

The Rootball e-News

NEWSLETTER OF THE MIDWEST CHAPTER ARS

VOL 3, NO 2, APR 5, 2013

April Rose



Plant Sale Varieties

See below for a list of the rhododendrons that have been ordered. Members once again can pre-order for pick-up on Saturday morning of the sale. Contact Tony Greco for details <apgreco@sbcglobal.net>.

Dorothy Swift
Yellowstone
Tapestry
Percy Wiseman
Scintillation
Skookum
Sugar Puff
Tina Henjie
Polarnacht
Wyandanch Pink
Kabarett
Caroline
Lemon Dream
Weston's Pink Diamond
Landmark
Minnetonka
Pearce's American Beauty
Janet Blair
Commonwealth
Calsap
Anna Hall
Bixby

MEMBERS DISCOUNT - 10%, 15%, 20%

Chapter Plant Sale and Truss Show on May 11 and 12

The Midwest Chapter's annual Plant Sale and Truss Show will be held at The Chicago Botanic Garden on Saturday, May 11 and Sunday, May 12. Hours of the sale are from 10:00 AM - 4:00 PM each day.

The rhododendrons have been ordered from Rosebay Nursery in Saugatuck, Michigan. Twenty-two varieties are on order including some new cultivars. A very small number of each variety has been ordered so if there is something you plan to purchase, you can pre-order. Contact Tony Greco and he will provide details. His contact information is in the left sidebar.

John Migas will also supply some evergreen azaleas again from his nursery. Varieties have yet to be determined.



Kabarett

Member's Discount

Our chapter will be offering a member's discount as an added benefit to membership; 10% off 1 or 2 plants, 15% for 3 to 5 plants and 20% for 6 or more. Last year we had several new members join to take advantage of the discount and we're hoping for similar results this year.

Truss Show

Our Truss Show is always a big hit with visitors and members alike and is a great venue to demonstrate the wide variety of rhododendrons and azaleas that can be successfully grown in our area.



Lemon Dream

We urge our members to bring some trusses for the show. Plan to arrive at 9:30 AM with your trusses to allow enough time to set up the display before the show opens. The display materials will be provided at the show.

Volunteers

The Plant Sale and Truss Show requires a lot of work to set up on Friday, help with sales on Saturday and Sunday and tear the show down on Sunday. We are looking for volunteers and if you can help out, contact Ted Nyquist <t.nyquist@sbcglobal.net> or 630-215-5022.

So mark your calendar to not miss this year's event. The plant sale is our chapter's main fundraiser that enables us to offer some of the fine programs we do throughout the year and we're looking forward to a good turnout.

JUNE
IN
Indiana

Midwest Chapter Summer Meeting and Workshop in Upland, Indiana

Fellow Midwest Chapter Member, Dr. Andrew Whipple, Professor of Biology at Taylor University in Upland, Indiana will make a presentation about his work with native azaleas and micropropagation on June 15.

Fellow Midwest Chapter members, Dr. Andrew Whipple, Professor of Biology at Taylor University and Paul Lightfoot have graciously offered to host a one day event for The Midwest Chapter. The event is scheduled on June 15 at the Taylor University in Upland, Indiana.



PHOTO: A Whipple

A full schedule of events is planned including a presentation on Dr. Whipple's work with native azaleas and a tissue culture demonstration. A garden tour of the university's native azalea collection which should be in full bloom (weather permitting) is also on the agenda. If time permits, a tour of Paul Lightfoot's garden will be included. Plants will also be available for purchase.

This event is a continuing effort by our chapter to reach out to members who do not live in the Chicago area by scheduling

meetings and programs in different locations within our membership area. Last year our summer meeting was held in Madison, Wisconsin and we had a good turnout. We're hoping for the same this year in Indiana.

Transportation

Our chapter is looking into renting a 15 passenger van if enough people are interested in driving up together from the Chicago area. We plan to return the same evening. It will be a long day but promises to be one of our chapter's most interesting and informative events.

Ted Nyquist is looking into the car rental details. We are planning for transportation with the assumption we will have enough people that will want to share a ride. More details about the event and transportation will be forthcoming.

W

Editor's Note

When I asked Andrew Whipple if he could provide me with some information about his work with native azaleas, he generously supplied three articles that cover different facets of his passion for these plants along with some photos that appear in this issue. The articles are all so interesting, I decided to include each in this issue of "The Rootball e-News." They appear on pages 3 thru 6.

Thanks, Andrew. We are looking forward to seeing you on June 15.

Tony Greco

From the Mountains to the Lab and Back

Azalea Preservation at Taylor

Submitted to *The Rootball e-News*
by Dr. Andrew Whipple

It was a dark and stormy night. The lightning flashed across the mountain ridges, breaking the inky blackness and casting shadows into the valley. The professor looked at the student, the student looked back, and both wondered, "Can we do the hike in the morning? Will the road and the trail be passable? Will there be an electrical storm when we're on the bald at the top of the mountain?" It turned out all the answers were "Yes."



azalea garden. Propagation of plants by vegetative means can be as simple as jamming a stick in the ground and waiting for it to root. While both woody and softwood azalea cuttings can be so rooted, thus creating clones of the parent plant, this method generally does not work with azaleas. How then to propagate vegetatively our native azaleas, thus cloning desirable individual plants?

Why drive the many hours from Indiana to Tennessee and North Carolina? Why embark on a long and rugged hike to a mountain top, only likely to be chased back down by a storm? The answer to all of these is to study our native azaleas in their natural setting. Unlike the azaleas native to East Asia, which are evergreen and have red, white, and purple non-fragrant flowers, azaleas native to the US are deciduous, bloom in reds, oranges, yellows, pinks, and white, are often fragrant, and have unusual and attractive flower forms. Consequently they are of horticultural interest for their pleasing aesthetics, and biologically interesting due to the occurrence of interspecific hybridization across several of the 16 eastern species. Further, as is the case with many extant species, many of these are in danger of being lost due to habitat encroachment or simple death of specific plants. Thus another answer to these questions is to preserve these plants while we yet have the opportunity.



PHOTO: A Whipple

Given knowledge and awareness of these plants, and of the need to preserve them, what can one do? One answer is to propagate them, either by seed to preserve the population's diversity, or by vegetative means to preserve specific plants as reference specimens. This is what Andrew Whipple, Professor of Biology, has been doing for the past several years, assisted by biology student Luke Collins and straightforward Taylor's resident horticulturist Paul Lightfoot.

Propagation by seed is straightforward, once the wild-collected seed is in hand (see 'dark and stormy night' above). As a result there are presently several hundred native azalea seedlings being grown in and around Taylor, including many in the Taylor

azalea garden. Propagation of plants by vegetative means can be as simple as jamming a stick in the ground and waiting for it to root. While both woody and softwood azalea cuttings can be so rooted, thus creating clones of the parent plant, this method generally does not work with azaleas. How then to propagate vegetatively our native azaleas, thus cloning desirable individual plants?

An answer to that question is *in vitro* micropropagation, wherein small plant pieces are surface sterilized, placed into tissue culture in the lab, and become established shoot cultures. There are many challenges and variables in this methodology, and success is not always achieved with a given plant, but at present we have over 50 different azaleas in culture in Taylor's Department of Biology. Once in culture there are procedures by which to create rooted plants from these miniature *in vitro* grown azaleas, and we have had success in this step of micropropagation as well. Consequently there are dozens of azaleas in Taylor's azalea garden, and other sites, that originated from these lab cultures, with many more presently in the pipeline.



PHOTO: A Whipple

From the mountain to the lab and back – but where is back? "Back" means planted outside in order to test the hardiness of these plants relative to Indiana's climate. At present we have the campus azalea garden between the Memorial Prayer Chapel and Wengatz planted with about 350 azaleas, as well as several other sites at which azaleas are planted for additional testing. "Back" also means azaleas planted outside in order to serve as reference plantings to be available for further study, such as molecular phylogenetic studies. Thus "back" will provide easy access to these plants throughout the year, without the need to climb the mountain under dark and stormy conditions. Finally, should there be the need these plantings could serve as a source from which to repopulate areas that have lost their native stands of native azaleas, and so "back" might well mean back on top of the mountain.

How I Became OBSESSED

With Our Native Deciduous Azaleas (And What I'm Doing About It)

Article and Photo
by Dr. Andrew Whipple
Professor of Biology
Taylor University

June, 2010

The (deciduous) azalea bug bit me hard at the 2002 ASA/ARS meeting in Atlanta, especially upon touring Earl Sommerville's garden. The colors, the forms, the fragrances – Wow!

Upon returning to the clay cornfields of central Indiana I took on the task of growing these plants at this site, and quickly learned the need of well drained acidic soil for their survival and growth. Succeeding with named, in-the-trade varieties, I returned to the memory of the Sommerville plants and acquired a few from nurseries, but came to realize that many of these, as well as unique forms in others' gardens and in the wild, were often the only ones in existence. "What if this one plant dies?" I found myself thinking. "These need to be propagated and shared around."

Then came the discovery that some deciduous azaleas are difficult to propagate by the usual means, and that the same Earl Sommerville whose collection got me hooked was micropropagating (tissue culturing) his plants. And so I learned from Earl the specifics of in vitro propagation of deciduous azaleas as a means to make more of these azaleas that might otherwise be lost to us.

At this point (June 2010) I am up to my eyeballs in deciduous azaleas - in tissue culture (maybe 70 different plants in culture at present), in pots (maybe 1,000+ plants) – and am the proud papa of an azalea garden on the campus of Taylor University in Upland, Indiana with about 350 azaleas. My vision is to utilize my familiarity with the laboratory world, by way of tissue culturing, to help preserve and spread around these delightful, but difficult to propagate, plants.

// the colors,
the forms,
the fragrances . . .
WOW! //



PHOTO: A Whipple

AZALEAS

AT TAYLOR UNIVERSITY

Article and Photos
Dr. Andrew Whipple

Aesthetics, Genetics, and Preservation by Micropropagation

"You can't grow azaleas in central Indiana. The climate is too harsh, the soil is wrong, and so no one grows them here. It's too bad because azaleas are so pretty." Come visit the Taylor University azalea garden during bloom time - May and June – and see for yourself that deciduous azaleas can do very well in the corn belt. Stand on Brad's Bridge over the creek between the Memorial Prayer Chapel and Wengatz Hall and you will be in the midst of the azaleas, planted on both sides of the creek by Taylor University Biology students.

Aesthetics

Deciduous azaleas? Unlike the more familiar evergreen azaleas, small manicured bushes that bloom in red, white, and pink, deciduous azaleas drop their leaves in the fall and bloom in yellow to orange to red with infinite intergrades between, as well as white and pink. As an added bonus many deciduous azaleas are delightfully fragrant. The form of the plant

varies from compact bushes when grown in full sun to tall gangly shrubs in the shade. The sights and fragrances of these plants are evident from the garden edges, and



are even more enjoyable from inches away as you wander into the garden. The beauty of the Azalea Garden compliments the tranquility of the Prayer Chapel, providing a peaceful setting for prayer and reflection.

Genetics

Of the nearly two dozen deciduous azaleas species worldwide, three fourths of them are native to the eastern United States, ranging from coastal dunes and wetlands to mountaintop balds thousands of feet above sea level. All azaleas are classified as members of the genus *Rhododendron*, with deciduous azaleas placed into

the subgenus *Pentanthera*. Of particular biological and aesthetic interest is naturally occurring crossing between species, creating interspecies hybrids displaying colors and flower forms unlike the parents. These hybrids are beautiful in their own right, as well as presenting an interesting system in which to study the means and mechanisms of the reproductive biology between species, from cytogenetics up to the population level.



*"You can't
grow azaleas
in central
Indiana... it's
too bad
because
azaleas are
so pretty."*

Preservation by Micropropagation

Just as Golden Delicious is a particular type of apple, propagated asexually by grafting pieces of a Golden Delicious tree onto a rootstock, if one wants to have multiple

azalea bushes of the same appearance and genetics, asexual reproduction is necessary as seedlings of azaleas like apples are not true to the seed parent type. Unfortunately deciduous azaleas are typically difficult to propagate by usual horticultural

AZALEAS

continued from page 5

practice, necessitating other means to generate many copies (clones) of a desirable plant. Growing azaleas as tissue cultures in the laboratory, and then growing out full sized plants from these cultures, is a means used here in the Department of Biology thus to preserve especially desirable azaleas that would otherwise be lost upon the inevitable death of the original plant.

Why azaleas at Taylor University?

- Education

This work, especially the laboratory based micropropagation, affords students the opportunity to pose hypotheses, design experiments to test those hypotheses, and then to perform those experiments, gather data, interpret the data. In short, students learn science by doing science.

- Preservation

Many individual azalea plants are of both biological and horticultural value, but are in danger of being lost since they can be very difficult to propagate.

Micropropagation affords a means to save such valuable plants by asexually producing multiple plants, genetically and in appearance identical to the one parent plant. By distributing these plants to other holders of plant collections the potential loss of the plant is greatly lessened as it is now found at multiple sites.

- Reference

Given the biological value of many of these azaleas, and the difficulty in obtaining study material – the plants may be on a secluded mountain top, in a private collection, or at a site scheduled for development – having the plants at an easily accessible site is of prime importance. Thus the Taylor Azalea Garden and the azalea tissue cultures also function as a reference source for those studying the biology of these plants.

- Demonstration

Although there are no azaleas native to Indiana, the

success of the Taylor University Azalea Garden demonstrates that with a little planning and care deciduous azaleas – even those native to the panhandle of Florida – can be grown in central Indiana.

- Beautification

Many campus grounds are known for the beauty of their landscaping, and many also serve as repositories of collections of especially beautiful plants. The addition of the Azalea Garden on the Taylor University campus serves these

purposes, and puts Taylor on the map in a new and novel way.

What azaleas are in the Taylor University Azalea Garden?

Close by the path are early blooming plants, a mix of some commercially available complex crosses and many plants from the Earl Sommerville (of Marietta, GA) collection. Included in this group of mostly southern azaleas are plants from the following species: *R. austrinum* (the Florida azalea), *R. flammeum* (Oconee azalea), *R. canescens* (Piedmont azalea), *R. atlanticum* (coastal azalea), *R. alabamense* (Alabama azalea), *R. calendulaceum* (flame azalea). Among these *R. austrinum*, *R. atlanticum*, *R. canescens*, and *R. alabamense* are fragrant, each with its own aroma. Among the plants on the Chapel side of the creek are plants from the Kelly Strickland (of Tallahassee, FL) collection, including *R. austrinum* and *R. flammeum*. Most of the plants on the Wengatz side of the creek away from the path are selected seedlings grown from the hybrid swarm on Gregory Bald

(NC/TN) and include the species *R. arborescens* (sweet azalea, fragrant), *R. viscosum* (clammy azalea, fragrant), *R. cumberlandense* (Cumberland azalea), and *R. calendulaceum* seedlings *m*. The plants at the top of the garden on the Wengatz side are from the large-flowered *R. calendulaceum* population at Hooper Bald (NC).



a message from the president . . .



“ You can preorder plants
for pickup at the sale ”

Spring Ahead

Every year at this time I start looking forward to spring much as a child would look forward to Christmas or a holiday. (I still believe in Santa Claus.) Shortly we shall start to enjoy the new buds of spring and are excited to see how are gardens survived the winter.

I have heard a lot of complaints about the long winter in the Midwest and the enduring snow. But if put in perspective, we should be thankful for the snow cover that protects our rhododendrons. I expect this to be a good year for our plants. Only the next two months will tell. We should see our plants bloom at near normal times, but I can't predict if there will be any left over damage from last year with the excessive heat and drought. Soon in April we will be picking up new plants at nurseries for additions to our gardens.

In anticipation, we have arranged for one of the largest selection of rhododendrons and azaleas for our plant sale at the Chicago Botanic Garden in years. Separately, Tony Greco has noted the varieties we have selected elsewhere in this newsletter with the exception of the evergreen azaleas which we won't know until just before Mother's Day weekend. You can preorder plants for pickup at the sale to make certain that your favorite plant is still available to you when you arrive. Please contact Tony Greco to place your order.

We will again offer member's discounts as we did last year. We need volunteers to help with the plant sale including the set up day on Friday, May 11. Please contact me if you can be there either one or all three days. Also if you know of an individual who is considering purchasing a plant, tell them to come along.

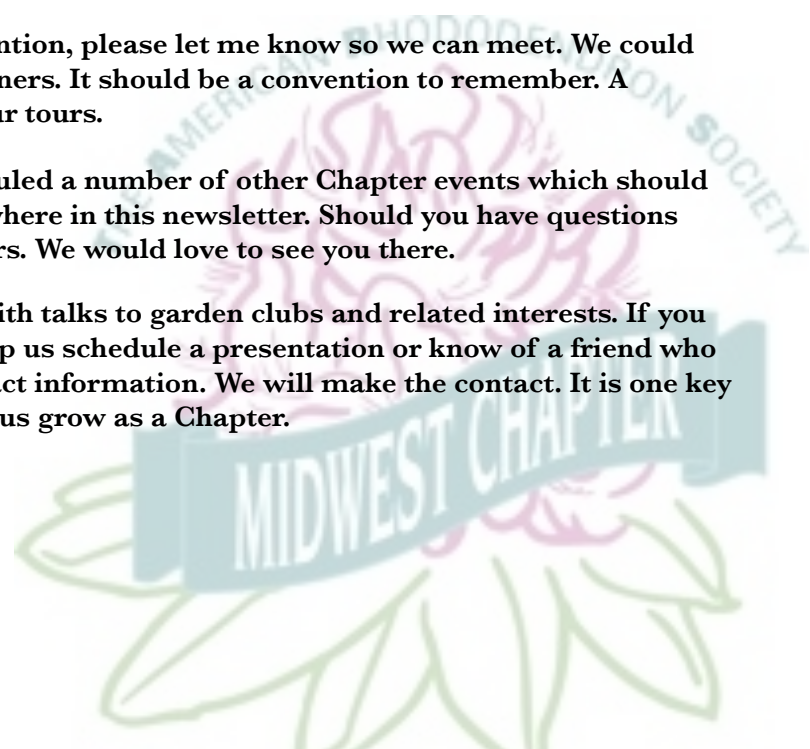
If you are traveling to Seattle for the National convention, please let me know so we can meet. We could even have a Midwest Chapter table at one of the dinners. It should be a convention to remember. A number of terrific gardens have been selected for our tours.

In addition to the Seattle convention, we have scheduled a number of other Chapter events which should be of interest to our members. They are noted elsewhere in this newsletter. Should you have questions about an event, please call one of the Board members. We would love to see you there.

One last request. We are starting to be aggressive with talks to garden clubs and related interests. If you know of a contact at a particular club who could help us schedule a presentation or know of a friend who belongs to a garden club please let us have the contact information. We will make the contact. It is one key way we can fulfill our purpose as a society and help us grow as a Chapter.

Warmest Regards,

Ted Nyquist



Large Turnout

for Midwest Chapter Presentation to Glenview Gardeners



by Ted Nyquist

A key purpose of the American Rhododendron Society is “to encourage interest in and to disseminate information about the genus Rhododendron.” One way to help accomplish this purpose is to give presentations to local garden clubs. At the same time it provides an opportunity to highlight our annual Truss Show and Plant Sale which will be held at the Chicago Botanic Garden this year over Mother’s Day weekend, May 11 and 12 and to recruit new members to our Chapter.



Left To Right: Judy Oppgaard, President, Glenview Gardeners Bill Dietrich, Michele C., VP Programming, Glenview Gardeners, Ted Nyquist, Susan Garland

On Tuesday, March 12, I had the opportunity to give a PowerPoint presentation to the Glenview Gardeners club. There were approximately forty attentive and knowledgeable gardeners present including three Chapter members; Bill Dietrich, Susan Garland and Becky Maganuco. Becky is also a member of the club. The meeting date and engagement was arranged through the efforts of Tony Greco and Michele C., their Vice President of Programs. Michele pointed out to me that previous members of our Chapter who had talked at their Club were John Golab (May 1991), Phil Merzer (April 1994) and Jerry Firak (1998).

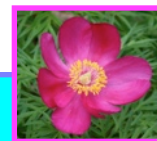
The presentation covered the categories of Rhododendrons, cultural requirements, soil preparation, planting and many examples of various Rhododendrons all of which were grown in our

Midwest Chapter gardens. We raffled a \$25.00 gift certificate toward a Rhododendron at our Chapter

sale in May. A number of members of the club signed up to be notified regarding the details of the plant sale. Chapter literature was made available to the audience.

We would be interested in knowing which of our Chapter members either have garden club contacts where we could give Rhododendron presentations

or are members of other garden clubs themselves. Our Chapter now has an excellent PowerPoint presentation as well as literature to support the presentation. Please let us know if you have contacts that may be interested in hearing about our plants.



The Glenview Gardeners is a very active organization with a full slate of programs. Their monthly meetings usually include a guest speaker and all Midwest Chapter members are invited to attend. There is never a charge. For more information of their upcoming events visit:

http://www.glenviewgardeners.orgCalendar_of_Events.html

MIDWEST CHAPTER ARS

Mentoring Program Guidelines

Prepared by Ted Nyquist
and Susan Garland

What is the Mentoring Program?

The Mentoring Program of the Midwest Chapter of the American Rhododendron Society was established in 2012 to ensure that new members to the Chapter (up to two years) are immediately welcomed into the Chapter and the Society and receive expected and proper support. We in the Chapter want to make certain that new members are successful and become knowledgeable about the genus Rhododendron.

Is the program voluntary on the part of the new Chapter member?

Yes! There is no requirement to participate in the Mentoring Program on the part of the new member but the program will be offered to all who desire to participate.

Who are the Mentors?

The Mentors are Midwest Chapter Members who are assigned to each new member by the Board of the Chapter. Any existing member may volunteer to be a Mentor subject to the approval of the Board. Generally, Mentors should have considerable experience successfully growing rhododendrons and/or azaleas and be knowledgeable concerning Chapter activities. Mentors may serve a length of term of their choosing.

What are the duties of the Mentor?

- a. Once a Mentor has been assigned to a new member, the Mentor should within fourteen days contact the new member by phone and/or email. If the Mentor fails in this obligation, a new Mentor should be assigned.*
- b. Determine the new member's goals for growing and gardening with rhododendrons.*
- c. Explain the Chapter and National communication avenues and review the Chapter and ARS websites to explain the information that is available to them, including Chapter meetings and resources.*
- d. Visit the new member and their garden if appropriate.*
- e. Be proactive and offer periodic advice and assistance with their garden activities and questions.*
- f. It shall be the duty of the Membership officer to maintain a record of the new members and their Mentors.*

*We in the Chapter
want to make
certain that new
members are
successful and
become
knowledgeable
about the genus
Rhododendron*

CALENDAR OF EVENTS

ARS National 2013 Convention

DATES: May 1-5, 2013
PLACE: Seattle, WA

Refer to ARS Journal for details

Chapter Plant Sale & Truss Show

DATES: May 11 and 12
PLACE: Chicago Botanic Garden
TIME: 10:00 AM - 4:00 PM

Michigan Meet

DATES: May 17 - May 19
PLACE: Saugatuck, MI

Contact John Migas for additional information
azaleajohn@yahoo.com

Chapter Summer Meeting and Native Azalea Presentation/Workshop

Date: June 15, 2013
PLACE: Taylor University, Upland Indiana

Details will follow.

Midwest Chapter Officers

Ted Nyquist, President
t.nyquist@sbcglobal.net

David Hinde, Treasurer
dwh123@charter.net

Susan Garland, Membership
s-boatman@sbcglobal.net

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Steve Krebs Addresses Midwest Chapter

Article and Photo by Ted Nyquist



Our Winter Chapter meeting was held at the Chicago Botanic Garden on Saturday, March 2. Dr. Steve Krebs, Director of the David G. Leach research station of the Holden Arboretum in Kirkland, Ohio was the guest speaker. A sparse turnout was present to hear Dr. Krebs speak about "Modernizing a Garden Classic; Rhododendrons for the 21st Century."

Among the several topics covered in the presentation, Dr. Krebs spoke about the efforts to create plants which showed greater heat tolerance and root rot disease resistance. Numerous excellent depictions of the research efforts were clearly expressed in the PowerPoint slides. After the extremely hot Spring and summer we experienced in many parts of the Midwest Chapter, greater heat tolerant plants would be a welcome addition to our gardens.

Dr. Krebs also spoke about the completion of the new Discovery Garden at the Holden Arboretum, and a native azalea hybridization project at the Leach Station that has resulted in summer blooming plants with bright colors and fragrance.

Prior to the presentation of Dr. Krebs, Ted Nyquist, President of the Midwest Chapter, gave an update on Chapter finances, membership growth which now stand at seventy nine, and plant for future meetings.

A much larger turnout was present for Dr. Krebs talk on similar subjects at Cantigny Park in Wheaton, Illinois. Cantigny, under their Director of Horticulture Joy Kamisky, is initiating efforts this year to establish a significant rhododendron collection.

A goal of both presentations was to "highlight" novel hybrids that can be

enjoyed by the masses because they are easy to grow under a wide range of conditions."

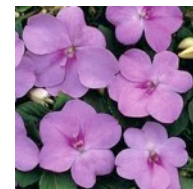
In Case You Might Have Missed It

Fellow member, Betty Ann Addison, wrote an article "The Honey Trick: A Technique for Overcoming Reluctant Pollination in Rhododendrons" that was published in The Winter 2013 edition of The ARS Journal. The article appears on page 40.

Congratulations, Betty Ann!

Impatiens and Downy Mildew

Susan Garland recently reported she had attended a masters gardening class and learned the downy mildew fungus that attacks impatiens (*impatiens walleriana*) is in the Chicago area.



Although impatiens may be healthy when purchased, they soon can become infected, develop yellowing shriveled leaves and eventually defoliate completely. Some of us experienced this with our impatiens last summer.

Since many of our members have shade gardens and plant impatiens, it is highly recommended to plant other types of shade annuals this year. Fortunately, New Guinea impatiens are immune to the disease and can be a suitable alternative.

Visit the links below for more information.

<<http://www.chaletnursery.com>>

<<http://hyg.ipm.illinois.edu/article.php?id=424>>



The Midwest Chapter ARS
midwestars.org

BLOG: midwestars.org/wordpress

A special thanks to Andrew Whipple, Ted Nyquist and Susan Garland for their contributions to this issue.

Editor/Design/Photography
A. P. Greco