



Conservation Through Knowledge

Nutmeg State Orchid Society Inc.

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Officers:

President: Ron Burch

ronjonb@aol.com

Vice President: Ginna Plude

gcplude@aol.com

Jeanne McDermott

jtmcdermott@comcast.net

Treasurer: Tom Mierzejewski

tommajeski@comcast.net

Secretary: Walter & Harriet Doehr

johndeered@att.net

winnietpooh@att.net

Directors: Jay Presbie

jpresbie@sprintmail.com

Sandy Myhalik

myhalik@comcast.net

Newsletter Editor: Walter Doehr

johndeered@att.net

AOS Representative: Ginna Plude

gcplude@aol.com

Membership: Jeanne McDermott

NSOScontact@comcast.net

Affiliated with the American Orchid Society



501 (c) (3) non for profit organization

The President's Message:



NSOS's last meeting before summer was the trip to Glen Decker's Piping Rock Orchids for the picnic with Northeast New York Orchid Society. I was not able to attend due to a prior family engagement but have heard that the picnic was a great success and it has been suggested that we as an organization have a get together with another society next year. This sounds like a great idea and one that we will discuss when we get back together in the fall.

Our next Society meeting will be held September 10, when we have our annual picnic (details to be posted during the summer). Rain date will be September 11. On the day that picnic is not held, consider attending the International Phalaenopsis Alliance meeting which will be held in New Hampshire on the 10th and in New York on the 11th (see announcement on our website under Other Events).

On October 3, Glen Decker will be the speaker at our meeting and will speak about cultivation of slipper orchids. Glen is a great speaker and one of the most prominent growers of slipper orchids in the US.

At our November 7 meeting, Margaret McBride of Black Meadow Flora in Chester NY will speak about Terrestrial and Semi Terrestrial Orchids.

The year will end with our Holiday Party and Elections on December 5. This is an important election (of course all of them are) since we will be electing a full slate of officers as the existing officers have held their positions for two years. Please consider running for election – you will find it great fun and you will become even more involved with our great organization.

We wish everyone a great summer and look forward to seeing you in September!

Ron Burch

May SHOW TABLE

GROWER	PLANT NAME	TYPE	CROSS		TEMP	GROWN
Rocco Basilica	Beallera 'Smile Eri'	Oda	B. Tahoma Glacier	Oda. Ingera	I	W
	Enaylia bractescens				I	W
	Baldan's Kaleidoscope 'Lycastanopsis'	Phal.	P. Hausermann's Candy	P. Daryl Lockhart	I	W
	Jiuhbao Sweetie 'Red Sun'	Dtps			I	W
	Mem. Jay Yamada 'Kauai'	Dgrma			I	W
John Sziklas	Copper Queen	Blc			I	G
	Lowii 'Princehouse'	Paph.			I	G
	Grande 4N Gigantea x Wallisii	Phrag.			I	G
Ginna Plude	Rainbows Dance 'Akazkinchan'	Den.			I	W,L
	Sin Yuan Golden Beauty	Phal.			I	W,L
	Taisuco Mizky	Dtps.			I	W,L
	Renati 'S&W'	Lc.			I	W,L
Jeanne McDermott	Mini Mark 'Holm'	Phal.	Micro Nova	Philippinensis	I	W, H
Robert Bruzas	C. New Dawing 'Flowers Galor'				I	W,L
Marie Hebert-Begley	Tiada kings Caroline Little Zebra	Dtp	Ever Spring King	Ho's Little Caroline	I	W,L
GROWN KEY	TEMP. KEY					
L= Lights	I=Intermediate					
W=Window	W=Warm					
G=Greenhouse	C=Cool					
H=Hydroponics						



Dtps. Taisuco Micky
Grown By Ginna Plude



Phal Sin Yuan Golden Beauty
Grown By Ginna Plude



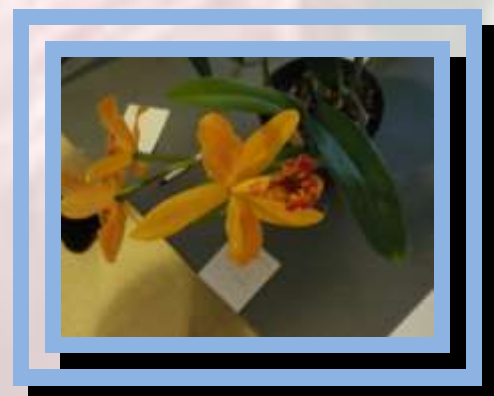
Dtps Jiuobao Sweetie 'Red Sun'
Grown By Rocco Basilica



Tiada Kings Caroline
Grown By Marie Hebert-Begley



C. New Dawing 'Flowers Galor'
Grown By Robert Bruzas



Blc Copper Queen
Grown By John Sziklas

NUTMEG STATE ORCHID SOCIETY MENTOR LIST 2011

Ron Burch	Cypripediums Native orchids	860-567-0431	ronjonb@aol.com	Call/e-mail anytime
Walter Doehr	Cymbidiums, Phals., Growing under lights Hydroponics	203-634-7712	johndeered@att.net	Call/e-mail anytime
Joe Hertz	Under lights and Windowsill growing All species	860-233-5505	jhertz1015@aol.com	Call/e-mail anytime
Julia Massolin-Walas	All species, Hydroponics Pests & diseases, Mounting/Repotting Dividing	860-673-3578	orchidjulia@hotmail.com	Call/e-mail anytime
Jeanne McDermott	Windowsill growing: Phals, Paphs, Brassia, Oncidium, Cymbidiums, Miltoniopsis & mixed genera	860-677-5381	jtmcdermott@comcast.net	Call/e-mail anytime
Sandy Myhalik	Phalaenopsis	860-677-0504	myhalik@comcast.net	
Jay Presbie	Growing under lights All species	860-651-3155	jpresbie@sprintmail.com	Call/e-mail anytime
John Sziklas	Paphiopedilums Phragmepediums Cattleyas	860-658-2908		Call anytime

NSOS now has a mentor list and would like to add more folks going forward. We are looking for people that are willing to answer questions on something that you are familiar with pertaining to orchids. You do not have to be an expert, just able to help someone who has a question in your area of knowledge. We all have areas that we feel comfortable in that would be of great assistance to someone just starting out. If you wish to be added to our NSOS Mentor List, please send me a note: johndeered@att.net

BUSINESS MEETING

Our meeting was called to order @
Ron
was held
in
the first



7:15pm by President
Burch. The meeting
at Camp Happy Hill
Unionville. This was
meeting at our new



location and the facility seems to fit our needs. We did not use a microphone and everybody heard our speaker.

The upcoming bus trip to Piping Rock orchids was discussed. The club would provide water. The members are asked to bring a folding chair to sit on as seating will be limited. The bus will leave @ 8:30am sharp and return @ 6:30 pm.

NSOS is looking for someone to host our picnic on Sept. 10, 2011 (rain date Sept. 11). Anyone interested is asked to call Jeanne.

Jay Presbie donated his library to NSOS, the books will be categorized and will be available to the members shortly. Thanks Jay for the great donation.

SPEAKER



Carri Raven- Riemann was our speaker. Carri just returned from Taiwan where she was involved in judging as well as acquiring some nice orchids. Carri spoke on

hybridizing and culture followed a question and answer period. As excellent and we got to see some

As always Carri brought some pre ordered but there were a lot of great presentation and insight on what is coming in the future.



by
always Carri's presentation was of the upcoming things in Phals.

orchids for sale, some of which were others for sale. Thank you Carri for a

UPCOMING EVENTS

2011

June 19, 12:00pm ... Northeast Judging Center - Elmsford, The Hampton Inn, 200, Tarrytown Rd., Elmsford, NY

July 3, 12:00pm ... Northeast Judging Center - Boylston, Tower Hill Garden, 11 French Dr., Boylston, MA

July 17, 12:00pm ... Northeast Judging Center - Elmsford, The Hampton Inn, 200, Tarrytown Rd., Elmsford, NY

August 7, 12:00pm ... Northeast Judging Center - Boylston, Tower Hill Garden, 11 French Dr., Boylston, MA

August 21, 12:00pm ... Northeast Judging Center - Elmsford, The Hampton Inn, 200, Tarrytown Rd., Elmsford, NY

September 4, 12:00pm ... Northeast Judging Center - Boylston, Tower Hill Garden, 11 French Dr., Boylston, MA

September 10, ...NSOS Picnic – Place TBA Rain date on September 11, 2011

September 18, 12:00pm ... Northeast Judging Center - Elmsford, The Hampton Inn, 200, Tarrytown Rd., Elmsford, NY

October 3, ...NSOS meeting 7:00pm –Held at the Lions Clubs Camp Happy Hill, 87 W. Avon Rd, Unionville, CT @ 7 pm – 9 pm - Glen Decker from Piping Rock Orchids will give a presentation on” How to Grow Great Slipper Orchids”

November 7, ...NSOS meeting 7:00pm – Held at the Lions Clubs Camp Happy Hill, 87 W. Avon Rd, Unionville, CT @ 7 pm – 9 pm – Margaret McBride from Black Meadow Flora inc. from Chester NY will give a presentation, Topic TBA

December 5, ...NSOS meeting 7:00pm – Holiday Party & Elections - Held at the Lions Clubs Camp Happy Hill, 87 W. Avon Rd, Unionville, CT, Room C @ 7 pm – 9 pm

Meetings are held at the Lions Clubs Camp Happy Hill, 87 West Avon Rd, Unionville, CT @ 7 pm – 9 pm the first Monday of each month unless otherwise posted above or on our website.

TREASURER’S REPORT

**NSOS financial data is available to members upon request. Send your inquiries to our Treasurer,
Tom Mierzejewski: tommajeski@comcast.net**

Advertising in our NSOS Newsletter

Advertising is now open to members and businesses. The following rates apply: \$10/month business card size ad. ¼ page \$25, ½ page \$50. Members would get \$5 & \$10 off these rates respectively. A four line word ad for members would be \$2. Contact Walter Doehr if interested and send your check to Tom Mierzejewski, our Treasurer.

Refreshments:

It is requested that for the October meeting, those members with last names beginning with A thru M bring in a snack or finger food to share with members. Thanks in advance for your contributions!



Robert Hirnyk Memorial Library

	TITLE	AUTHOR	PUB
1	Book of Orchids	Withner, Dr. Carl	1985
2	Botanical Orchids and How to Grow Them	Kramer, Jack	1998
3	Complete Guide to Maine's Orchids	Kenan, Philip E.	1983
4	Exotic Orchids -- Successful Indoor Gardening	Rittershausen, Wilma	1989
5	Expanding Your Orchid Collection	Rentoul, J. N.	1989
6	Field Guide to the Orchids of Britain and Europe	Williams, John & Andrew	1978
7	Flowers of the Amazon Forest	Mee, Margaret	1988
8	Forgotten Orchids of Alexandra Brun	Cribb, Philip	1992
9	International Book of Orchids	Hunt, P. Francis	1979
10	Miniature Orchids	McQueen, Jim and Barbara	1992
11	Orchid Genera Illustrated	Sheehan, Tom and Marion	1979
12	Orchids	Black, Peter McKenzie	1973
13	Orchids	Menzies, David	1991
14	Orchids -- A Guide to Cultivation	Cribb, Dr. Philip & Bales, Chris	1992
15	Orchids -- Natural History & Classification	Dressler, Robert L.	1990
16	Orchids -- Wonders of Nature	Kijima, Takashi	1987
17	Orchids at Kew	Stewart, Joyce	1992
18	Orchids from Seed	Thompson, P.A.	1974
19	Orchids of Africa	Stewart, Joyce & Hennessey, Esme F.	1981
20	Orchids of Asia	Eng Soon, Teoh	1980
21	Slipper Orchids	Hennessey, Esme F. & Hedge Tessa A.	1989
22	Southern African Epiphytic Orchids	Paul, John S.	1978
23	The Specialist Orchid Grower	Rentoul, J. N.	1987
24	Wild Orchids of Britain and Europe	Davies, Paul and Jenne	1983
25			

**INTERNATIONAL PHALAEOPSIS ALLIANCE “FOCUS ON PHALS” DAYS
PLANNED FOR FALL
SEPTEMBER “DOUBLE-HEADER” WEEKEND FOR NEW ENGLAND & NEW
YORK**

This fall, on September 10 & 11, 2011, the New England and New York/Eastern Canada Regions of the International Phalaenopsis Alliance (IPA) will be hosting, in conjunction with two local AOS affiliated societies, a two-day double-header for their annual “Focus on Phals” day – a fun and informative day-long event with old friends and new. On Saturday, September 10, we will be in Bedford, New Hampshire, providing the program and sharing the day with the regular monthly meeting of - and in cooperation with - the New Hampshire Orchid Society. And on Sunday, September 11, we will be in the Colonie, NY area, near Albany, in cooperation with the North Eastern New York Orchid Society (one of two possible venues to be determined depending on the number of Registrants).

Our Keynote Speaker for each event will be Norman Fang of Norman’s Orchids who will cover in-depth culture of the Phalaenopsis orchid in “*The Changing Face of Moss Culture: Tips for Success*”. With so many Phals now being sold in New Zealand moss, which is packed into the pots tighter than a brick, Norman will cover all the elements of caring for and being successful with this new approach to growing these Phals to perfection – a presentation that is not to be missed.

Our second guest speaker will be Carlos Fighetti, Immediate Past President of the AOS and current First Vice President of the IPA. He will be speaking on “*Phal Species & Their Variants: Are They or Not?*”. With so many new forms of the species being shown now, he will explore the question of whether they are actually a species or a hybrid.

Our third speaker, Carri Raven-Riemann of the orchidPhile, will give a brief overview of the newest directions in breeding in Taiwan as seen at the recent March 2011 TIOS Show in Taiwan. We’re also currently exploring the possibility of having AOS judging of the show tables at each meeting.

Each day will begin in the morning with a continental breakfast, followed by presentations given by Carlos and Carri, a light lunch, a review of the show table and a mini auction of select plants to help defray the speakers’ expenses. The afternoon session will begin with our Keynote Speaker, Norman Fang, and finish with a round-table in-depth discussion of culture.

Guest vendors will include Norman’s Orchids, the orchidPhile and Kelley’s Korner Orchid Supplies (Pre-Orders from all three vendors will be made available at a later date). As soon as all the details are firmed up, we will have Registration Forms available for each event which will be made available for the society newsletters and web sites. The minimal Registration Fee is just to cover the expense of the food we provide for each event. Therefore, it will be imperative to register your intention to join us at a specific location so enough food and chairs can be provided for all who wish to attend. For this reason, we will not be taking any additional Registrations a week before either event (September 2). However, due to the summer hiatus for many societies, we may not be able to get Registration Forms into their newsletters in a timely manner. So if you would like to have the form mailed or e-mailed directly to you,

please send your request to:

Adrienne Giovino
47 Spellman Road
Westwood, MA 02090
Phone: (781) 326-8921

E-mail: ipa.adrienne@gmail.com (**please mention IPA Regional Meeting
in the subject line)

Contact information will also be available at www.phal.org under Upcoming Events. We're really excited about this new approach to holding our annual Regional get-togethers and hope to see many of you there. Our special thanks go to the two co-hosting societies who have so generously invited us to share this day with them.



Phrag. Grande 4N Gigantea
Grown By John Sziklas

NENYOS/PIPING ROCK EXCURSION

On Saturday, June 4th, 46 NSOS members enjoyed an adventure that took us to Galway, New York via the Peter Pan Express! The weather was dry and sunny; the ride effortless thanks to our smooth bus operator, Joe; the picnic delightful with an abundance & variety of food to consume; and lots of camaraderie to engage in and enjoy. All that plus the orchid shopping opportunity was huge...so many choices to make in blooming & non-blooming plants. To top all this, Alan Koch from Gold Country Orchids delivered a most educational one hour presentation answering a multitude of audience questions.

Thanks to Tom Hoodack, NENYOS VP, and all of the NENYOS volunteers who helped make this a terrific event! Besides NSOS, some orchid Society members from Syracuse and Buffalo also attended. Thanks are indeed extended to Glen Decker, Piping Rock Orchids, for allowing all of us to peruse his greenhouse at our leisure for shopping and enjoy his yard as well. It was a delightful day!

Although NSOS had several late cancellations, you can be sure that those empty seats were filled with wonderful orchids going to their new homes in CT! Fun was had by all!!

Tom & Jeanne

At least 4 of our members won the raffle.

A special thanks to Tom & Jeanne for arranging & coordinating the trip!



More pictures will be posted on our web site.

For those of us that are growing in hydroponics or that considering trying it here are a couple of articles of interest. There are many more facts on their website.

Hydroponics, and First Rays' "SEMI-HYDROPONIC™" Orchid Culture Technique

[Home](#) > [Semi-Hydroponic Culture](#) > [Semi-Hydroponics](#)

or

[Home](#) > [Free Information](#) > [Semi-Hydroponics](#)

Most experienced orchid growers will acknowledge that the majority of orchid culture is hydroponic in nature, as the medium is there primarily for mechanical support, and provides little, in any, nutrition to the plant, with that being provided by the nutrient solutions used.

When most folks think of hydroponics, it's in the context of "ebb-and-flow," nutrient film, or nutrient mist (aeroponic) culture techniques. I don't feel that those are appropriate for orchids, due to the possibility of pathogen transport through the nutrient bath, not to mention the costs involved, so I have experimented for years in an effort to find a culture technique that provides the best conditions for the plants, as well as a minimum in labor for the grower.

I grow nearly all of my personal collection of plants in individual-pot hydroponics, using Prime Agra® spherical ceramic media, in what I refer to as a "semi-hydroponic™" method (don't get hung up on the name, it's simply a way to differentiate it from the methods I described above):

For **containers**, I use custom-made plastic pots ([available from our online store](#)), but have, in the past, used painters buckets, food storage containers, trash cans, etc, with closed bottoms. I have even used Styrofoam coolers. Those pots have two or three quarter-inch diameter holes about one inch up from the bottom on the sides. The function of the design is described below.

The **medium** is another key component of the culture technique; it must be inert so it won't decompose, fairly uniform in particle size so it provides lots of free air space, and must provide good capillary (wicking) action to keep it uniformly moist. I started this culture technique using a custom "semi-hydroponic™" medium, which was sponge-rock (very coarse perlite, with chunks typically 1/2-3/4") and coarse charcoal, mixed in about 50-50 ratio, and, although it had a reasonably long life, it was not reusable, and over time, root growth appears to break down the sponge rock, which limits air flow. After much experimenting, I have found a medium that really fits the bill: one-half-inch diameter [PrimeAgra™ ceramic medium](#) that can be reused indefinitely. Click on that link for more details about the medium. If you want to see how PrimeAgra™ compares to other inert, inorganic media, [click here](#).

Potting is very similar to that with more traditional media, except that, instead of compressing the medium around the roots as you pot, you want to shake the pot when pouring medium around the roots, so it will get into the spaces within the root ball. Pot your plants to a normal depth. Be sure to soak the medium thoroughly (I prefer overnight) before potting. Adding Dyna-Gro K-L-N Root Grow to the presoak also helps.

NOTE ON SIZE OF MEDIUM TO USE: Most clay aggregate materials are available in fine and coarse grades. We recommend the **coarse** grade for almost all plants, with the exception of small, really fine-rooted plants such as pleurothallids or tiny seedlings. If you try growing larger plants in the fine material, you will likely experience root rot in short order. Don't be too concerned about using coarser material for fine-rooted plants, as they seem

to adapt to it quite well - [click here to take a look.](#)





Watering frequency will vary with plant growth rate and ambient conditions, and may vary with the season. In fact, once a plant is well-established, it literally cannot be overwatered, and flushing the pot frequently eliminates plant waste products and returns the reservoir chemistry to its "target" values, so is an advantage. At a bare minimum, try to water before the pot dies out. We recommend feeding a somewhat dilute nutrient solution at every watering, and all of our plants get either Dyna-Gro "Grow" (5-9-7) solution or the MSU-type fertilizer at a nitrogen dosage of about 100-150 ppm. When using the Dyna-Go in my reverse osmosis (RO) water, we also add about 1/4 teaspoon of Pro-tekt to bring up the pH, and about once a quarter, I'll add 1/2 tsp./gallon magnesium sulfate [Epsom Salts] to the solution as a supplement (neither is necessary with the MSU fertilizer, as it provides the proper pH range in RO, and has plenty of magnesium and sulfur already). Notice I don't water constantly...that's why I call it "semi-" hydroponic.


The watering technique is dependent on the pot used: when watering plants in our "semi-hydroponic™" pots, fill the pot to the top. It saturates the mix and then drains down to the level of the holes, which leaves the mix nice and airy, while providing a reservoir to keep it moist by capillary action. If you're using the two-stage hydroponics pots with gauges, we have found that it's best to stop adding solution at the moment you see the gauge just begin to move up from the bottom.

Paphiopedilums, Phragmepediums, masdevallias, phalaenopsis, cattleyas, cymbidiums, Oncidiums, dendrobiums, epidendrums, Miltoniopsis, pleurothallids and Zygopetalum all do great for me, along with a variety of other miscellaneous genera. I've not had the guts to try vandaceous orchids as yet, but I'll get there eventually. Bromeliads and tropical house plants also thrive under the conditions. **DO NOT** try any toolumnias in S/H culture - they just don't go for it!

For those of you who have a tendency to "over-pot" plants, this culture method may offer you a real "plus," as it appears that plants do quite well in large pots. For example, several years ago I moved an Oncidium Sharry Baby 'Sweet Fragrance' AM/AOS from a 3" pot of bark mix to a 12" Semi-hydro pot, and it has bloomed reliably ever since. In September of 1997, it had 4 spikes carrying over 300 blossoms! When carrying it back to the greenhouse from the household display location (my kitchen), I dropped it, breaking the pot. To my amazement, the entire 12" diameter by 14" tall pot was just FULL of roots!

I know there is no "universal culture method" that is perfect for every grower and every genus, but I believe that the semi-hydroponic™ technique comes pretty close. When using the PrimeAgra™ medium and the Dyna-Gro nutrient combination described above, I observe the following:

-  The plants are healthy and strong, and bloom reliably. Generally, I see improved size, color and durability in the blossoms.
-  There is always a readily available moisture and food source, eliminating the stresses put on a plant when those are lacking or only available intermittently.
-  It appears that one cannot overwater, as the pot design maintains a maximum level, and the medium controls the distribution.
-  Root rot is virtually eliminated, as the airy nature of the medium, coupled with the holes in the side of the pot, allows plenty of air movement and gas exchange to keep the root zone fresh, and not saturated with carbon dioxide.

 There is no noticeable salt buildup, due to the nature of the nutrients, the structure of the medium, and the flushing action of the dilute solution.

If you have some experience growing orchids in this manner, please join "[The Official Semi-Hydroponics Forum](#)", or fill out our "[Feedback Form](#)."

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Root Cells and Culture

[Home](#) > [Semi-Hydroponic Culture](#) > [Roots & Culture](#)

If you've hung around the orchid growing community long enough, you've probably heard the statement "good roots means a good plant." While accepting that at face value, little do folks look into the details of that statement and think about what it means to their culture of orchids.

Let's start with some root "basics:"

1. Root cells serve to regulate the flow of water and nutrients (as water-soluble ions) into the plant, and to regulate gas exchange (mostly carbon dioxide out and oxygen in, but any green roots will carry on photosynthesis, so the opposite flows are also present).
2. The rates at which those occur are determined by physical characteristics of the root cells and by the relative concentrations of the components on either side of the cell wall.
3. A root cell, once grown, is apparently "locked into" the configuration that was appropriate at the time it grew, and cannot change to accommodate a new environment. New cells must grow that are attuned to the new environment. That is why one may see the decomposition of the old root system if the plant is moved into a different culture, such as a bark-based medium to Semi-Hydroponics™.
4. The functionality of cells in a particular environment is not "all-or-nothing," but is a matter of degree.

Based upon those tenets, it becomes clear that some of the long-established "rules" are quite well-founded:

1. When repotting, for example, always make sure that new growths (hence new roots) are forming. Doing so gives the plant the opportunity to grow cells that are appropriate for the environment created by the new medium, and to develop a new root system that will fully support the plant as the old roots start to fail.
2. Likewise, it is important to keep the plant in a low-stress environment for four to six weeks after repotting so the plant can get established. If the new roots have not yet grown enough to fully support the plant, and the old roots are not able to function at 100%, this makes a lot of sense. This is an especially important issue when making a drastic change in media, such as bark-based to mounted, into inert media, or into water. Interestingly enough, aerial roots do quite well when submerged in water, as they can apparently regulate water flow better than those that were submerged in the medium.

One further thing that relates to media choice is decomposition and gas exchange. We know that decomposing medium can take down a plant quite quickly, but an aspect of that which is not often considered is its effect on gas exchange: as organic media decompose, they tend to compact and stay quite wet, and it quite plausible that it's the compacting of the medium - and not the wetness or decomposition themselves - that is the culprit in the rapid loss of the plant.

As plant respiration occurs, carbon dioxide exits the roots so it can be swept away into the air. If the medium is compacted and wet, the carbon dioxide will not dissipate, but can react with the water to form carbonic acid, which really kills plant tissue quickly. The localized high concentration of carbon dioxide near the roots also limits the plant's ability to release more, essentially "choking" the gas exchange process.

It seems likely that the open, airy structure of the ceramic PrimeAgra™ medium - permitting lots of gas exchange - is why constantly-wet roots don't rot in semi-hydroponic culture. Some experts feel that a lot of flushing with fresh water (carrying lots of oxygen) is beneficial to the plant, so the watering regimen used in semi-hydroponics may also play a role in plant health.

Further, the fact that there is no potential of medium decomposition means that we have eliminated another potential source of stress on the root system, and one response to stress is the generation of phenolic compounds. Designed to be released into the root environment in order to fend off external diseases and competition from other plants, the compounds are also toxic to the orchid's own roots. Reducing the need for self defense reduces the possibility of self-destruction.

One last comment: the vast majority of the orchids we grow are epiphytes or semi-terrestrials such as Paphiopedilums. Accordingly, their roots are designed to function in open air, attached to tree branches, or just under the surface of the leaf litter on a forest floor (could those "hairs" on Paph roots be there in order to provide air space between the roots and the litter?). Potting a plant in any medium is for our benefit, not the plants, so we had better make sure that the conditions within the medium are not detrimental to the functioning of the roots.

NSOS is not promoting this supplier, we are just giving our members information on Hydroponics & giving them acknowledgement for this info. They allow these articles to be emailed.

AOS CORNER

Monthly Checklist for July and August

Cattleya

Cattleyas this month require careful attention to their watering and fertilizing needs owing to characteristically high temperatures. Evaporative cooling is a must in areas of the country where it is effective. Where it is not (the more humid regions), care needs to be paid to proper venting to keep temperatures within reason. Bottom vents in conjunction with top vents provide enough rising airflow to help keep plants cool. Increased air flow lessens humidity and dries plants out more quickly, necessitating more frequent damping down and watering, in areas where high humidity is not a problem. Higher light and heat indicate more fertilizer. The growths your plants are making now are the source of this autumn, winter and spring's blooms, so applying adequate fertilizer this month is the best way to ensure future blooms. Higher temperatures and humidity may also lead to fungal or bacterial rot problems, so it is important to closely observe your plants for any early indication of problems. Pests are also at a high point this month for the same reason.

Paphiopedilum

Cooling and air circulation are especially critical in these two months to prevent stress and avoid disease problems. Watering needs to be closely monitored to ensure that plants do not dry out. Warmer-growing hybrids will be at the peak of their blooming, with attention needing to be paid to staking of spikes. Look for water lodging in growths, which can rot emerging spikes and lead to the loss of the entire growth.

Phalaenopsis

Most, if not all, potting should be complete by now. This month and next are when these plants achieve their maximum growth. This growth will be that from which they set their spikes for the coming season. The more leaves the plants grow, the better potential for spiking will be realized. Growers in cooler areas such as the Pacific coast have the advantage this month, should they choose, of cooling for early season spikes. Lots of heat and light call for liberal applications of water and fertilizer.



Beallara Diana DUnn 'Newberry' is a good example of the colorful patterns that *Oncidium* intergeneric hybrids offer.

Cymbidium

Summer can be the most rewarding season for cymbidiums. Growths should be coming strong now. The leaves of the new growths are best when they are broad and fairly stiff. The color should be a light green to nearly yellow. Early flowering varieties should be showing flower spikes, so move the plants into a cooler area with lower light. For mid-season varieties, lower the dosage of nitrogen to assist in spike initiation.

High-elevation Plants

For cooler-growing plants, such as masdevallias, other pleurothallids and the like, the next few months will be a challenge. During the hottest times, keep your plants more shaded and be sure to keep the humidity level much higher. Do not let plants dry out. Delay any potting until the weather cools.

Oncidium intergenerics

Many of the intergeneric crosses between odontoglossums and oncidiums, such as *Odontocidium*, *Wilsonara* and *Colmanara*, will be blooming now. Take special care to train the spikes for best floral display. Keep plants under fairly shady conditions. Watch for snails and slugs.

Vandaceous

Plants will be growing quickly now and really enjoying the hot humid days so similar to their native habitat. Watch for pests though, as many of these also enjoy the same conditions as the plants. Check flower spikes so that they can extend unimpeded for the best flower presentation later. .



The Philippine species, *Euanthe sandariana*, rewards growers with massive heads of flowers at the end of summer.

The AOS thanks Ned Nash and James Rose for this essay.



HAVE A COOL AND GREAT SUMMER

Orchid Tip...

Peppermint oil & Castille liquid soap (available at health food stores) makes a safe, effective pest control. Dilute 1-tsp per quart of water in a hand sprayer and spray infestations every few days until controlled. Works especially well against soft-bodied pests such as aphids and mealy bugs.