

Massachusetts Orchid Society

P.O. Box 1041
Medford, MA 02155



JULY 2022

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M inute Minutes

Notes from the Board

Prior to our in-person meetings, please email your orchid names and parent names (if known) to <mailto:showtable@massorchid.org>. This will give the committee a chance to provide everyone with more thorough information about your orchids.

Thank you! - *The Show Table Committee*

◆ **CALL FOR AUCTION DONATIONS!**

The MOS Auction is around the corner, and we need your divisions, seedlings or just any orchids you're ready to say goodbye to. This is our second largest annual fundraiser, not to mention it's the best opportunity to come away with great deals on unique orchids for growers of all levels around. Email Board@massorchid.org for how to donate.



Annual Memberships are due!

Please show your continued support and renew by clicking [here](#).

Did you know you can submit articles to the newsletter? Got extra orchid supplies you want to unload or looking for garden swaps? Submissions are due 10 days prior to monthly meetings. Email Anne at newsletter@massorchid.org to post or advertise in the newsletter!

We are always interested in suggestions for speakers and topics, plus ideas for special programs for upcoming general meetings. Please email them to mos-board@googlegroups.com.

Find us on Facebook at www.facebook.com/massorchid and Instagram at www.instagram.com/massachusettsorchid.

President's Message

Hey MOS! It's good to be back!

First off, I want to thank our past President, Brandt Moran, for everything he has accomplished and led in the past MOS year. Brandt,

The society has increased its membership count and remains cash flow positive, and most importantly it's been really, really fun! Thank you for sharing your encyclopedic knowledge and obsessive orchid R&D, your great backyard with a crammed hand-constructed greenhouse, your wine cellar and your time with us on the board. May your persimmons grow bountifully, and your summers be tolerably hot!

We have a couple events coming up that you should absolutely consider attending: In August, the Richters have invited MOS members to join them for the annual picnic at their home. They are amazing hosts with a really impressive greenhouse that will be open for viewing. Bob Richter will be giving tours that you will not want to miss as he has an incredible amount of knowledge about anything orchid! In September, the MOS annual auction will offer a smorgasbord of member donated plants as well as some offerings from the best nurseries around. This event is a huge fundraiser for the society and a really great way to grow your collection! Some of the divisions that will be offered up are the same plants you've seen on the show table.

MOS, I can't wait to introduce myself to all the new members, and to reintroduce myself to everyone I haven't seen in a year! We have an amazing lineup on the board this year: a huge welcome to the first-time board members Alexis and Bob! And a huge thank you to the board members that have stayed on for another year!

Let's keep kicking orchid butt!
Dina Deresh



The MOS SUMMER BBQ is fast approaching!

When:

Saturday, August 6th

Rain Date: TBA

Where:

Bob and Marcia Richter's

283 Elm Street

No. Reading, MA

The Society will provide hotdogs, hamburgers, veggie burgers and drinks.

Members, please bring:

Appetizers (last name A – F)

Desserts (last name G – L)

Salads (last name M – Z)

But if you have a favorite dish, you're welcome to bring it instead.

You might want to bring a lawn chair for yourself.

RSVP Mikeb@massorchid.org by Saturday, July 29th



We received the letter below from Catherine Chance, in her search for a particularly cherished orchid from her past. Perhaps you or someone you know has one for her?

I'm reaching out if one of your members has *Erycina echinata* and would be willing to part with a division. I have been around orchids my entire life, as my parents had a greenhouse before I was born. My brother and I were always involved in shows as children, setting up tables and running errands. I knew how to transport an orchid and keep it at show quality before I learned to drive. Our daily chores involved scraping clay pots, picking up leaf debris and picking slugs after bedtime. Even as I became an adult and moved off on my own adventures, I still attended local shows and would come home and help in the greenhouse.

My Mother, Jackie Parker, passed away in a car accident in 2019 and as anyone knows, that grieving process never really ends. Spending time with my Dad (Bill Parker) and making sure he was okay evolved into my personal reacquaintance with orchids, joining my local society, the AOS and building my collection.

We've spent countless hours discussing their plants, as my Dad remembers everything-who gave it to him, their story, all the trials and tribulations of learning the plant, memorable blooms, etc.

It was one of the above conversations that started this quest. His dear friend, Jim Quattlebaum (wife Kathryn) gave him a plant of *Erycina echinata* decades ago. Daddy mentioned that it was his most highly awarded orchid (HCC/AOS in 1986) and how it was one of many lost when the heaters went out in the greenhouse one winter. He chuckled during the telling, saying he didn't have any idea where Jim had even gotten the thing.

He said he's been looking for it for years-he pulled up google to show me pictures of what it *wasn't* supposed to look like. He mentioned that he'd even talked with people he gave divisions to over the years, without success in finding the plant still living.

It's funny the things we fixate on sometimes, but I want to find this plant for my Dad. I have contacted numerous North American growers, but none have this species. I've spoken with Dr. Meyers (Columbian Orchid Imports) and he's willing to try and see if a Columbian collection has the plant (he's not hopeful). Mexican vendors and I have traded translations and when I've gotten a response, it's that they don't have it. I would be beyond appreciative if you could share this with your group and if anyone has a lead (of any type) of where I can locate it, I'm including all my contact information. Here is a photo of my Dad's plant back in 1986 after AOS judging.

Sincerest Regards,
Catherine Chance
405-743-5758 (cell)
405-372-5300 (work)
catdoc27@hotmail.com



MOS Show Table Results, June 2022

Judges: George B., Dina D. & Brigitte F.

Scribe: Linda A.

Total Ribbons: 13

Name of Orchid	Name of Exhibitor	Light L,M,H	Temp W,I,C	Growing Location: Lights, Windowsill, Greenhouse? Judges' or Exhibitor's Comments?
Zygopetalum Louisendorf 'Moonlight'	Maryelisa B.	L/M	I	Windowsill. Beautiful, deep color. Doesn't need differential temps to bloom
Ascocentrum garayi x miniatum	Bob R.	H	W	Greenhouse
Tolumnia Orchidom Happy Spots 'Charlotte' AM/AOS	Bob R.		I	Lights
Miltoniopsis Jolene Carlson 'Ravishing'	Li-Ann S.		I	
Encyclia Nursery Rhyme	Bob R.	I	W	Greenhouse
L. tenebrosa	Brandt M.		I	Greenhouse
Den. Green Mist x Nidi	Ron M.		W	Lights
Den. bensoniae	Brigitte F.	H	I	Lights. Needs a rest, loses leaves, then buds arrive
Phrag. China Dragon	Brandt M.	H/M	I	Greenhouse. People's Choice
Phrag. sedenii	Mike B.	M	I	Lights
Paph. 'Worthy Fred'	Mike B.	L	W	Lights
Paph. sukhakulii	Ron M.	L	W	Lights
Phrag. Mont Fallu x Grande	Steve K.		W	Greenhouse. Potted in tree fern

Congrats to People's Choice Award winner Brandt M., for his Phrag. China Dragon

Den. bensoniae, Brigitte F.





Zygo. Louisedorf 'Moonlight',
Maryelisa B.



Paph. 'Worthy Fred', Mike B.



Paph. Sukhakulii, Ron M.



Tolumnia Orchidom Happy Spots 'Charlotte' AM/AOS,
Bob R.



Miltoniopsis Jolene Carlson 'Ravishing', Li-Ann S.



Phrag. Sedenii, Mike B.



Den. Green Mist x Nidi,
Ron M.



L. tenebrosa, Brandt M.



Encyclia Nursery Rhyme,
Bob R.



Tolumnia Orchidom Happy Spots 'Charlotte' AM/AOS,
Bob R.



Phrag. Mont Fuller x Grande,
Steve K.

UPCOMING EVENTSMonthly AOS Judging at Tower Hill

02 July 2022 10:30 AM
Tower Botanic Garden,
11 French Dr., Boylston, MA
Please see our website: nejcaos.org

Monthly Meeting – Kristen Uthus of New World Orchids

12 July 2022 7:30 PM
Sons of Italy, 117 Swanton St.
Winchester, MA

MOS Annual BBQ!

(In lieu of August's Monthly Meeting)
06 Aug 2022

Monthly AOS Judging at Tower Hill

03 Sep 2022 10:30 AM
Tower Botanic Garden,
11 French Dr., Boylston, MA

MOS Annual Auction

13 Sept 2022 7:30 PM
Sons of Italy, 117 Swanton St.
Winchester, MA



July speaker Dr. Kristen Uthus of New World Orchids presents, "The Japan Grand Prix: A Gaijin in Tokyo"

The JPG is one of the premier international orchid shows, and the fact that it is set in one of the most interesting and beautiful countries in the world makes it a must-see experience. Kristen shares some of her experiences at the show, her travels in and around Tokyo, and includes some cultural information on the Japanese orchids. In addition, you will see some of the jaw-dropping displays that are constructed for (what was) the 10-day event.

Kristen is offering a 10% discount of all plants on her website to MOS members for pre-orders. Pick your plants from her website (newworldorchids.com) but email your list directly to Kristen@newworldorchids.com. Pay for plants at the meeting.

Kristen is a particularly entertaining speaker ~**DO NOT MISS THIS MEETING!**

Dr. Kristen Uthus studied both plant and animal ecology and evolution at Virginia Commonwealth University (VCU) and the Ohio State University (OSU). She then taught biology and ecology at several colleges including VCU, OSU, University of Michigan, and Eastern Michigan University. The daughter of a plant fanatic, Kristen has been growing orchids for over 20 years, and in 2014 she fulfilled her dream of making orchids a full-time commitment by purchasing NWO.

Although she enjoys growing many varieties of orchids and other plants, miniatures remain her passion—the weirder the better. New World Orchids specializes in Japanese species including *Neofinetia falcata*, *Dendrobium moniliforme*, and *Sederia japonica*, but her miniature selection includes many other small species including Pleurothallids, Bulbophyllums, and Angraecums. Although never entirely up to date, you can check out some of NWO's offerings at www.newworldorchids.com.

Kristen lives in Manchester, MI, about an hour west of Detroit. She is supported in her orchid pursuits by her husband, Dr. Kevin Wehrly, and her two sons, Henry and Gus.

2022 MOS Meeting Program

Jan.	Mike and Daryl – repotting and mounting
Feb.	Fred Clarke of SVO – Becoming an 80 Percentile Grower
Mar.	Glen Decker (formerly Piping Rock Orchids)
Apr.	Francisco Miranda – Miranda Orchids
May	Carrie Reimann – The Orchidophile
June	Tim Culbertson
July	Kristin Uthus – New World Orchids
Aug.	MOS BBQ
Sept.	MOS Annual Auction
Oct.	Bob Winkley
Nov.	Bob Cleveland Orchids
Dec.	Annual Holiday Party!

Scale Insects on Orchids

Paul J. Johnson, Ph.D.
Insect Research Collection,
Box 2207A, South Dakota State University,
Brookings, SD 57007

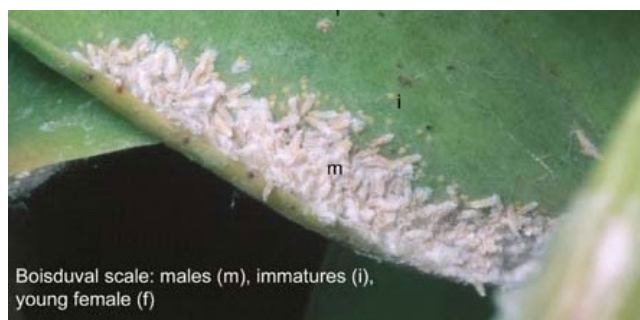
This note is written for the orchid keeper or grower in northern states of the U.S., and Canada, that generally has a small to medium sized indoor collection.

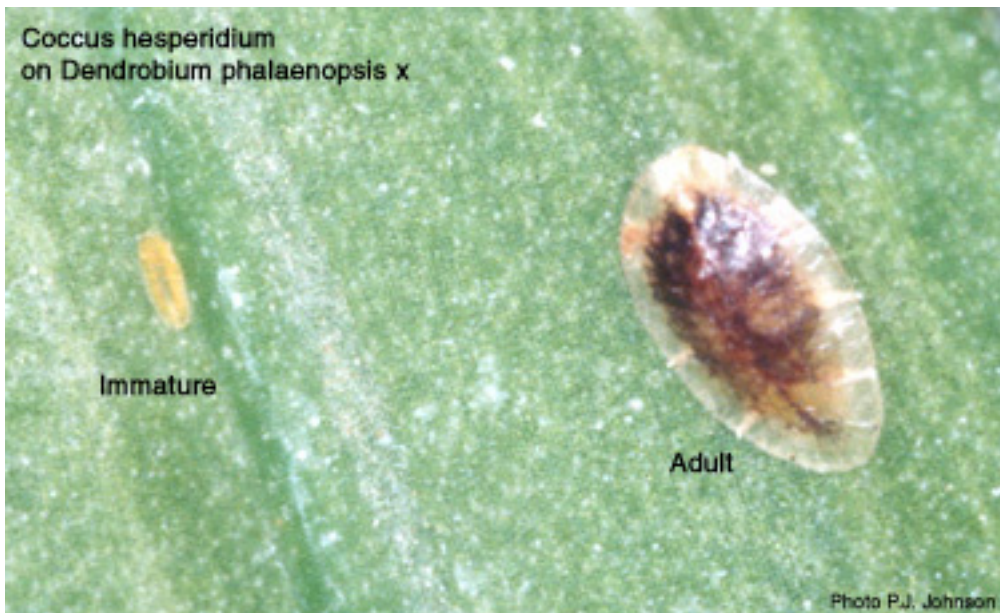
Commercial growers or those with relatively large collections may have environmental conditions and access to chemicals not available to us with smaller plant collections. The keeper or grower in southern states enjoys the potential of many more scale problems because of outdoor growing, but also benefits from natural environmental population management by the weather, and predatory and parasitic enemies of scales!



Sources and Identification

Scales are probably the most important insect pests of cultivated orchids in northern climates. Mealybugs and aphids may tie for second in importance and are controllable with the same methods. According to a 1976 publication from the Florida Department of Agriculture and Consumer Services, there are no fewer than 27 species of scale identified from cultivated orchids. Fortunately, few of the hard or armored scales common on woody plants are also pests on orchids or other non-woody indoor ornamentals. Rather most are the soft scales, usually referred to as brown soft scales or hemispherical scales, and will survive indoor or greenhouse plants. Especially common is the brown soft scale (*Coccus hesperidium*) shown above, and possibly the similar elongate soft scale (*Coccus longulus*). Boisduval's scale (*Diaspis boisduvali*), also called Boisduval scale, the scourge of the southern orchidists, is rarely encountered in northern home collections and apparently does not survive well here, except in the larger collections. This may probably be due to the relatively higher level of personal attention given to individual plants in smaller collections. However, when introduced on infected plants





it can spread quickly to a variety of orchids and be extremely difficult to control. Boisduval's scale will also seriously debilitate or kill orchids.

The more common species of these odd insects that infest orchids are immediately recognized in the adult stage by the light yellowish to greenish-brown, tan, or dark brown, oval to circular, objects that show-up on leaves, petals, sepals, petioles, pseudobulbs, and sometimes rhizomes and roots. Mature females

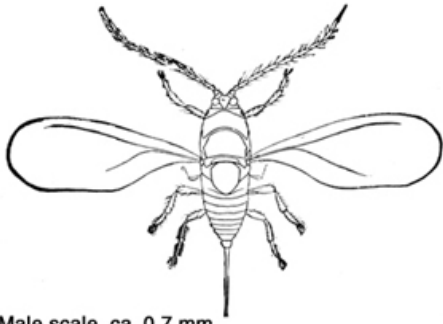
of Boisduval's scale are a rather typical rounded and light-colored scale type, while males are easily recognized by the cottony appearance of aggregated males (see small images above), and these may be confused with mealybugs if not examined closely. The immatures, or crawlers (above far-left), of all scale species are tiny and yellowish to pinkish, and not easily seen without a magnifier.

In the home orchid collection scales are acquired by plants in some combination of three sources. The most common way of acquiring scales is by purchasing an infested plant. Scales are also easily transmitted from infested to clean plants when your plants touch each other and the crawlers to move from plant to plant. The final source is colonization of your plants by windblown crawlers. Colonization is usually done during the summer when your plants are outdoors, but it can also occur indoors in greenhouses and sunrooms by floating on currents produced by circulating and heater fans. This occurrence appears to produce the odd effect of having pockets of infestation when the crawlers settle on plants where the air currents are the weakest and early during a spreading infestation. Similar effects are found with aphids, mealybugs, whiteflies, and spider mites.



Life Cycle

Scale insects have a three-stage life history: egg, larva (or nymph), and adult. Eggs are laid by females, with the eggs usually retained in the body and under the outer "scale" covering when the female dies. These hatch into the mobile nymphs, called crawlers. The crawlers are the active stage that can move between plants. After finding a suitable place for feeding, the crawler will settle and begin feeding, and



Male scale, ca. 0.7 mm

transform into the next nymphal stage. At this point the female begins to form the hard protective “scale” covering. The covering enlarges as the insect grows. Nymphs often have a light yellowish scale, which darkens to tan or brown as the insect matures. Males of soft scales do not form the hard coating or scale, but are small winged creatures whose primary, if not sole, role is to mate and die.

Scales have short life cycles, but may have many generations per year. In a warm greenhouse or indoors the life cycle may be accelerated, though typically a month or more is required for completion of a generation. It is the overlapping of generations that creates the biggest scale management problem. All control methods are at their greatest effectiveness against the the crawlers. By the time the scales have formed the hardened cover (the scale), it is too late to easily kill those adults with chemicals. Also, the large dry brown scales are already dead and the “shells” may be full of eggs which will spill when the shell is ruptured.

Management

Scale management is usually a protracted and serious effort, and never much fun. Light infestations restricted to one or a few plants can usually be treated with household products rather than concentrated insecticides. When possible, immediately isolate infested plants from others to prevent the crawlers from moving amongst them.

Because the life cycle of scales can be so short combined with the overlapping of generations, in order to bring a serious problem under control you will need to do a treatment every 2-5 weeks, depending on the life cycle period of your particular problem scale species. Consequently, the key to scale control is persistence and regular scheduling of control methods.

Management methods that are the least toxic to people, pets, and plants, are the most time consuming and laborious. Insecticidal methods, including horticultural oils, soaps, and synthetic insecticides are progressively more toxic (to both the insects and humans!) and more expensive, but less work. Regardless of method or chemical used, you must remain vigilant and expect to make at least 2-3 applications 10-16 days apart.

Because of plant costs, personal attachment to orchids by owners, and the over-riding desire to avoid insecticides whenever possible a number of effective “home remedies” for scale control are available. Be aware that non-insecticidal treatments may not be highly effective for elimination of scales. Thus, they should be viewed as controls, not eradicators. Also, many common home chemicals are extremely toxic to humans, pets, and plants even in diluted forms, often being proportionately more toxic than the feared insecticides.

Rubbing Alcohol

Probably the most popular home remedy is to swab and daub plants with a Q-tip or ball of cotton dipped in isopropyl (rubbing) alcohol. Do not use other alcohols, such as ethanol or methanol, that can penetrate the plant tissues rapidly and cause considerable damage! The concentration of the isopropyl seems to make little difference; the common 70% available in hardware and drug stores is satisfactory. On hard-leaved plants, gentle rubbing with the fingers or a soft toothbrush is effective, with or without the alcohol. Remove all scales, large and small. Afterwards, you will still need to repeat the alcohol treatment to remove the tiny yellowish spots which are the recently hatched crawlers. Pay particular attention to the midrib, other veins, and leaf edge areas. Closely monitor your plants to get an idea of the life cycle of the particular species of scale that is your problem, but expect to repeat treatment against the immatures every 1-2 weeks.

A common alternative to the swab and daub method is to spray alcohol with a misting bottle or small pump sprayer. Many home growers will also mix-in a small amount of mild liquid dish detergent, and sometimes mineral oil, neem oil, or horticultural oil. One recipe for a 1.5 liter spray bottle is to mix a 50:50 solution of isopropyl and water, with a few drops of liquid soap to act as a spreader, and 1/2 to one teaspoon of one of the oils. But, it seems that every grower has their own proportions of these ingredients, none of which seem to work significantly better than another. Caution is urged, however, as excessive amounts or too strong of a detergent, or use of an ammonia-based chemical cleaner may damage your plants, especially buds and flowers. This is particularly true of dish-soaps and household detergents that could remove natural protective waxes from plant tissues. Also, alcohol sprays are not effective against eggs protected by the scale covering, hence the physical removal of the scales by hand is more effective and provides more rapid control.

A potential rare problem with alcohol treatment is chilling of the plant. The rapid evaporation of alcohol cools the plant tissues, especially with air movement that increases evaporative cooling. This chilling is suspected of over-cooling tissues and creating zones of dead cells that may become necrotic from bacteria or fungi. On warm or breezy days consider wiping any residual alcohol with a tissue instead of permitting it to evaporate off the plant. Such problems and tissue drying are found particularly on soft or thin-leaved orchids (e.g. *Oncidiinae*).

Repotting

Given an extreme infestation you may see scale developing on the roots and rhizomes. At this time, or anytime you observe a heavy infestation, then you may need to consider replacing the potting medium. The potting medium can harbor eggs and crawlers, so dispose of it in a compost pile or in the garbage. When repotting, a close inspection and if necessary a very gentle cleaning of scale and spraying of the roots before repotting is essential. Use care with the cleaning of roots because of their fragility.

Oils, Soaps, and Sterilants

Horticultural oil, neem oil, mineral oil, insecticidal soaps, and sterilants form the next stage of chemical control of scale insects. The oils and soaps are often regarded as “organic” or non-chemical methods,

but this is a misconception or an extremely broad concept of “organic.” Indeed, neem oil is extracted from the neem tree, but horticultural oils and mineral oil are petroleum distillates. Likewise, insecticidal soaps are a solution of synthetic pyrethroids mixed with a detergent (soap) that is made from petroleum products. Sterilants are anti-bacterial and anti-fungal chemicals that are also often effective on algae. However, all of these solutions are generally considered safer for humans, pets, and plants than usual insecticides. None provide absolute control over pests, but frequent use during the presence of pests frequently reduce insect populations to below self-sustainable levels in small orchid collections.

Horticultural, mineral, or neem oil solutions smother the insects, so complete coverage of all sprayed plants is essential. These oils are mixed with water and usually a plant-safe detergent for enhancing the spreading and sticking of the oil. The main caution with these oil solutions is that they should never be applied to plants on hot days (>80 degrees F) or in direct sunlight, as to prevent burning of tissues. Leave the plant in shade until the application has dried. Usually mineral or horticultural oils are best as plant derived oils may spoil rapidly in heat and create gummy blobs or decay malodorously.

Insecticidal soaps are usually solutions of a synthetic pyrethrin, piperonyl butoxide as a synergist (to enhance the effectiveness of the pyrethrin), and sometimes a plant-safe detergent. As with oils the detergent acts as a surfactant and spreader for dispersing the pyrethrin evenly, and as a mild caustic against the insects. Also, to prevent sunburn apply the chemical and allow it to dry in shade. Pyrethroids are synthetic analogs of pyrethrum, the natural extract from certain Asteraceae. Caution should be urged with so-called “safe” insecticidal soaps as some plants are sensitive, particularly tender new tissues, and when mixed with hard water. Some non-orchid ornamentals will drop leaves and abort flowers when sprayed with insecticidal soaps, so caution is urged with prized orchids. Though piperonyl butoxide is usually regarded as safe for plants, it can cause allergies and respiratory problems for users and may contribute to phytotoxicity problems.

Sterilants are usually Physan 20, RD20, or Consan 20, and these are used as anti-bacterial, anti-algal, and anti-fungal agents. These solutions are all composed of isomer cocktails of quaternary ammonium chloride and all have the same antibiotic activity. Quaternary ammonium chloride solutions are common cleaners used by commercial kitchens, janitorial services, and bathing pool maintenance, and are commonly available in concentrated forms at hardware and home repair stores. These chemicals can be used in diluted form, according to label directions, usually for controlling bacterial and fungal diseases on orchids. However, at these same dilutions there is some limited effectiveness on scale crawlers and other delicate insects. Frequent use of sterilants for insect control is not recommended, due particularly to potential damage on new growth, buds, and flowers, and should be done under shade to prevent sunburn.

Insecticides

Persistent populations of scale or infestation in many plants often demand the need for use of synthetic insecticides. There are few insecticides specifically registered for use on orchids, but there are several common, inexpensive, home-and-garden chemicals labeled for ornamental plants. Insecticide

formulations not labeled for ornamental plants are often mixed with solvents that aide in the application of the active ingredient for specific purposes. These solvents, not necessarily the insecticide itself, often produce phytotoxicity and may seriously damage or kill plants. Thus, never use any insecticide that is not specifically labeled for ornamental plants.

There are many insecticides available for ornamental plants, but some are not tested on orchids, and others are generally too expensive or otherwise readily available for the small keeper or grower. Some of the more available and effective insecticides that come in various brand names are acephate (e.g., orthene [wetable powder or liquid]), imidacloprid (liquid), malathion (liquid), and carbaryl (water-based emusifiable concentrate). Other chemicals are available, but in some states you may need a commercial license to purchase them. A current garden center insecticide mixture of acephate and the miticide fenbutatin-oxide is effective for many common orchid pests. Fertilizer/systemic combinations for roses and other ornamentals, usually with disyston/disulfoton, may be effective but are not widely tested on orchids. Also, caution should be given to the fertilizer effect on your plants in combination with other nutrients. Of course, always follow label directions and never, never, never exceed the minimum recommended concentration given in mixing directions! Recommended solutions are based on extensive testing for selected pests and plants. Orchids are tough plants, but many are sensitive to various chemicals, particularly under direct sunlight or high heat, and while certain species may not react to a given formulation others may, so testing is justifiable.

Some insecticides are occasionally discontinued for use because of some discovered hazard. For example, Cygon used to be available, but it no longer recommended and labeled for orchids because it will damage many plants, especially the buds and flowers, and is extremely hazardous to use. As of late 31 December 2004 Diazinon is also no longer available for use, even for non-commercial outdoor use. Although most insecticides with discontinued labels are legally allowed to be “used up”, it may be best to dispose of such chemicals rather than continue their use and risk damage or loss of plants, or increase your own health hazard.

Most home orchid keepers and growers in northern states that need to apply insecticides during inclement weather need special care for applications. If you cannot spray out of doors, place your plant (s) inside a large plastic bag (remove the bag after the spray has settled!) and let the plant ventilate where the fumes will not be wafted around the house or work area. Again, you may have to consider removing the potting medium, spraying the plant, and repotting it with new media in a clean pot when the spray has dried.

Growth Regulators and Chitin Inhibitors

Research on the use of insect growth regulators, botanical insecticides, and their application to ornamental plants is increasing, but incomplete. Insect growth regulators, such as kinoprene (tradename = Enstar II), are synthetic forms of juvenile hormone which is highly important in insects at critical stages of their metamorphosis. The use of growth regulators interrupts the normal development of the insects, including orchid pests such as scales, mealybugs, aphids, and whiteflies. Apparently, there is

little good and reliable information on their use on orchids, but an increasing number of growers are reporting satisfactory results with Enstar II and there does not seem to be any plant health problems noted thus far. Also, they are regarded as safe for humans and pets. Kinoprene does not work on adult insects and so should never be used to eradicate a pest population, but is best used on incipient infestations and maintenance sprays.

Azadirachtin (tradenames = Azatin and Neemazad) is a plant derived (neem tree) chemical, or botanical insecticide, that is a chitin inhibitor. Chitin is a primary component of the insect integument, or exoskeleton. Azadirachtin reduces the insects' ability to properly develop its integument and causes mortality through incomplete development. There is little information available on this chemical for use on orchids, but it is available on a wide variety of ornamentals and is labeled for greenhouse applications.

Final Considerations

Heavy infestations of scale, especially on many plants may require severe control methods. In such situations, you may need to consider the use of a synthetic insecticide. On the extreme side if you have a plant showing signs of decline from scale you may have to seriously consider destroying that plant, as the low likelihood of rejuvenating that plant may not justify the expense and effort of continued treatments. After all, the destruction of a sick plant can be used to justify the purchase of a new and healthier plant!

If you are battling scale for long periods of time (e.g., >9 months) and have been using the same insecticidal control method then you may have built a bigger problem that you started with. Depending on the length of time of your problem and the intensity of chemical use you could have selected a population of resistant scales. The best resolution to this is to change methods and chemicals occasionally; that is, do not use the same chemical mix more than 3-4 times sequentially. After isolating infested plants give them a thorough application of something different from what you have been using. For example, if you used insecticide then switch to an oil, soap, or different insecticide.

Generally, never use an insecticide not labeled for ornamental plants. Whenever using oils, soaps, and insecticides, be thorough, change formulations frequently, and do not use less than the minimum concentration of mixture. Too little of a chemical enhances resistance, while too high of a concentration may damage the plant. Never use hard chemicals prophylactically, that is do not routinely use chemicals as a preventative as it is a waste of chemical (and money!) and such use allows resistant scales to develop. Finally, keep up the manual removal of all scales, if possible. Removing the egg laying adults is as important as killing the nymphs. And, remove the dead scales because eggs protected under the shell of the dead female may hatch and re-infest the plant.

The single greatest problem leading to unsuccessful scale management is lack of patience and lack of attention to scheduling. It takes time to eliminate a scale population. It also requires intensive and regular control methods over a minimum of 2-4 month period, and there still may be no guarantee of eradication.

Get to know your fellow MOS members!

Jeff Feldman

If you're in the minority of members who've never met Jeff Feldman, that'll quickly change now that we're meeting in person again. Jeff is that warm, witty, and engaging "orchid killer" who is a bona fide people lover. He enjoys spending time with members, getting to know, and welcoming everyone into the MOS fold. Chatting with Jeff, you've got his full attention, and while he's interested in just about any topic, he's most eager to tell you what makes MOS a very special society; a place where you get to learn about growing orchids and make a slew of life-long friends, too.



With a solid background of volunteering throughout his professional career, Jeff knew that a volunteer organization's success is driven by recruiting new members and involving them with its activities. During Jeff's 4 years of service on the Board, he and Ralph DiFonzo co-chaired the membership committee and doubled membership in a 2 year period. "A membership committee is responsible for driving an organization. When that goes well, we have a successful Society devoted to its educational goal; an interest in and and growing of orchids", he said. Jeff is always one of the guys who gets people in the door, encourages members to bring their plants to the show table and he is a perennial MOS Show Committee team trooper. Perhaps most of all, with a particular eye for talent, Jeff is a recruiter for leadership opportunities needing to be filled within MOS. In addition to Membership, as former (3 term) Vice President, Jeff oversaw the monthly speakers' program, where he planned and solicited speakers from across the country and coordinating scheduling with our sister societies.

Jeff got involved with orchids when his dad passed away in '99 and a friend/colleague of his sent him a beautiful white orchid. Knowing nothing about orchid care, it gradually died. Several years later, two friends of Jeff and Roberta, who happened to grow orchids, started taking them to visit a nursery, where he bought a few of his first orchids. Then in 2011 at the Lyman Estate sale, Jeff bought a Neofenitia and a woman working there (Chieko Collins) suggested he join MOS to learn how to grow it. That was when he joined up!

Jeff enjoys growing mini and compact catts, toolumnias and neos, all of which he has had "the joy of limited success". Recently, he discovered his talent for growing seedlings (using a grow dome and researching the culture needs of seedlings taken from a flask). Currently he grows on two light carts with 4 LED grow lights and a fan, plus a small, 3 level shelf unit in a south-facing window. Most of his orchids go outside in warm weather on his deck (facing due south) under a shade cloth. Those that can't tolerate high light are kept in a mostly shaded area.

Annual MOS and sister society shows are some of Jeff's favorite society highlights. He enjoys keeping track of the data the following year to tweak planning and preparations, to make it a better experience each year. Jeff particularly loves MOS's low-key, social events (summer bbqs and holiday parties), which he feels are the warmest and nicest MOS events of all!



• THE AOS CORNER •



Greenhouse Chat with Ron McHatton

Orchid related questions, answered by AOS experts.

Click [here](#) to watch now.

Note the specific times below if you wish to watch or listen to those topics.

- 03:14 Phalaenopsis Root health, watering and repotting
- 10:29 Cattleya Brown sheaths and blooming
- 14:48 Oncidium Sharry Baby culture
- 17:55 Hydroponic Growing
- 21:11 Culture tips while plants are in flower
- 25:16 Ants in my orchids
- 27:15 Phalaenopsis When to repot
- 29:10 Miltonia When to repot
- 30:31 Phalaenopsis roots and repotting
- 33:35 Pre-soaking roots before repotting
- 36:43 Cattleya luteola culture
- 39:13 Moisture meters and watering
- 41:57 Automatic watering system techniques
- 43:50 Water quality and Ph
- 45:46 Indoor growing
- 52:37 Oncidium Sharry Baby spots on the leaves

Seasonal Orchid Care July/August

Click [here](#) for Checklist

Organizing orchid culture and its chores by season is a convenient way to make sure that your orchids get the proper care at the right time. Becoming in tune with your plants' growth cycles creates a connection with the natural world and makes you a better grower.

Officers, Directors & Committee Chairs

Officers

President	Dina Deresh	dinad@massorchid.org
Vice President	Bob Francey	bobf@massorchid.org
Past President	Brandt Moran	brandtm@massorchid.org
Secretary	Brandt Moran	brandtm@massorchid.org
Treasurer	Amanda Larson	amandal@massorchid.org

Directors

Linda Abrams	lindaa@massorchid.org
Mike Badia	mikeb@massorchid.org
Emily Dewsnap	Emilyd@massorchid.org
Ralph DiFonzo	ralphd@massorchid.org
Anne Pfaff	annep@massorchid.org
Alexis Victor	alexisv@massorchid.org

Committee Chairs

AOS Trustee	Howard Bronstein	
AOS Representative	Brigitte Fortin	aosrep@massorchid.org
Conservation	Robert Hesse	conservation@massorchid.org
Social Media	Emily Dewsnap	emilyd@massorchid.org
Technology	Ralph DiFonzo	ralphd@massorchid.org
Hospitality Committee	Karyn Stewart	karyns@massorchid.org
Library	Open	librarian@massorchid.org
Membership	Ralph DiFonzo	ralphd@massorchid.org
Newsletter Editor	Anne Pfaff	newsletter@massorchid.org
Speaker Program	Bob Francey	bobf@massorchid.org
Orchid Digest Representative	Brigitte Fortin	orchiddigestrep@massorchid.org

Orchid Show

Ralph DiFonzo	
Brigitte Fortin	show@massorchid.org

Orchid Show Program

Meg Bright-Ryan	program@massorchid.org
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Show Table

Mike Badia	mike@massorchid.org
Linda Abrams	lindaa@massorchid.org