talks to the La Crosse website and data is placed there under your account. The website lets you look at the current reading (every 5 minutes), a graph of the last 24 hours, and a graph of the last week to get the big picture. There are **apps available** for iPhone, iPad, and Android phone which allow you to see the same data presentations.

Notifications about failures: You can set limits for temperature and humidity. When outside of the specified range, you can get **notified with an email.** I would like to be notified the same way my phone notifies me about amber alerts or storm warnings but, unfortunately, it doesn't get your attention that way. I am actively working at solving that problem.

DISCLAIMER: This does not imply that Tucson Orchid Society in any way endorses this product.

Outreach Update Tucson Orchid Society will hold another repotting clinic at a library. This time it's at the Dusenberry-River Library **on September 26.** Member are encouraged to attend, bring plants to display, and share tales about your orchids.



Orchid of the month by Dianne Turausky

Brassolaelia “Yellow Bird”

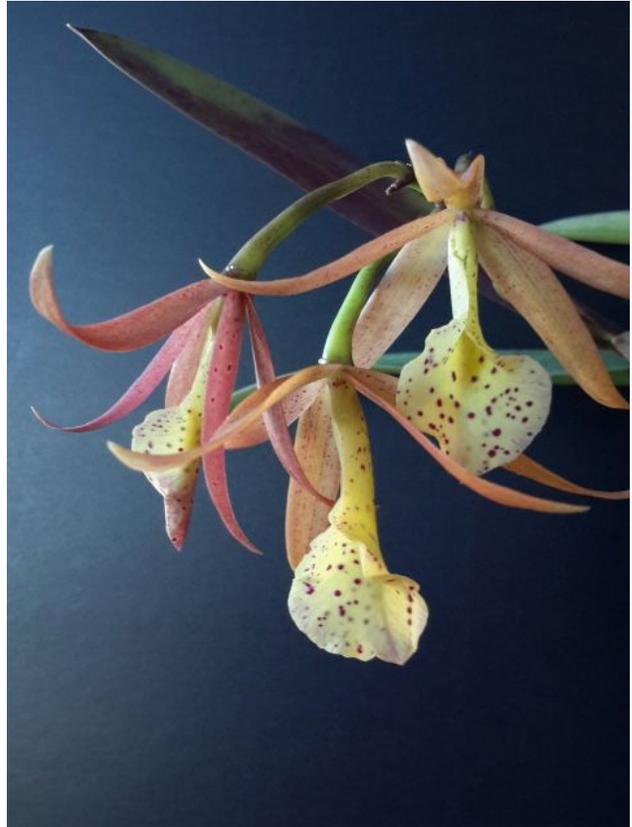
I spend an alarming amount of time browsing orchid websites. Several vendors keep me updated on sales, and I can't help but check out what's available. And so it was that I discovered the Brassolaelia “Yellow Bird.” The photo was remarkable in that the flowers seemed to be different colors. I actually checked to see if one had to select a yellow, pink, or orange one, but there was no such tab. My limited experience with Brassavolas and Laelias, I felt pretty confident that my hot, sunny greenhouse would be an acceptable home.

The orchid arrived in great condition and looked quite healthy. The leaf/bulbs are narrow, and the plant is less than a foot tall. The orchid grew quickly, and soon it was apparent that I would get to see a Yellow Bird in bloom. It is quite amazing! The flowers open dark orange, but by the next day, the orange starts to look more like a peachy pink. Several days later, the flowers are yellow. The fragrance can fill a room!

And surprisingly, the flowers last for about two weeks.

I grow mine where I would grow my Cattleyas. I water it when it is dry...again, like I would treat a Cattleya. Since my greenhouse is really bright, I had a little problem with the leaves turning red. An application of Epsom salts took care of that. My biggest problem has been keeping it in a pot. The roots tend to ball up and no matter what I try, eventually the plant has walked itself out of the pot. I may eventually resort to mounting it or putting it into a basket so its roots can wander. It also has a rather sprawling growth habit, so you have to put it with tolerant neighbors.

I've had this orchid for about a year, and it is now getting ready to flower for the second time. If you have room for a sprawling orchid that appreciates good light, treat yourself to a “Yellow Bird!”



Killing Bugs Sheri Musil

At the July 20th meeting, Sheri led a discussion on orchid culture. Part of that discussion was how to treat the bug pests you get on your orchids - the gentler way. She graciously wrote this very good reference article for the newsletter.

Pests seem to like our orchids just as much as we do. There are lots of options for getting rid of pests. I'm going to discuss some of the less toxic options. BUT – whatever you use – remember a few golden rules.

1. **More is not better.** If the instructions say use a teaspoon per gallon, use that dose. Too weak may not work or help breed resistant bugs. Too strong may damage your plants. Experienced members all have stories of their own or about someone else who damaged lots of orchids by using products incorrectly.



2. Try to find the **correct dose for orchids** rather than for vegetable or ornamental plants in general. If you're not sure, check with other people in the orchid society.
3. Some **orchids are more sensitive** than others. If you're not sure, try just one plant to start with. Wait a week and see what happens.
4. Don't breathe any of this stuff, and most of it shouldn't get on your skin. Follow the instructions! Please **don't take your safety for granted**. Even something as common as alcohol or 409 isn't good to breathe in, especially when you're using it for a half hour spraying all of your plants.
5. Most of the options **should be done outside** while temperatures are comfortable for us and the orchids. You don't want most of this stuff circulating in your house where you'll be breathing it in for a long time. And some of the options have serious temperature/light restrictions for good reason.
6. Just because "Joe" uses it without protection or at higher than recommended rates **doesn't mean you should follow "Joe" over the cliff**.
7. **Don't believe** everything you read online!



These mixes are relatively safe to use – start with the **top of the list and then work your way down** to more heavy duty chemicals if you need to. These are primarily good for scale, mealybugs and maybe spider mites. Bugs don't develop a resistance to alcohol, soap or oil sprays. I recommend taking a look at the AOS web site (www.aos.org) for more information on bugs – it's good to know what type of bug you're trying to kill.



These are mostly contact killers, and will need to be **repeated on a regular basis**. A good general recommendation is spray **every 5 days**, 3 times, then monitor and see if you need to keep going.

- **Alcohol** (70% isopropyl alcohol – not beer!) This is easily available at the grocery store, Walgreens, etc. Use the 70% alcohol version – if you buy the 90% kind then dilute it with water. It can act as a desiccant (dries thing out), which may be one of the ways it kills bugs. I absolutely **would NOT dunk a plant** in the stuff, but you can put it in a spray bottle and spray the leaves. Be careful in cold weather – it evaporates quickly and could cause a chill injury to the plant. It is also rather flammable, so don't smoke while you're spraying.
- **Alcohol plus soap** Add a drop or two of **non-citrus dishwashing soap** (I like Ivory or Dawn) to a pint of alcohol. The soap acts as a surfactant which will help the alcohol get into tight spaces (such as the base of the leaves) and also may help **wet the protective shield** that some bugs use.
- **409** Yep, the 409 you clean with. There are a variety of mixes recommended using 409, but you want to be sure to use the **"original" form of 409**. Mike Barretti recommends using a 50/50 mix of one part 409 mixed with one part 70% isopropyl alcohol. Look online for other mixes. Be careful about breathing this mix for a long time – I use 409 to clean projection screens in classrooms at work and it leaves me short of breath and coughing for a day or two afterwards. **Take the plants outside**.



- **Soap** There's a variety of You can make your own mix as personally don't find soaps used aphids, which are pretty easy to better luck than I do.



insecticidal soaps out there, including Safer. well. Avoid **citrus scented soaps** entirely. I alone very effective for anything other than just hose off the plant. But you may have

- **Oils** There are a lot of options out there, including vegetable oil, Neem oil and others. I've tried Neem oil and have stopped using it because of stories I've heard about it damaging plants. There is speculation that Neem oil can go "bad" when stored improperly, but I don't know if that is true. I'm also a little resistant to using plain vegetable oil as I'm concerned about the "weight" of the oil. I'd prefer to use a horticultural oil that is designed for spraying on plants. **Do NOT use the dormant horticultural oils** designed for fruit trees, it's too heavy.

- **Stylect oil** Stylect oil is my **oil of choice** and the only thing I've found that really works on Boisduval scale. Jim Wilcoxon and Mark Dimmitt also use Stylect oil. It also does a **good job killing spider mites**. You can buy it at Arbico, but it comes in a fairly large container. Perhaps some of you could get together and share a purchase? It will slowly **dissolve some plastics**, so I suggest that you use glass containers if you store it out of the original container. Wine bottles with corks work pretty well as it's easy to pour out small amounts.



This oil is essentially a super light paraffin type oil. You don't want to breathe oil into your lungs. I usually use it with a fan running behind me to **blow the spray away from me**. You also need to spray this when the temperatures are below 90 and let the plant dry before putting it back into the light when it's really hot. So in summer I suggest using it first thing in the morning while it's still relatively cool. Those of you growing plants indoors can probably spray a plant outdoors and then immediately bring it inside.

Use a 0.5 to 1% solution and remember to **keep shaking it to keep it well mixed** – this is an oil and water solution. I like to use distilled or deionized water, but it will work ok with tap water as well.

- 0.5% solution = 2.5 Tablespoons (1.25 liquid ounces) of Stylect oil to 1 gallon of water
- 1% solution = 5 Tablespoons (2.5 oz.) per gallon of water

This oil can slowly build up on plants and potentially interfere with the plants ability to breathe. So I don't recommend using it on a regular basis if you don't see bugs.

- **Imidacloprid** This is one of the few insecticides on the market that I will use. It is a systemic insecticide, meaning that the plant will **take up the insecticide into its tissues** and then persist for a long time. I read an extension bulletin from Florida recommending treating orchids only once a year. It works for **mealybugs and gives some scale protection**, although I don't think it works that well for Boisduval scale. I've used it 3 times to get rid of mealies and they were gone for years. The fourth time I evidently had a bunch of resistant mealies move in so it didn't help much.

Imidacloprid is **implicated in killing bees**, so please don't use this stuff on plants outside. It comes in a variety of forms (granular, liquid) and is offered by different companies. They all use a different percentage of Imidacloprid, so here's a couple of examples:

- Bayer Advanced Tree and Shrub Insect Control, Imidacloprid at 1.47%, use 2 Tablespoons per gallon of water
- Bayer Fruit, Citrus and Vegetable at 0.235%. That's much weaker, so use 12 Tablespoons per gallon of water.



Remember, a higher concentration may be bad for the plants so follow dosing instructions. You can spray the plants with this mixture, but do follow the directions for safe application. I prefer to move the plant to **floor of the greenhouse, drench the roots in the pots** and let the solution drain, then move the plants back to the bench.

- **Finally...** You can **mix and match** – just not on the same day. I'm going to use the Imidacloprid application and follow up with alcohol and stylet oil applications on my current mealybug infestation. Our society has members that know a lot about stronger insecticides and miticides (**mites need to be handled differently than insects**), so ask around if you'd like to use them. There are also "organic" treatments (hormones and other options) available if you want to try them.



DISCLAIMER: The products mentioned in the article are not endorsed by Tucson Orchid Society. Use them at your own risk.

AOS Webinars



The American Orchid Society (AOS) offers free online seminars (called webinars) and greenhouse chats on all sorts of orchid subjects, which you can view "live" as they occur, or after the fact through their archives. Most are available to anyone but some are restricted to AOS members only. Here is the link to the AOS webinar page: <http://www.aos.org/orchids/webinars.aspx>.

Education Corner

by Marie Hirsch and Doug Forester
What Does That Orchid Word Mean?

Miltonia (mil-TOH-nee-a)

Miltonia is a medium sized genus of epiphytic orchids ranging from Brazilian Atlantic Forests to Argentina and Paraguay. This genus was established by John Lindley in 1873 and were named for Charles Wentworth-Fitzwilliam formerly Viscount Milton, an English Orchid enthusiast.

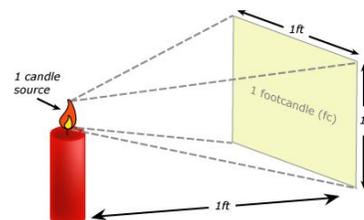


Miltoniopsis (mil-TON-nee-op-sis)

This species is sometimes referred to as the Pansy Orchid due to the resemblance to Pansies. The genus was proposed in 1889 but not really accepted until 1976. Despite its somewhat similar flowers, Miltoniopsis are from the cooler forests on the Andean slopes closely related to *Cyrtorchilum* and only remotely related to Miltonias.

Footcandle or Foot-candle

A foot-candle is the unit of illumination that equals the illumination produced by one candle at a distance of one foot. A footcandle is equivalent to one lumen. Most light meters register in foot-candles.



Show and Tell Please bring your **orchids that are in bloom** to show off! It's nice to share your pretties with everyone and talk about what works and doesn't work for you. Get tips from others to help your orchids grow better. It great to see so many wonderful orchids at **Show And Tell!**



Calendar of Events

August 17 meeting 7:30 PM - Wes Addison - Orchid Diseases and Pests

September 21 meeting - Peter Lin: Compact Vanda species and their hybrids

September 26 - Dusenberry-River Library repotting clinic

October 15 - 1-4 PM Tony Knight greenhouse tour

October 19 meeting - Peter Tobias

November 2 - 7:30 PM - Annual club auction

November 5 - 1-4 PM - Barb Gores greenhouse tour

December 11 Noon-4 PM - Potluck and Annual Meeting

January 18 meeting - Tony Knight: The Orchids of Kenya

Cookie List

Please bring something nice to share, **including something to drink** like tea and/or lemonade.

Aug 17, 2016 David Ingram Nov 2, 2016 Bill Hays

Sep 21, 2016 Carolyn Addotta Jan 18, 2017 MaryAnn Albano

Oct 19, 2016 Chris Valenta

General Meeting Information

The Tucson Orchid Society regularly meets on the **third Wednesday** in January through October. Members are encouraged to bring orchids in bloom for **show and tell**. In November, the Society holds a fundraising **auction** of plants donated for that purpose. In December, we have a wonderful, relaxing **potluck** with a greenhouse tour, combined with a short business meeting and election of officers.

The monthly meetings are held at the [Gem & Mineral Society Building](#) (Adobe Bridge Club entrance), 3727 E. Blacklidge Dr., Tucson, AZ 85716 at 7:30 PM. From the intersection of East Ft. Lowell and North Dodge, go two blocks south on Dodge, turn left on Blacklidge. The building is on the north side of the street.

The Newsletter The newsletter is published every month of the year. If you have something you would like to have published in the newsletter that is of general interest, don't hesitate to contact the newsletter editor, Doug Forester. The deadline is two weeks prior to the monthly meeting.

TOS Officers

President	Judy Forester	judyf.ccn@comcast.net
Vice-President	Dianne Turausky	dturausky@comcast.net
Treasurer	Jim Wilcoxon	jfw@theriver.com
Past President	Mike Barretti	mbarretti@msn.com
Media/Membership	Doug Forester	dougf.ccn@comcast.net
Program Chair	Wes Addison	wesadd@cpatucson.com
Show Chair	Wes Addison	
Auction Chair	Mike Barretti	

Social Media

Facebook: www.Facebook.com/TucsonOrchidSociety

Website: www.orchidsocietytucson.org