

PASSING JUDGEMENT...?

You have an orchid in bloom and it's beautiful! It looks better than it ever has... The flower is fresh, colorful, well-formed, and this orchid has NEVER bloomed so well... And the show is tomorrow!!! Will it measure up? That AM/AOS has got to be just around the corner, or at least a nice first place rosette! But the judges pass right over your pride and joy.



So what are those judges looking for as they pass judgement on our orchids? Our March speaker might just be able to help. Former CNYOS President Tony Paroubek will be joining us at our next meeting this Sunday (March 5TH) to give us a few hints on what that secret society of AOS judges is looking for when they judge our plants. What makes a good orchid flower in the judges' eyes? Tony will offer hints on how to properly prepare orchids

for display, including staking and grooming, and will take a look at the plants on our own monthly show table. So if you've got any plants you're interested in putting into the spot-light, be sure and bring them along. Tony will be glad to look at them through the judge's microscope!

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Tony is a past CNYOS President, and spent 6 years as a student & probationary judge for the American Orchid Society. He is owner and operator of *Par-O-Bek Orchids*, in Rodman, NY, and is also largely responsible for the great selection of orchids that we have to bid on at our annual May auction, nearly all donated from friends and commercial orchid growers contacted by Tony on behalf of the club.

FEBRUARY HIGHLIGHTS: TRIP TO BLOOMFIELD ORCHIDS AND GENERAL BUSINESS MEETING.

The Central New York Orchid Society had a busy February. On the 6TH, between 12 and 15 members took a road trip out to **Bloomfield Orchids** in Pittsford, right outside of Rochester. Joe Kunisch, as usual, proved to be a wonderful host. We were welcomed with several platters of fresh baked goods and coffee. As we looked through the greenhouses, Joe was available to answer questions, and at one point took the time to give the club some good cultural hints on growing slipper orchids. CNYOS continues to share a very supportive relationship with Joe and Bloomfield Orchids.

CNYOS had its regular meeting one week later at St. Augustine’s Church. Club business was the main agenda, as the month of March has a lot of activities. Members volunteered to assist in the Flower & Garden Show, and the GROS and STOS orchid shows (see *CNYOS CALENDER*, opposite). In addition, there was a great mid-winter show table, which we usually don’t see in February due to our regular greenhouse trip (see page 5).

BE PREPARED TO VOLUNTEER!!!

CNYOS President Dave Ditz will be bringing sign-up sheets to the meeting on March 5TH for our March activities, especially the Flower and Garden Show at the State Fairgrounds. Show hours are as follows:

- Set-up:** Wed. 3/15 (PM) or Thurs. 3/16(AM)
- Thursday, 3/16:**6:00-9:30^{PM}
- Friday, 3/17:**1:00 - 9:30^{PM}
- Saturday, 3/18:**10:00^{AM} - 9:30^{PM}
- Sunday, 3/19:**10:00^{AM} - 5:00 ^{PM}
- Break-down:**Sunday, 3/19 after 5:00^{PM}

Take a look at these dates and times, so that you’ll have a general idea when you might be able to sign up to help the club out. This is an excellent opportunity to attract interest in the club, raise some money, and hopefully get a few new members. We need your help!

MEETING MINUTES FOR FEBRUARY 13, 2000

- 1. Flower & Garden Show-3/16-3/19.** display booth is 10x10’. Set-up times are Wed 8am-8pm, Thurs. by 3pm. Bring plants between 5:00 and 6:30, or get them to someone who will be going to help set-up. Dianne Bordoni, Donna Coleman, and Dolores Capella have volunteered to set up. Our vendor will again be MaryCarol Freyer- phals, mini-cats, and Oncidium Sherry Baby. We are still trying to find a source for Paphs in bud.
- 2. Genesee Region Show:** set-up is Thurs. 3/23 9am-10pm. All plants have to be registered by 9pm. **Dianne Bordoni, Barbara Weller, & Cheryl Lloyde** have volunteered to set-up.
- 3. Jeff Stuart, Carl Peterson, & Bill Lutz** will set-up the **Southern Tier Show 3/30/00** -set up starts @ 3pm.
- 4. April meeting is moved to 4/9/00** due to conflict with the Southern Tier Orchid Show.
- 5. State Fair-** we can participate 1-3days. Our dates are Aug. 26/27. 8am set-up on Sat, 9:30 pm. break down Sun. We will have a 2 table booth, but no selling by club.
- 6.** Jeff Stuart is now getting the newsletter duplicated at Quartier Copies on Bridge St. in Syracuse. The newsletter will be printed off a hard disc,with a new format. We will have a “poll” for a new name, including The Orchid Addict or The Orchid Enthusiast.
- 7. Mounting clinic** scheduled for the April meeting. Dolores Capella and Rich Groll have left over mounting sticks from two years ago. Orchids will be ordered from Andy’s Orchids by Jeff Stuart.
- 8. Library-** in the back room of new meeting site in file cabinets.
- 9. 3/11/00-field trip to Lyndon Lyon Greenhouse** — sponsored by the local African Violet Society. Let Monica Kott know if interested. Meet at the Thruway exit 34A by 10am.
- 10. Tony Parobek** will be presenting the March meeting on judging.

Respectfully Submitted,

Barbara Weller, CNYOS Secretary

APRIL MEETING: MOUNTING CLINIC

For our April Meeting on the 9TH, we will be holding a clinic on how to mount orchids, and how they should be grown. The last mounting clinic was two years ago, and it proved to be one of the most popular meetings to date. Just as last time, **ANDY'S ORCHIDS OF ENCINITAS, CA** will be providing both the orchids and the mounts. Andy will have a selection of orchids for us to choose from, including *Laelias*, *Dendrobiums*, and *Encyclias* (his choice). Final details will be available later in the month, and a supplemental newsletter will be sent out so that members can select what type of orchids they would like to mount; most will cost under \$10. In addition, the club will be placing a group order, and it is likely that we will be able to get a nice bulk discount. Catalogs will be available at the upcoming meeting. Andy specializes in species orchids, and has an incredible selection from which to choose.

CNYOS CALENDAR

- March 5** **Monthly Meeting: Tony Paroubek** lead a discussion on what judges look for in orchids, both for ribbon and national awards. Also: Business Meeting, Show Table, & Refreshments.
- March 16-19** **Central New York Flower and Garden Show.** As in past years, CNYOS will have a booth at the CNY Flower & Garden Show to hand out literature, answer questions, and sell orchids and supplies. The club will need a lot of volunteers to help out.
- March 25-26** **26TH Annual Genesee Region Orchid Society Show and Sale** in the Eisenhart Auditorium at the Rochester Museum and Science Center, Rochester, NY. Contact: J. Kaeding, 161 Crosman Terr., Rochester, NY 14620; (716) 442-3202.
- March 30 - April 2** **Southern Tier Orchid Society Show**, Oakdale Mall, Renalds and Harry L. Drive, Johnson City, NY. Contact: Lee J. Stradley, 1923 Cole Place, Vestal, NY 13850, (607) 754-6236.
- April 12-16** **Greater New York Orchid Society Show**, World Financial Center Winter Garden, West Street, New York, NY. Contact: Carlos Fighetti, 325 Piermont Rd., Closter, NJ 07624; (201) 767-3367.
- August 26-27** **New York State Fair**, at the Fairgrounds. For the first time, CNYOS will have a display and booth in the Horticultural Building to inform the public about orchids and our club. This could be a great opportunity to boost membership.
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GROS NEWS: NEWS FROM THE GENESEE REGION ORCHID SOCIETY

Our speaker for March is Dr. Don Garling, Orchid Extension Specialist at Michigan State University. Don is also the Nuisance Aquatic Plant Specialist in the Department of Fisheries and Wildlife at MSU. He is an accredited AOS Judge at the Great Lakes Judging Center and serves as their Training Coordinator. Don has been growing orchids for about 15 years in a 17 x 21 foot attached greenhouse. He specializes in "P" Orchids - Paphs, Phrags, Phals, Pretty, Puny and Peculiar. Don will be discussing "Home Remedies, Magic Potions, and other Methods for Controlling Orchid Pests." We will be taking Don to dinner at Hogan's Hideaway at 5:30 p.m., March 6TH. Please call Margie Koehler at 223-4249 by March 3RD if you'd like to go. The Show Table will be back, so don't forget to bring in your flowering plants!

STOS NEWS: NEWS FROM THE SOUTHERN TIER ORCHID SOCIETY

Major preparations for the STOS Orchid Show March 31 - April 2, 2000 are under way. Exhibitors are STOS, CNYOS, NEPOS, Antec Labs, Lowes and Pat Bonamo, our show chairman. We have four vendors who are also exhibiting: Fernwood Orchids, Leon Frank Orchids, Jim Marlow Orchids of Rochester and Paul Sheets Orchids of Philadelphia. A new feature this year is flower arrangements featuring orchids created by a number of local florists. CNYOS members and friends are cordially invited to attend this show which is open 4 - 9 March 31, 10 - 9 April 1 and 10 - 4 April 2. From Syracuse take I-81 south to NY 17 west. Take Exit 70N to Harry L Drive. Continue straight ahead across Harry L Drive and turn left into the mall. The show is in the center court.

NOTE FROM THE EDITOR...

So here is my first attempt at a revitalized newsletter--I hope you like the changes. I'm trying to make the layout a bit more consistent, and get away from the "squeeze all the information in where-ever it will fit" mode. This is going to be an evolving process--with any luck each month's newsletter will reflect a few new, and hopefully improved, changes. As usual, I appreciate any and all suggestions and *constructive* criticisms! And also as usual, I encourage all CNYOS members to write up their experiences and share them with the club through the newsletter. Whether it be about an orchid-related trip, or suggestions on culture of a genus you grow particularly well, I'm sure the club would appreciate reading about your experiences. Thanks, and enjoy the newsletter...

Respectfully yours,
Jeff Stuart

FEBRUARY SHOW TABLE

Cypripedium Alliance

<i>Paph. appletonianum*</i>	Stuart
<i>Paph. sukhakulii</i>	"
<i>Paph. Johanna Burkhardt (rothschildianum x adductum)</i>	"
<i>Paph. philippinense</i>	"
<i>Paph. villosum</i>	"
<i>Phrag. Olaf Gruss (besseae x pearcei)</i>	"
<i>Paph. Henrietta Fujiwara (primulinum x haynaldianum)</i>	Myers
<i>Phrag. Sedenii (longifolium x schlimii)</i>	"
<i>Paph. Unknown</i>	Sherwood
<i>Paph. philippinense</i>	Kot
<i>Paph. sukhakulii</i>	"
<i>Paph. Apple Jack (Valentine Voila [sic] x appletonianum*)</i>	Stensland
<i>Paph. F.C. Puddle (Actaeus x Astarte)</i>	"
<i>Paph. Deep Space (Docteur [sic] Knock x Hellas)</i>	"
<i>Phrag. Andean Fire (lindleyanum x besseae)</i>	Lloyd
<i>Paph. primulinum</i>	"
<i>Phrag. Ecu-Bess (besseae x ecuadorensis†)</i>	"
<i>Paph. Sheerline x Inca</i>	Ditz
<i>Paph. hirsutissimum</i>	"
<i>Phrag. Saint Peter (Eric Young x longifolium)</i>	"
<i>Phrag. Hanne Popow (schlimii x besseae)</i>	"
<i>Paph. Royal Prince x callosum</i>	Cohen
<i>Paph. Master Henry (henryanum x mastersianum)</i>	"
<i>Phrag. pearcei</i>	Groll

Cattleya Alliance

<i>Soph. coccinea</i>	Groll
<i>Soph. cernua</i>	"
<i>Bc. Maikai (B. nodosa x C. bowringiana)</i>	Lloyd
<i>Encyclia polybulbon</i>	Witkin
<i>C. Chocolate Drop (leopoldii x aurantiaca)</i>	"
<i>B. Little Stars (nodosa x cordata)</i>	Burton
<i>Slc. Petite Rose x Soph. coccinea</i>	Stuart
<i>Lc. El Cerrito x Bc. Daffodil</i>	Weller
<i>Lc. Mari's Song (Irene Finney x C. Cherry Chip)</i>	Capella

Vandaceous

<i>Phal. Unknown</i>	Guay
<i>Dtps. Achy Breaky Heart (Queen of Hearts x Phal. Bright Lights)</i>	Benson
<i>Phal. schilleriana</i>	"
<i>Phal. Orchid World (Malibu Imp x Deventeriana)</i>	Bordoni
<i>Phal. Rainbow Chip (equestris x Cassandra)</i>	"
<i>Sarco. Heidi (hartmannii x Fitzhart)</i>	"
<i>Phal. Gold Tris (Taipei [sic] Gold x equestris)</i>	"
<i>Phal. Brother Pico Pink (Ho's Amaglad x equestris)</i>	"
<i>Phal. Golden Gift x Dtps. Rendezvous</i>	Ditz
<i>Rhy. gigantea</i>	Capella
<i>Phal. Taisuco Roseherz (Zauberrose x Lippeherz)</i>	Lloyd

Oncidium Alliance

<i>Hwra. Lava Burst (Mini-Primi x Rdza. lanceolata)</i>	Coleman
<i>Trpla. tortilis</i>	Stuart
<i>Ada elegantula</i>	"
<i>Odm. (sic) wyattianum</i>	"
<i>Colm. Wildcat (Odt. Rustic Bridge x Odcdm. Crowborough)</i>	T. Lloyd
<i>Colm. Wildcat</i>	Guay

Pleurothallid Alliance

<i>Masd. strobilii</i>	Witkin
<i>Masd. hirtzii</i>	Groll
<i>Pths. truncata</i>	"
<i>Masd. veitchiana</i>	"
<i>Pths. species</i>	"
<i>Dryadella zebrina</i>	"
<i>Lths. maxonii</i>	"
<i>Drac. inequalis</i>	"

Dendrobium

<i>Den. primulinum</i>	Stuart
<i>Den. cuthbertsonii</i>	"
<i>Den. cuthbertsonii</i>	Witkin
<i>Den. Super Ise (Super Star x Ise)</i>	"
<i>Den. Nagasaki x Yukidaruma</i>	Ditz

Miscellaneous

<i>Kalopternix sophronites</i>	Ditz
<i>Coel. ovalis</i>	"
<i>Max. praestans</i>	Groll
<i>Cym. Unknown</i>	"
<i>Aërgs. luteo-alba var. rhodosticta</i>	"
<i>Max. variabilis (sic)</i>	Kot
<i>Plectrophora cultrifolia</i>	Stuart
<i>Max. sp.</i>	"
<i>Aërgs. hyaloides</i>	Capella

Photographs

<i>Pogonia ophioglossoides</i> - Rose pogonia	Introne
<i>Platanthera lacera</i> - Ragged fringed orchis	"
<i>Platanthera grandiflora</i> - Larger purple fringed orchis	"

**Paph. hainanense* is a variety of *Paph. appletonianum*. It is not recognized as a separate species. They may both be varieties of *Paph. wolterianum*.

†For registration purposes, *Phrag. ecuadorensis* is a separate species from *pearcei*. The Royal Horticultural Society (registration authority for orchids) is a law unto itself.

MISCELLANEOUS BUSINESS...

CLUB REMINDERS

Orchid-Growing Supplies are now available, including fir bark, sphagnum, sponge rock, charcoal, and 40W fluorescent tubes. Call Rich Groll for details on pricing and availability.

Items from the **CNYOS Club Library** are available through Dianne Bordoni. Please contact her if you're interested (446-3836).

DON'T FORGET TO BRING YOUR BLOOMING ORCHIDS FOR THE MONTHLY SHOW TABLE!



REFRESHMENT SCHEDULE

March 5	Gary Stensland & Dave Ditz
April 2	Jennifer Wilson & Carol Haskell
May 7	Deb Coyle & Dianne Bordoni
September 10	Tom & Cheryl Lloyd
October 1	Jeff Stuart & Judi Witkin
November 5	Monica Kot & Donna Coleman
January 2001	Gary Stensland & Judi Witkin

Phalaenopsis bellina (violacea), photograph by Vagisha Sharma, with digital enhancement by J. Stuart.

DIRECTIONS TO ST. AUGUSTINE'S CHURCH

From the Syracuse Area

Take **690 West** towards **Baldwinsville**. Get off at the **Jones Rd. Exit**, and take a **Right** onto Jones Rd. Take the next **Left** onto **Peck Rd.**, and stay on Peck for about **1.2 miles**. Peck Rd. changes to **O'Brien Rd.** **The Church will be on the Left.**

From the Liverpool Area

Take **John Glenn Blvd.** towards **Baldwinsville**.

Stay on John Glen Blvd until it ends; it will run into **Rt. 48 North**. Take Rt. 48 North to **O'Brien Rd** (about 1.8 miles). **Turn Left onto O'Brien**. **The Church is at the top of the hill on the Right.**

From the Thruway

Take **Exit #39**. Go to **690 East** towards **Syracuse, State Fair**. Get off at the **Jones Rd. Exit**. Take a **Right** onto Jones, and then take the next left onto **Peck Rd**. Peck Rd. changes to **O'Brien**--stay on Peck/O'Brien for about **1.2 miles** total. **The Church will be on the Left.**

SPOT LIGHT ON *LAELIA SINCORANA*

Laelia sincorana is an orchid with a lot of “bang for the buck!” It’s 4” flowers dwarf the plant, which is only 2-4” tall. They often bloom in spring, and should be budding up this time of year. This species was originally discovered in 1908 by Ernst Ule who found it growing at 4,000 ft in the Serra da Sincora in northern Bahia, Brazil. Nine years later Schlechter described and named it *Laelia sincorana*. Curiously, subsequent papers by Schlechter, Hoehne and others which included discussion of the genus *Laelia*, specifically section Hadrolaelia (to which *L. sincorana* belongs), completely omitted mention of the *Laelia* from the Serra da Sincora. It was almost as if it had never been discovered. It was not until the now famous 1968 National Geographic expedition to Brazil for their article on orchids that the impetus began to “rediscover” *Laelia sincorana*. A request was put out by herbarium director Guido Pabst to collect living material of two new species discovered by the National Geographic team. One of the two species, *Cattleya grosvenori*, turned out to be the *Laelia sincorana*.



This *Laelia* grows in a harsh environment indeed; on Vellozia (Canela da Ema - ostrich legs) shrubs fully exposed to the elements on the summit of the Serra da Sincora. The Vellozia provides little, if any, shade and moisture comes mainly from fog and condensation that clouds leave behind. The intensely colored flowers can reach 4” across, as large as the plant itself, making this a worthwhile species to grow. Fortunately it is an adaptable species that can do well in cultivation. If you want to succeed with this *L. sincorana* use a well-drained medium that dries quickly such as lava rock or Aliflor and give it intermediate temperatures. Mount culture is also suitable. Bright light is required for it to flower.

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Reference: The Orchid Photo Page, by Greg Allikas, <http://www.orchidworks.com/>



Sonnenberg Orchid Show

April 8 - April 15
Daily: 10:00^{AM} - 5:00^{PM}
\$2.00 for Adults and Children over Twelve
151 Charlotte Street
Canandaigua, New York 14424
Call (716) 394-4922 for details.

Neem Those Mealys Away?!

[or A Trip to The Village Pharmacy]

by Gary T. Hawbaker ©1999

An article in the July 1999 issue of *Orchids* prompted me to do some further research on Neem oil as a possible answer to the mealybug problem that plagues my orchids. Since I grow my orchids indoors, and not in a greenhouse, the selection of products that I can use to fight those little critters is reduced compared to my counterparts in the orchid world who grow their pride and joys in the comfort of a greenhouse. However, I would quickly add that, more and more, people all over the world are becoming concerned with the chemicals that are being used to control the insects that seem to enjoy chomping the living daylight out of our vegetation, and especially my orchids!



In the article, "Oil of Wonder," E. Shaunn Alderman tells how this oil from India could help what ails your orchids. She goes on to relate the experience of orchid grower Larry Evans, owner of Blue Pagoda Orchids in Englewood, Florida. Having purchased some plants from Larry in the past, I contacted him and he directed me to his web site which contained the complete article he had written regarding his experience with neem oil. With this article as a start, I began to search the web for other information on neem.



The neem tree is a tropical evergreen related to mahogany. It is native to east India and Burma, but grows in much of southeast Asia and west Africa. Some trees have been planted in the Caribbean, Central America, and parts of southern United States. The tree has also been grown successfully indoors in pots with the same care as the Ficus tree. The blooms of the trees are small, white flowers with a sweet, jasmine-like scent. The edible fruit (loved by children in Africa) is about 3/4 inches long.

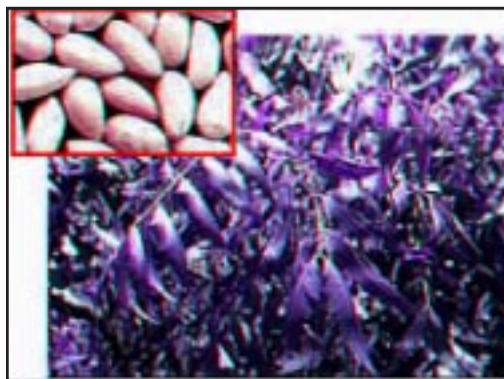
The Neem tree of India has been called "The Village Pharmacy," "Tree of 1,000 Uses," "The Ultimate Herb," "Mother nature's gift to the world," the "cornucopia" tree, "The Wonder Tree," and in Sanskrit its name *arishtha* means "reliever of sickness."

HISTORY — "The neem tree should have been designed by a celestial committee (maybe it was). A collaboration of genetic engineers, chemical engineers, pharmacists, agronomists, and dieticians could not have produced a more interesting, and some say, valuable plant." (About.com — The Neem Tree - Forestry - 04/25/99.) Dr. Noel D. Vietmeyer, in the foreword of *Neem: A Tree For Solving Global Problems* states, "I've never come across a plant with the potential that Neem has."

Shortly after Julius Caesar established the Roman Empire, Pliny the Elder issued a public complaint: the ever-increasing volume of medicines from India was causing a drain on the Roman gold treasury (are we talking about balance of trade problems here?).

In 1922, British archaeologists found Neem products in clay pots in the 5000-year-old Indus Valley at the sites of the cities of Mohenjo-Daro and Harrapa. One of the amazing things that happened as they dug deeper, was that the civilizations became more complex and advanced than the ones previous. As they dug, one of the most prominent medicinal herbs they found was Azadirachta Indica also known as Neem.

The medicinal benefits of Neem are spoken of in the Veda's, the world's oldest books. In India's ancient Ayurvedic (nature healing/herbal) Medical texts the medicinal information about neem is expanded in great detail. It is apparent that every part of the Neem tree has health promoting benefits. Neem is used in India as an internal remedy as well as an ingredient in tooth paste, soap, shampoo, cosmetics and skin creams. The active ingredients read like something from a pharmacy index: nimbin (anti-inflammatory, antihistamine, anti-fungal); nimbidin (anti-bacterial, anti-ulcer, analgesic); gedunin (vasodilator, anti-malarial); and sodium nimbinat (diuretic, spermicide, anti-arthritis). And for the orchid grower, there is salannin (insect repellent) and azadirachtin (insect repellent, anti-feedant, anti-hormonal).



INSECT CONTROL — As mentioned above, Neem has important qualities for insect control. More than 500 arthropod pest species have become resistant to one or more insecticides. Scientists, today called bioprospectors, have been scouring the rainforests for years in search of useful plants. After studying over 250 plants that exhibited insecticidal properties, the consensus

was that Neem proved to be the most effective and most environmentally friendly of them all. Neem promises to provide a truly natural alternative to synthetic, and in many cases less friendly, insecticides. Neem's natural properties pose no danger of toxic reactions. It is non-toxic to animals or people and only affects insects that eat plants, leaving honeybees and other beneficial insects unharmed. "The seeds and leaves of the neem tree are the source of a new class of "soft" pesticides... The most active insecticidal compound found in neem is azadirachtin which acts as an anti-feedant. Insect pests usually refuse to eat any plant covered with neem and do so until they starve to death." In fact, in one study of Neem extracts the desert locust, which is known for its voracious appetite, refused to eat any plants sprayed with Neem and eventually starved to death surrounded by its favorite food! (The Neem Association)

"As important as azadirachtin is, neem's true effectiveness comes from the interaction of all of the compounds which affect different aspects of an insect's life. Other compounds act as insect repellents, cause insects to lay sterile egg cases, prevent molting, and others simply enhance the effects of other compounds. The number and complexity of the compounds found in neem that affect insects make resistance to neem highly unlikely. This is extremely important as insects are rapidly developing resistance to the major synthetic insecticides." (The Neem Association)

Entomologists have isolated 390 different insect species that are controlled by the bio-activity of the Neem tree. Some sources even place the number closer to 500 species. Several of these are resistant to chemical pesticides. Some of the pests controlled by Neem are: aphids, army worms, chinch bugs, greenhouse white flies, gypsy moths, Japanese beetles, mealy bugs, potato tuber moth, spotted cucumber beetle, tobacco caterpillar, web worms, and weevils.

THE BLUE PAGODA EXPERIENCE — As I said, my interest in Neem was piqued when I read the recent article in *Orchids* which mentioned Larry Evans of Blue Pagoda Orchids. Larry's experience is found on his web site in a section called "Notes from the Glovebox" (<http://www.bporchids.com>). Larry begins the article, "Neem Oil: Facts and Practical Experience" with a caveat that he cannot recommend Neem Oil because our government has not approved its use on orchids or any plants.* Larry goes on to say, "When I refer to neem oil, I mean pure Neem Oil as pressed from the seeds of the Neem tree. I have never used any product with neem oil in it. I don't know that it would be as safe as pure neem oil."

Larry's experience was based on the fact that due to an illness his greenhouse "had become a disaster area." The mealy bugs attacked his plants and in addition he was fighting off snails, slugs, scale, and fire ants. Because of reactions to many insecticides, he needed to look in other directions to solve his insect problem. He decided to try Neem oil. With a solution of one ounce to one gallon of water with some dishwashing detergent to disperse the oil, he sprayed everything: plants, benches, under the benches, and walkways. He noticed a definite improvement almost immediately. In two weeks he sprayed again and kept his eyes open for possible invaders. They were gone — no mealy bugs, no slugs or snails, no scale, and even the fire ants were gone. He did not spray again for six months and then six months after that.

Larry says, "The beauty part of using Neem oil is that you don't have to wear protective clothing or special breathing equipment and no sickening odors. Neem oil does have an odor, best described as 'kind of like onion soup'. However, the odor only lingers for a short time." [Note: One source said "garlic" but why quibble?!



Finally, Larry says, "When I use neem oil I only mix the amount I will use within four hours. Neem is very biodegradable and will start to break down. If it [neem oil] is kept in the refrigerator at approximately 40⁰ F the shelf life is extended. As organic oil it will turn rancid. How soon will depend on the storage temperature."

Blue Pagoda Orchids has used "pure neem oil on *Cattleya*, *Dendrobium*, *Phalaenopsis*, *Oncidium*, *Vanilla*, *Vanda*, *Peristeri*, etc. We have detected no damage to any of these plants."

MIXTURE — The precise mixture of neem oil that one should use is apparently up to debate. As indicated, Larry Evans of Blue Pagoda Orchids suggests 1 ounce of neem oil to 1 gallon of water with a bit of environmentally friendly dishwashing liquid to help suspend the oil. The Original Neem Company suggests 2 dropperfuls of their NeemAura Naturals Neem Oil (approx. 2.5ml) and 8 capfuls of Hydrogen Peroxide (approx. 10ml) added to 1 gallon of water. From an e-mail response of Josephine M. Scott at The Original Neem Company she indicated that the peroxide keeps the neem dispersed in the water and does not hurt the plants, but I do not think that she has tried it on orchids. She felt that 1 ounce per gallon that Larry was using "seemed very strong..."

I asked Larry Evans for his thoughts on the peroxide mixture and his own mixture and he indicated that hydrogen peroxide comes in different strengths and one would need to know which strength was being used. In addition, he expressed a concern that the peroxide breaks down very quickly and might alter the neem. He reiterated the fact that his results have been good at 1 ounce per gallon and had not hurt any of the plants in the 2500 sq ft of greenhouses where he has used it. He felt that perhaps a half ounce per gallon might be acceptable for maintenance. Again, as Larry indicates



in the beginning of his article, “he cannot recommend neem oil because our government has not approved its use on orchids or on any plants,” and can only relate what his own experience has been.

Suggestions from other sites: Plasma Power web site suggests the following mixture (for outdoor plants) 1/8 oz detergent, 2.5 fl. Oz. Plasma neem oil to 3_ gallons water. (www.plasmaneem.com). Safer’s BioNeem suggests 6 Tbsp per gallon. Golden Harvest Organics suggests: The product is mixed with water at a ratio of 0.05% to 2.0% depending upon the targeted use. A few drops of soap like castille or other vegetable based soap can be mixed in to aid as a spreader sticker (surfactant). Keep it agitated during application to keep it well mixed.

STORAGE — Proper storage is important with Neem oil. On web sites where it was mentioned, it is suggested that any neem mixture be used within 4 to 8 hours after mixing with the water and pure Neem oil should be stored in a cool, dark environment.

WORDS OF CAUTION — As with any new product that you might try on your orchids it would be best if you tested it on a plant or two that has been infested with some sort of “animal” before trying it on the whole herd. Milan Mehta of Rym Exports (and Neem Tree Promoter) also cautions that one must be aware that Neem Oil comes in seven types and only a few companies prepare the best. “The most important and highly effective is the Cold Pressed Neem Oil.” A note sent by our illustrious newsletter editor also carried a word of caution from an orchid news group: It seems that Andy of Andy’s Orchids had some Polyrhizia Lindenii (the Florida Ghost Orchid) which he had unflasked and mounted. They were growing well until one day, when he was treating some nearby plants with a neem oil based pesticide and a bit splashed on the baby ghosts. A few died right away and the rest died later on. Not knowing the pesticide used, it might be wise to stick with the “real thing” — neem oil “straight” for your mixture. According to Neem: A Tree For Solving Global Solutions: “Mixing neem extracts with other materials can boost their power 10- to 20- fold. Among these so-called ‘promoters’ are sesame oil, pyrethrins (a type of insecticide mostly extracted from chrysanthemum flowers), and piperonyl butoxide.” Perhaps the solution was just too much for the young Poly. Lindenii plants.

Finally, to echo Larry Evan’s original words of caution and expand on them a bit: I cannot testify to any of the information provided in this article other than what I have read from the work of others. I have tried neem oil and have found no ill effects to my plants. Mealy bugs which are my worst problem seem to be gone. From all indications it would appear that “the real thing” (cold pressed neem oil) may be the answer to an orchid grower’s dream. Like Larry, I cannot recommend neem oil, but from the research I have read and my own initial trials, it looks like it may well be a frontrunner in the insecticide race of the 21st century!

**[NOTE: The Biocontrol Network — <http://www.biconet.com> — indicates that neem is approved for food crops. The article on the Neem Tree on the “about.com” web site indicates that neem extracts have been approved by the U. S. Environmental Protection Agency for use on food crops. This is repeated on the organix.net web site. Margosan-O, the first commercial insecticide derived from the seeds of the neem tree is registered by the EPA, and is being test marketed, according to www.neemaura.com web site.]*

SOURCES — Neem oil varies in price. In the articles and web sites I have researched, it has ranged from about \$8.00 to \$22.50 for an 8 ounce bottle.

Biocontrol Network: <http://www.biconet.com>; offers information and sale of: Safer’s BioNeem, a botanical insecticide that offers broad range insect control. Its active ingredient — Azadirachtin. “This multipurpose product effectively controls more than 30 common pests, including aphids, whiteflies, gypsy moths, webworms, mealybugs, and caterpillars on ornamentals, flowers, trees, shrubs, and is now approved for food crops. Its active ingredient has very low toxicity ratings, and has no known insect resistance since it was developed 10 years ago.” Application rates: Approx. 6 tbsp./gallon of water. Use at 7 day intervals.

Blue Pagoda Orchids: 120 W Dearborn St, Englewood, FL 34223; <http://bporchids@bporchids.com> sells DynaGro Neem Oil.
Golden Harvest Organics, 404 N. Impala Drive, Fort Collins, CO 80521; <http://ghorganics.com>

The Neem Association, 1511 Oneco Ave, Winter Park, FL 32789. The Neem Association provides information about neem to all interested parties, material to researchers and seeds to groups supporting indigenous farmers. Members receive quarterly newsletters, discounts on neem-based products and on publications by the Neem Association. New members receive a copy of the book “Neem - The Ultimate Herb” (a \$12.95 value) and free samples of neem products from growers and manufacturers. Membership is \$25.00 per year.

The Neem Peace Shop, PO Box 732, The Channon, N.S.W. Australia. 2480. Offers Green Gold® which “contains over 180 organic derivatives from Neem tree seeds ... 100% environmentally-safe (EPA; US) ... neem extracts like Green Gold® are far more powerful at deterring and repelling insects than neem oil (which is more medicinal).”
www.altnews.com.au/neem/NeemPeace.htm

The Original Neem Company (tm), 2711 NW 6th Street, Suite B, Gainesville, FL 3260 <http://www.neemaura.com>;
 sells NeemAura natural products

Organix-South, Inc., PO Box 41153, St. Petersburg, FL 33743; <http://organix.net>

Fantasy Orchids, 830 West Cherry Street, Louisville, CO 80027; Website: <http://home.earthlink.net/~fantorchids>

Roberts Orchids, 605 18th Street SE, Owatonna, MN 55060-4134; Email: orchidjimm@aol.com

N & D Orchids & Exotics, Beaverton, OR; Email: USAFA64@aol.com

Ely's Orchid House, 1106 Fieldcrest Ave, Centralia, WA 98531; Email: f-nely@localaccess.com

J & M Tropicals, 9527 Pine Cone Drive, Cantonment, FL 32533;

Crystal River Orchid Supplies, 9525 West Cedar Street, Crystal River, FL 34428; Website: <http://www.orchidsupplies.com>

V.K. Orchids, LLC, 1460 Route 22, Brewster, NY 10509; Email: orchidsusa@aol.com

REFERENCES

Alderman, E. Shaunn, “Oil of Wonder”: Orchids, July 1999.

Alpha Omega Labs: NEEM: Tree of 1,000 Uses, by Acharan S. Narula: www.altcancer.com/neem1000.html

ENECOS International, a group promoting ENvironmental, ECOconomic and Social resources in the Third World: www.scrypton.com/enecos. Article mentions that Mr. Antoine Perot, Jr., of Fort Washington, MD is leading an effort to help NeemCo. of Ghana to produce and promote Neem products.

HealthBoards.com: “Neem: The Ultimate Herb”

McCaleb, Rob: Neem: Ancient Herb From India, Delicious!, Dec 1996. p. 5; check for other articles on Neem at: <http://www.delicious-online.com>

MOS Newsletter, March 1995, page 5, BioNeem by Bob Soman (from the OSWP Newsletter. Feb. 1995)

National Research Council, Neem: A Tree For Solving Global Problems, 1992; publ by the National Academy Press. 800-624-6242 or visit their web site: <http://books.nap.edu>

The Neem Association: “Neem — The Ultimate Herb” — http://members.aol.com/_ht_a/neemassoc

Neem Foundation, 67-A, Vithal Nagar, Road No. 12, JVPD Scheme, Mumbai - 400 049, India; www.neemfoundation.org

NgeeAnn Polytechnic, 535, Clementi Road. Singapore 599489: Neem: The Wonder Tree: www.np.ac.sg/~dept-bio/NEEM.html

Plasma Power: www.plasmaneem.com

Selvester, Joseph, (Ayurvedic Practitioner and Master Herbalist), Neem “The Village Pharmacy.”

Stix, Gary: “The Village Pharmacy,” Scientific American, p. 132 of May '92. A review of Neem: A Tree For Solving Global Problems.

GRAPHICS:

www.altcancer.com

Neem Association

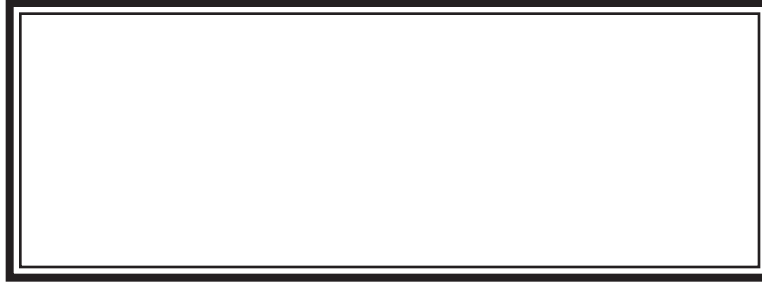
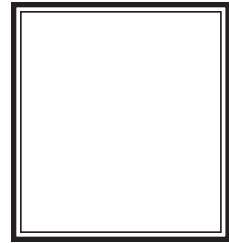
www.plasmaneem.com

www.neemfoundation.org

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ABOUT THE AUTHOR: Gary Hawbaker is a member of the **Susquehanna Orchid Society**, in York, Pennsylvania. His article, reproduced above with Gary's permission, first appeared in the August 1999 issue of his society's newsletter, and was recently mentioned in the December 1999 issue of ORCHIDS, THE MAGAZINE OF THE AMERICAN ORCHID SOCIETY (“Neem Oil Proves Popular: Ancient-oil article results in wide-reaching inquiries”, by E. Shaunn Alderman, pp. 1240-1242). Gary reports that he has been using Neem Oil since last summer, and has seen no ill effects in his orchid collection (mostly *Phalaenopsis*). Except for the occasional mealy bug, his plants remain for the most part bug free.

THE CENTRAL NEW YORK ORCHID SOCIETY
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Jeff Stuart, Editor
351 Kensington Place
Syracuse NY 13210-3309
(315) 471-1404
e-mail: jastuart@syr.edu

