

SUNDAY, MAY 2ND, 2004 2 PM

THE MEETING WILL BE HELD IN THE USUAL PLACE, THE NEVADA GARDEN CLUB BUILDING AT WASHINGTON AND TWIN LAKES ON THE WESTERN EDGE OF LORENZI PARK. THE BUILDING WILL BE OPEN AT IPM.

Carol Siegel, Newsletter Editor

CAROL SIEGEL- PRESIDENT
CLARICE DEAN -VICE-PRESIDENT
EILEEN MCKYTON- SECRETARY
DIANA SMITH- TREASURER

AND...

Dan Mumau, Michael Lawless - Membership Hospitality Chairmen
Lillian Patterson- Photographer and Historian
Dan Mumau and Tony Billitere- Raffle Chairmen
Phyllis Bond, Leslie Doyle, Shelly North and Eileen McKyton- Special Events Chairmen
Jeri Lee and Tony Billitere- Community Liaison
Alex McKyton -Building Chairmen and Webmaster
Tex Severance and Mike Levin- Show and Tell Gurus
Tex and Gidget Severance- Judging Chairmen
Scotty Nogaim- Election Chairman, Raffle Lady
Steve Ninemire Library Chairman Clarice Dean, Assistant Librarian
Clarice Dean- Trip Chairman
John Haydukavitch-Video Chief

Shelly North-Classy C	ub Apparel Chairlady_
May 2, 2004	Norman Fang, Owner of Norman's Orchids "Phalaenopsis"
June 6, 2004	Glen Decker, Owner Piping Rock Orchids, "Phragmipedium"
July11 , 2004	Dr. Joseph Arditti, "The Little Known Uses of Orchids
	In Medicine, Food, Magic, and As Implements"
August 1, 2004	Barbecue Mt. Charleston Eldine Stevens' house
Sept 12, 2004	Mike Blitz, Exotic Orchids of Maui "What's Happening
	In the World of Cattleyas"
October 3,2004	Aaron Hicks, "The Orchid Seed Bank

November 7, 2004 The Further Exploits of Bill Bergstrom in Mexico December 5, 2004 Fifth International Food Fest and Holiday Party

January 9, 2005 Mike Glikbarg, Orchids of Los Osos, "Odontoglossum and Oncidinae" SECOND SUNDAY

February 6, 2005 Alan Koch, Gold Country Orchids, "Orchid Growing

For Dummies" (author of the book!)

March 6, 2005 Jerry Fischer, owner Orchids Limited, "The Orchids

Of Borneo"

April 3, 2005 Charles Rowden, "Orchid Photography"

May 1, 2005 Dr. Joseph Arditti, subject to be announced

June 5, 2005 Sue Fordyce, owner Fordyce Orchids "Sophrinitis and

Her Sisters"/"Orchid Sign Language"

July 10, 2005 SECOND SUNDAY Sheldon Takahashi, owner Carmela's

Orchids, "Cattleyas"

August 7, 2005 Barbecue

Building

September 11,2005 Virtual Greenhouse Tour

November 6, 2005 The Adventures of Dennis D'Allesandro in Bolivia

December 4, 2005 Sixth Annual International Food Fest and Holiday Party

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On Sunday, May 2nd, our meeting coincides with a Cinco de Mayo celebration in Lorenzi Park..AGAIN. This has happened many times, and we never have parking spaces. I HAVE HIRED A SECURITY GUARD (WITH PERMISSION OF THE CITY OF LAS VEGAS PARK DEPARTMENT) TO SAFEGUARD OUR SPOTS FROM 9:30 TO 2:30. WHO SAYS WE CAN'T LEARN!!! It is always possible that something will happen, but I have the cell phone number of the Director of Cultural Events—so I think we will have plenty of spots. Come and claim our spots! I recently returned from speaking in Salt Lake City and will pay for the security guard myself from my Honorarium.

We will be lucky enough to have Norman Fang, owner of Norman's Orchids, who will be presenting a slide-lecture on the secrets behind the gorgeous phalaenopsis at his nursery. Some of the club visited his nursery last year, and the orchids were all pristine and flawless, like beautiful little schoolgirls all in a row. He is a genius!! Come and find out how he does it. Norman will also kindly provide the raffle table and sell plants. Great opportunity! We thank Vickie Stewart, Eileen McKyton, Christine DeLaCruz and Nita Bragg in advance for providing snacks for the meeting.

On Saturday, May 8th, all interested club members will meet at Home Depot on Rainbow near Alta between Sahara and Charleston, to car pool to Red Springs in Meet near Nevada Federal Credition

Calico Basin at 10 am. We will be going to see our native orchid Epipactis gigantea with Dr. Pat Leary, Chairman of Biology at CCSN. This gorgeous orchid is three-feet tall with a reddish-brown flower whose lip chatters in the breeze. They call it the "Chatterbox Orchid". It grows in shady, wet places and loves the cliff there with its springs running by. This is a free, EXTRA activity. Bring water, a hat, comfortable shoes you can do walking in, and all your excitement. Everyone of average abilities should be able to do this walk of about 15 minutes with an incline. Pat went out to see them last week-end and assures us that the orchids are in bloom!! This is the first of several trips we have planned this spring and summer to delight in our native orchids.

On a glorious spring day in April, we met to enjoy food, flowers, fun and fellowship. Ron Parsons, considered by many to be one of the San Francisco Area's best orchid photographers, delighted us with a slide lecture on the weirdest and oddest orchids in the world. What a great speaker he was—and what gorgeous slides! Clarice Dean, Jane Green and Jeannie Salles made scumptious food, and I brought in a cake to celebrate dear Clarice's birthday. Our raffle table was outstanding, spanning FOUR tables, thanks to Daniel Vong's generosity. Diana Smith, Mike Levin, Dan Mumau and Mike Lawless contributed lovely plants as well. Our library was even better after Steve Ninemire took our books (there are hundreds!!) home with him and catalogued them all to make it easier to select. We really appreciate you, Steve. Shelly North took orders for hats, aprons, t-shirts, muscle shirts (hope she's selling muscles, too...) and totes. All the apparel is really inexpensive and of good quality, and the club makes \$3 on each item. Make sure to order yours since we do not get any extra. Mike Levin did a great job on our show and tell. I was also very pleased that our poster display on the native orchids of Nevada won a purple ribbon for best educational exhibit at the Spring Bulb Show.

Our Species of the Month, prepared by Clarice Dean, was Oncidium sphacelatum, a native of Costa Rica, Venezuela and Mexico. The spectacular plant can get a three to four foot spike, likes bright sun but will thrive in almost any light level. Our project to bring a different native orchid to the club every month is a fun way to learn to appreciate orchids in nature—and not just in nurseries.

We were glad to welcome William Whaley and John Miller as new members and were pleased to have Jackie Braverman, Margaret Janes, CJ Colburn and Roy Gentry as

our guests at the meeting. Glad to have Eileen and Alex McKyton back safe and sound after a fun trip to Spain. It was lovely to see Jean Gordon looking so well, too, after her recent hospitalization. I just spoke to Phyllis Bond, and she, too, is recovering well from her recent surgery. Hope to see you soon, Phyllis. Our best wishes go to Roland Hui who is recovering from bypass surgery. We miss you, Roland.

We note with sadness the passing of our member Tita Owen, after a long battle with cancer. We will miss her. A book will be donated in her honor to the library.

We were thrilled that members of our club won THREE AOS awards for their outstanding orchids in the judging at the Easter Show at the Cal. Diana Smith blew them away with her beautifully-grown Coelogyne lawrenceana "Gaia" which won an AOS/HCC with 77 points. Way to go, Diana. Mike Levin did himself proud by winning TWO AOS/AM awards, each with 80 points, one for his Phrag Sorcerer's Apprentice and another for his Paph Lady Isabel. What a great showing for these talented members of our club. Awards were also presented to the talented members of the Torrance Cymbidium Society for their gorgeous plants.

Mike Levin, our beloved past president, told us about his TWO winners:

The Phrag Sorcerer's Apprentice I bought around 10 years ago from a mail order from someone on the east coast who I no longer see advertising. It was a seedling. It came with me from Texas. Norito saw it in bloom here in Vegas when I was growing in my lean-to (not my current spot) and thought it was awardable 7 years ago. It had gone downhill when I had no time due to work changes but seems to be coming back after being repotted around 2 years ago. It tends to get leaf tip blackening but this hasn't affected the flowers. When smaller it sat in water, now it is overpotted and the pot stays wet without sitting in water. When repotted the root ball was so large it had to go in a big pot. It has two more spikes in formation right now. This grex seems to be able to take and like overpotting as compared to most orchids. I was surprised it received 80 pts. The best sorcerer's apprentice I have seen pictures of is Glen Decker's plant, I forget the clonal name though and am too tired to look for it now. His is a tetraploid from the Eric Young Foundation and was pictured in color in the Awards Quarterly a few years back.

The Lady Isabel I purchased at the Santa Barbara Orchid Show from a vendor last month! It looked really nice, wasn't cheap and I hope I can continue to grow it well. It originally came from Orchid Zone and was sold by the firm Orchid Magic at the SB show. It pays to get to the show as early as possible to get the best choice of plants for sale. Lady Isabel is one of my favorite Paph grexes. Most of the time I raise seedlings and select the best for submission to judging, but not on this plant!

My clonal name for awarded plants is 'Mojave' because these plants have to be schlepped through our desert to go to judging (most of the time anyway) and/or are grown here and I couldnt think of anything else at the time.

Hope this helps. I was really happy for Diana most of all.

We asked Diana to tell us a little about her award-winning coelogyne:

I bought my Coelogyne lawrenceana from Countryside Orchids in April of 2000 as a blooming size plant (Blooming size? Yea, right!). I did some research and put it into a basket because I had learned it was a lithophyte (rock dweller). It also supposedly liked medium to low light and hot temperatures, so I placed it on my bottom bench on the warm side of my greenhouse. The first time it set buds was in July of 2002. Strangely, the buds did not develop and stayed 7" spikes throughout the fall and into winter. Talk about a-n-t-i-c-i-p-a-t-i-o-n.

In December the buds began to blast so I started bringing the plant into the house to tuck it in every night. The blasting stopped with one spike left. It bloomed in April, 2003 and put out multiple new growths shortly thereafter. By July, these new growths all had spikes. I was thrilled! Now I needed to figure out how to keep them all healthy. Since the bottom shelf hadn't worked and I had no room on the top bench, I hung it from the ceiling, again on the warm side of the greenhouse. Every day I held my breath wondering if the spikes were going to blast, but my luck held. It started blooming in January, and just kept getting better and better.

And the flowers were beautiful. Measuring 5 1/2" diameter, they had green and beige tepals with cute "starfish feet" nubs on the lips. I thought they were adorable (typical mother), but I didn't expect anyone else would think they were special. During set-up for the show at the California, Mike Levin suggested I put it on the table for judging. The rest is history. My baby received 77 points which put it into the HCC (Highly Commended Certificate) range on the AOS scale. Of course, I'm stunned, thrilled, ... ready to try for another one! A big thank you to Mike Levin for his suggestion, and his help with judging procedures, etc. And to Carol and our club for making this hobby (obsession) so enjoyable.

Our display, prepared by the very talented artist Shelly North, was a great hit!! We thank Clarice and Dennis Dean, Carol Siegel, Eileen McKyton, Diana Smith and Mike Levin for bringing down gorgeous blooming plants and helping Shelly do her magic. We also presented our award-winning display on Nevada's thirteen native orchids and distributed information on native orchids and on our club. We thank all the people who helped. Mike Levin and Gidget and Tex Severance were judges at the show, and Aaron Shave did the clerking. Jeri Lee, Steve Ninemire, Bill Whaley, and Eileen and Alex McKyton did us proud as ambassadors getting the word out about Nevada and orchids. Alex McKyton, a gifted photographer, saved us \$200 by taking the photos of the award-winning orchids for submission to the AOS. How kind of him! It is so much fun for us to participate with our sister society, the Torrance Cymbidium Society, in this fun event every year. Thanks, Everett and all of our good friends there.

I went to the Annual Garden Tour and Party at Aaron Schave's magnificent home and hope you went there, too. With piano music playing, I strolled his breathtaking grounds, marveling at the lush greenery, cactus, irises (he was president of the Iris Club for two years...) trees and tropicals of every kind. His greenhouse is a conservatory seating twelve for dinner in the midst of a rainforest with lots of orchids. Well, Aaron, I don't impress easily, but your eclectic home, bursting with good taste and even better plants, sure impressed me. Way to go, Aaron. Thanks for inviting our club! You have made a paradise in the desert.

On April 24th, from 9:30 to 3:30, Tony Billitere will be hosting a Day with the Experts at Plant World. Tony, Marsha Hawley, Lillian Patterson, Steve Ninemire and Daniel Vong will be our good will ambassadors. In case you didn't know, we get 10% off there just for being plant members.

On May 1st, we will be putting in a display at beatiful Paseo Verde Library as part of the Sunset Flower Show- May Memories- and I will be doing my "sex" talk in the library at 2 pm. The show runs from 12-4 on Saturday May 1st and we will do the display that morning. We are hoping that we will attract new members from the east side of town who have not heard of us. We will need your blooming plants for the display! Dennis and Clarice Dean will doing the display, and we are sure they will do a great job, again. You may bring your blooming plants to Clarice's house (876-2729) on Friday afternoon or evening or just come on down at 9 am and help with the display. To get to the library, take 215 east to Green Valley Parkway exit, turn right for two blocks. Just past Paseo Verde, on the left side of the street, is the modern library.

My article on "Orchid Addiction" was published in the April 2004 edition of ORCHID DIGEST. Fun! Following the newsletter are two articles on Neem oil printed with kind permission of the American Orchid Society. I have also written a little article on "The Zen of the Orchid Club." By the way, if you want to buy Neem Oil, it is available from

Charley's Greenhouse (<u>www.charleysgreenhouse.com</u>), Norman's Orchids (<u>www.orchids.com</u>) and CalWest Supplies (<u>www.calwestorchidsupplies.com</u>) as well as a whole lot of other places. Just type "neem oil" into your search and you will find many sources.

Stay safe, keep well, and may you bloom!! Love, Carolgrowlove@cox.net 254-4168

The Zen Of The Orchid Club by Carol Siegel

- 1. If you feed the members, they will come.
- 2. The closer to an orchid show, the faster the flower will fade
- 3. The longer you grow orchids, the less you know.
- 4. No matter how orchids are grown, the next speaker will say it is wrong.
- 5. The more raffle tickets you buy, the less you win.
- 6. Scale always grows on the side of the orchid you don't look at.
- 7. Cinco de Mayo celebrations always occur on a meeting day.
- 8. Bud blast is living proof orchids have a sense of humor.
- 9. You can kill mealy bugs, but you cannot get rid of them.
- 10. Greenhouses are never big enough.
- 11. The more orchids you buy, the more you need.
- 12. No matter how big your club grows, ten people will always do most of the work.
- 13. Filling pot with orchid gives more joy than smoking it.
- 14. Electricity always goes out on the hottest day of summer.
- 15. Small change in culture makes big change in flowers..
- 16. No matter where you sit at a meeting, the speaker will have his back to you.
- 17. An orchid expert is someone who has killed more than a thousand orchids.
- 18. The one doing the vacuuming is the president.
- 19. The greater the orchid passion, the flatter the wallet.
- 20. The student worries about the flowers. The master worries about the roots.
- 21. To flower an orchid is to have the human approach the divine.
- 22. No matter how crowded the growing space, there is always room for one more.
- 23. Shade cloth is always put up one day after the sunniest day of the year.
- 24. You can never be too thin, too rich, or have too many orchids.
- 25. If it looks too good, they just bought it.

Neem Oil Proves Popular

Ancient-oil article results in wide-reaching inquiries

By E. Shaunn Alderman

the publication of an article about neem oil in the July issue of *Orchids*. More than 30,000 readers read a brief history of the ancient oil and became enlightened about a natural product many orchid growers find helpful in controlling a number of problems, including scale, mealybugs and slugs.

Inquiries from various places such as Canada, Texas, Illinois and Missouri arrived via mail, fax, the Internet and telephone. Some readers complained about not being able to access the Web sites listed in the article. (Some sites were overloaded with hits when the article was first published, apparently causing a delay for some Internet users.) Other readers were instant believers and wanted to know where to purchase neem oil. They were directed to a neem oil advertiser in *Orchids*. The number of responses was amazing and they are still arriving. It seems neem oil is a topic that will not soon dissolve.

Popping Up All Over

The popularity of the article caused regional orchid societies to designate neem oil as their programs' topic of discussion. Speakers and neem-oil users were hurriedly gathered to share their knowledge. The International Phalaenopsis Alliance, with permission, reprinted the neem article in its Volume IX, Number 2 newsletter. Assistant editor Nancy Meares says the importance to phalaenopsis growers warranted the reprinting.

Cyberspace also offered a platform for neem-oil discussions. After the July article was published, questions appeared and discussions took place on the American Orchid Society's Web site — OrchidWeb®—concerning the use of neem oil, which is derived from Azadirachtin indica. The Orchid Forum page is ideal for discussions on numerous topics, and neem-oil was one.

Orchid chat-room discussions focused on true-life neem-oil experiences in the greenhouse. Reading the candid replies was fun and educational. It seems that not all readers interested in the benefits of neem oil grow orchids in greenhouses. Gary Hawbaker (LCC@redrose.net), secretary of the Susquehanna Orchid Society in York, Pennsylvania, was prompted to research neem-oil possibilities further after reading our article. His primary concern was with mealybugs and growing orchids indoors. Hawbaker wrote an excellent article for his society's August newsletter. He relied a great deal on information provided by Larry Evans, the Engleton, Florida, orchid grower mentioned in July who actually inspired the original article.

In a recent conversation, Hawbaker said he uses a 1-gallon pump sprayer strapped on his shoulders to spray his 300 indoor orchids grown on baker's racks and in his four library windows. Hawbaker claims this mealybug control system to be more effective at coating every part of every orchid. He encourages indoor growers not to dismiss using neem oil simply because they do not have hundreds of square feet in a greenhouse.

Widespread Responses

Joseph W. Goldzieher, MD, of San Antonio, Texas, first tried neem oil a few years ago on cattleyas and then oncidiums, dendrobiums and phalaenopsis. "The nasty bacteria and fungi have disappeared,

and I have not seen slugs, etc., since," says Goldzieher, who also plugs the value of neem oil in controlling spots, rusts and mold on his roses. "Considering that it is nontoxic to humans, and therefore does not require the protection required with chemical sprays, neem oil ought to be in everyone's greenhouse," he says.

Floyd Rogers (rogers4@ix.netcom.com), an experienced retail-garden-center reader inquired about using neem to control slugs. He suggested that the Northern Illinois Hosta Society would be interested in learning about natural controls.

Kaneohe, Hawaii orchid grower Bill Lorimer (Wlorimer@aol.com) was impressed with the results shared by Evans in the July article and offered this story: "My problem was mites, mealybugs, aphids and a little on thrips. I specialize in Dendrobium anosmum node propagation, laying the canes on coarse peat at the end of the flowering season. Using a 1-gallon, battery-operated sprayer, I used 3 ounces of neem on the media and canes. Ten days later I sprayed again. The bugs were gone on the trays I sprayed, but it was expensive. My orchid house is about 600 square feet, and I did not cover all pots and nodegrowing trays. I purchased an oil-free compressor, using a Gilmour Hand-Sand Blaster gun. Now I use 1 gallon of water with the 1 ounce of neem oil to mist the entire orchid house." Lorimer, an independent orchid nurseryman who has been growing Den. anosmum and Den. Nestor for about 17 years, claims his new testing plants are his wife's African violets.

A recent cyberspace testimonial appearing on one Phalaenopsis group's Web meeting was written by Bill Tippit, owner and hybridizer of Olympia Orchids (btippit@olympiaorchids.com). He explained how in September, with the phalaenopsis starting to spike, his nursery was desperate to control mealybugs and mites. Because Tippit had read recent articles about neem oil, he was willing to try it. His concern about using stronger

insecticides was valid because of the possibility of causing deformed buds and blooms during the spiking time.

"On September 13, we sprayed all the plants using a rate of 1 ounce of neem oil, plus 1 ounce liquid soap to a gallon of water. We used an entire quart (of neem oil) in the process. The only immediate noticeable effect was the unusual smell of the greenhouse. The smell was not unbearable or even unpleasant and disappeared each day," says Tippit.

He also explained how after about 10 days he checked the area sprayed and found only one plant with live mealy bugs. He and the greenhouse foreman speculated that they could have missed the plant during the spraying process. When Tippit decided to make a second application on October 4, he used a 50 percent solution rate of the first application, including only ¹/₂ ounce of the liquid soap. Not one insect was found approximately 30 days after the initial spraying. He says it is too early to claim neem oil as the answer to all of their insect problems. "But I have to admit, I'm really impressed so far and am planning on making another application in about two months," he says.

Commonly Asked Questions

The most often-asked questions in the faxed letters and electronic mail were about dilution rates. Because the AOS is not able to endorse the use of neem oil, the replies usually directed the inquirer to the orchid grower in the article. Evans, owner of Blue Pagoda Orchids, says a mixture of 1 ounce of neem oil to 1 gallon of water should be used for the first spraying. He emphasizes the importance of mixing a little soap (dishwashing detergent) with the solution to help emulsify the oil. "If no soap is used, the neem oil will not mix into solution with the water and the spraying will not be effective," says Evans.

Regarding storage, Evans says, "Pure neem oil will retain its potency much longer if stored at about 40 F in a low light area such as a refrigerator." He says to mix only the amount of neem you will use in four to six hours. When discussing application, orchid-forum writer Doug Conkin (orchiddoug@earthlink.net) advised neem oil users to "wear a respirator because this stuff stinks like rotten onions." He also warned users to "never apply any oil product, neem or otherwise, when the temperatures in your growing area are likely to go above 85 F for an extended period."

If your interest is piqued and you wish to speak with someone who has had actual neem-oil experience, there is always Evans. His longtime experience as an orchid grower and his successful encounters with neem oil will enlighten you. He will most likely suggest you visit his Web site (http://3catsldog/bporchids). Also, check out neem-oil advertisers found in *Orchids*. There are more distributors than ever, simplifying accessibility. The only obstacle distributors have encountered is a delay in shipping. After all, neem oil can only be imported from India.

Some readers implied they were disappointed the article did not go into depth regarding application and usage procedures. The purpose of the article was to inform readers and bring about awareness. The AOS will not recommend or endorse a product that is not specifically labeled for use on orchids. Feedback from the article showing interest and enthusiasm for neem oil has been educational and exciting. We are thrilled to hear the success stories, everything from eliminating snail problems to controlling mealybugs and even wiping out mounds of fire ants around greenhouses.

E. Shaunn Alderman is editor of Awards Quarterly and assistant editor of Orchids. She will be editing the 2000-2002 Orchid Source Directory (formerly known as the AOS Almanac), which will mail with the July issue of Orchids. • American Orchid Society, 6000 South Olive Avenue, West Palm Beach, Florida 33405-4199 (e-mail TheAOS@compuserve.com).

Oil of Wonder

How oil from India could help what ails your orchids

By E. Shaunn Alderman

URIOSITY IS AROUSED WHEN wonder formulas are advertised—instead of remaining unconvinced when the product's benefits are touted beyond belief, we cannot wait to try it for ourselves. After reading about neem oil's seemingly boundless virtues, orchid growers may follow this natural pattern and want to investigate the benefits of this ancient oil.

Whether you are seeking an ecofriendly pest-management practice for your greenhouse, or are interested in a variety of health benefits, neem oil could provide answers. Native to East India and Myanmar, the neem tree (Azadirachtin indica) is a tropical evergreen related to mahogany. Compounds found in the seeds, bark and leaves are said to have antiseptic, antiviral, antipyretic, anti-inflammatory, antiulcer and antifungal uses.

There is documentation indicating neem was used nearly 4,500 years ago. Neem branches, bark, leaves and fruit have been employed to treat medical conditions and cure many illnesses. For centuries, extractable compounds have been incorporated into personal-hygiene products such as toothpaste, skin cream and soap. Neem twigs have been credited with preventing gum disease and other dental problems for people who chewed on the twigs or used them as toothbrushes. The list of medical benefits is long, impressive and inspiring.

Neem in the Greenhouse

Reports say extracts from neem tree leaves also have insecticidal and fungicidal properties. This biological control offers hope for growers concerned with protecting the environment while providing optimum conditions for their agricultural and horticultural crops.

Orchid grower Larry Evans, owner of Blue Pagoda Orchids in Englewood, Florida, has his own neem oil story: "I can only tell you of my experience with neem oil. When I refer to neem oil, I mean pure neem oil pressed from the seeds of the neem tree. I have never used any product with neem oil as an ingredient. I don't know that it would be as safe to use as pure neem oil," says Evans. He continues, "Due to a long-term illness I had, my greenhouse became a disaster area. Every January as the phalaenopsis were spiking, the mealybugs moved in by the thousands. Toxic sprays did not get rid of them completely. About 75 percent of the mature plants had fire ants in their pots. Scale was rampant. We had snails and slugs so big they looked dangerous."

Evans experienced more difficulties because he is allergic to chemicals. He says, "Insecticides and fungicides that I had previously used were a short-term fix—lasting about two weeks. And the smell was offensive and lasted for days. It was all that was available to keep a clean, insect-free greenhouse, even if the fumes from most insecticides caused me to have allergic reactions."

Through the horticultural grapevine, Evans heard about using neem oil in the greenhouse. Desperate, still not feeling well and ready to experiment, Evans opted to give neem oil a try. "The first time I used neem oil. I mixed a ratio of one ounce to one gallon of water and added a few drops of dishwashing liquid. I sprayed every plant, all benches, walkways and under benches. In a few days there was a definite improvement," Evans says. To be thorough, Evans waited two weeks and sprayed again with the same solution ratio. "I kept a close eye on the plants and found no mealybugs, scale, slugs or snails. And best of all, the fire ants were gone,"

says Evans. "I have never used a product in the greenhouse that had effects as efficient and long-lasting as neem oil."

Evans did not spray again for six months. He did find a snail and a slug, but no other "livestock", and he decided to spray everything again. He claims part of the beauty of using neem oil is not having to wear protective clothing or special breathing equipment to control sickening odors. Evans says neem oil does have an odor, "best described as kind of like onion soup, however, the odor only lingers for a short time."

Used on cattleyas, dendrobiums, phalaenopsis, oncidiums, vanilla, vandas and the dove orchid (*Peristeria elata*), pure neem oil at Blue Pagoda Orchids is a product that has helped Evans tremendously. He even claims it to be catfriendly, not harming one whisker on Panzie, the nursery's customer-greeting greenhouse cat.

How it Works

According to information from the Neem Association, the most active insecticidal chemical compound found in the

Neem

Azadirachtin indica

Native to East India and Myanmar

Compounds in the seeds, bark and leaves are said to have antiseptic, antiviral, antipyretic, anti-inflammatory, antiulcer and antifungal properties.

Grow a neem tree outdoors where there are no hard freezes.

Indoors, place a neem plant near a sunny window during the winter. Move it outside during the summer.

The oil may be a suitable spray for orchids.

neem seed is azadirachtin, which acts as an antifeedant. This means plants that have azadirachtin on the leaves will not be eaten by insects. Instead, pests die of starvation. The association's educational material states, "Only insects that eat plants are affected by neem, leaving honeybees and other beneficial insects essentially unharmed." As to the fungicidal properties, when neem oil solution covers the leaves, fungal spores are prevented from sticking to the plant. If they do not stick, the spores cannot grow, penetrate the leaves and cause disease.

Based in Winter Park, Florida, the Neem Association is a nonprofit organization that promotes neem as a source of natural healing and as a solution to many of the world's environmental problems. To become enlightened about the many uses of neem-related products, visit the Neem Association's Web site (http://members.aol.com/_ht_neemassoc/index.html). Another Web site to visit is

Neem Oil Resources

Neem Association

1780 Oakhurst Avenue Winter Park, Florida 32789 WWW http://members.aol.com/_ht_ neemassoc/index.html

Neem Foundation

67-A Vithal Nagar, Road No. 12
JVPD Scheme, Mumbai
400 049 India
Telephone 91-22-620-6367
Fax 91-22-620-7508
WWW http://info@neemfoundation.org

Quail Roost Nursery

15100 Quail Roost Drive Miami, Florida 33187 Telephone 305-238-5202 Fax 305-251-4834 WWW http://members.aol.com/quail roost/index/html one developed by the Neem Foundation in India (http://info@neemfoundation.org), publishers of Global Neem Update, the organization's quarterly magazine, edited by Pramila Thakkar. Internet users may find reports from the meetings held in conjunction with the World Neem Conference hosted in Vancouver, British Columbia, Canada, in May 1999.

Buying and Growing Your Own

As a tropical tree, neem needs to be grown in a climate free of hard freezes. Well-drained soil is an essential condition for the minimum-maintenance tree, which also can be grown indoors.

According to Keith Weyrick, owner of Quail Roost Nursery in Miami, Florida, if grown indoors, neem should be placed near a sunny window during the winter and moved outside during the summer.

Weyrick's wholesale and retail nursery has grown neem trees for nearly seven years. He says local customers purchase the trees to plant in their yards, and offshore customers, for instance resorts in the Caribbean, incorporate the neem trees into their lush landscapes.

Your Own Neem Story

As wonder products go, neem oil's impressive history commands recognition. The centuries of success stories prevent labeling it merely another cure-all snake oil. Neem seems to be an oil that makes you wonder about the possibilities. Orchids readers are not shy about sharing their greenhouse experiences, good and bad. If you have a neem-oil story, especially an orchid-related one, please send it to the author.

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