



Show Me Hostas Newsletter

Volume 11, Issue 6

September, 2010

A MESSAGE FROM OUR PRESIDENT



Pam Wolkowitz President
Photo by Kelly Hall

Hello Everyone!

As I look at my hostas, even though they are in a “corral” waiting to go to their new home, I can see the signs of their struggle of dealing with another terribly hot Missouri summer. This is the time for southern blight, so keep an eye out.

The mobile home on our property has finally been moved. We will now start cleaning up,

killing grass and excavating. There will be a lot of work putting in the paths and bringing dirt in, but it will be fun work, if there is such a thing. Our goal is to have the garden completely ready for spring planting. We will look forward to having you all come out to see it.

The field trip to the Arboretum was informative and fun. It was a little warm but we had a slight breeze and enjoyed our walk through the flower garden. We had a good turn out and it’s always fun talking with fellow gardeners.

Hope you enjoyed the few days of really nice weather and were able to get out in your gardens.

Pam

2010 CALENDAR OF EVENTS

September 19

Meeting with Speaker Bill Ruppert
'The Perennial Plant Pallet of the City Garden'
1:00 PM, Creve Coeur Government Center

October 17

Meeting with Speaker Dave Wanninger
'Plants for Success in the Shade Garden'
1:00 PM, Creve Coeur Government Center

November 21

Meeting with 'Show St. Louis Hosta Society' DVD
1:00 PM, Creve Coeur Government Center

December 5

Holiday Party
1:00 PM, Creve Coeur Government Center

NEXT NEWSLETTER WILL ARRIVE AT THE END OF SEPTEMBER

Coming Event – September

'The Perennial Plant Pallet of the City Garden'
Bill Ruppert from National Nursery Products

St. Louis Hosta Society
September 19, 1:00 PM.



Bill Ruppert is owner and manager of the St. Louis office of National Nursery Products, a horticultural sales, marketing and consulting company which represents wholesale growers of ornamental and environmental landscape plants.

Bill has an extensive background in horticulture. Upon graduating from the University of Missouri with a degree that concentrated on ornamental horticulture and landscape design, he had a management role coordinating the landscape redevelopment and enhancement of the University's campus.

He now serves as an officer of the Horticulture Co-op of Metro St. Louis and of the Landscape and Nursery Association of Greater St. Louis. He is a member of numerous advisory committees and also a member of the Gateway Greening Board of Directors.

In his spare time, Bill enjoys home gardening including the collection and evaluation of recently introduced plants and combining unique and tough companion annuals with his selections of hardy perennials and ornamental shrubs.

Bill's topic is the 'perennial plant pallet of the city garden'. To discover what he means by that phrase, join your fellow members at our September 19 meeting.

Let's start the bidding at ...



A truck load of hostas destined for the member auction.



Members checking the merchandise before the start of the auction.



Bidders have their paddles. The auctioneer is about ready. Members are taking a last minute peek at item set to go on the block.

July 18 Member Plant Auction

Two pick up trucks arrived filled with the hostas and companion plants generously donated by members Martha and Lamar Karlovetz, who permanently relocated to Florida last fall. The plants had overwintered in the garden of Kelly and Jeff Hall.

Other members also generously contributed so that soon the tables lining the front and side of the meeting room were filled with items awaiting their turn on the auction block. There were small hostas ideal for troughs and large (how did that huge 'Mississippi Delta' ever fit inside a car?), single eye plants and large clumps, old standards and ones less often seen. Something for everyone.

The society thanks every person who invested their time and labor in digging and potting items for this event. Without their generosity, there would be no auction. A special thanks goes to Jeff Hall who for the past several years has acted as auctioneer. His plant knowledge and easy humor makes an enjoyable afternoon fly by.

This auction is one of two events that fund our society's yearly activities and make the publication of this local newsletter possible. Because of the support from the large turnout of members, our society will continue to thrive

Strolling among the wildflowers

August 15 meeting at Shaw Nature Reserve



Waiting for all to arrive at Bascom House



Joan Hummel leads the way



Waterfall and pool



Coneflowers in the Whitmire Garden

Members met in front of the Bascom House, an Italianate-Victorian home built in 1879 and purchased, along with 320 acres of farm land, by the Missouri Botanical Garden in 1925. Even today the good building materials, quality hand-made brick, and excellent craftsmanship of the 1870s carpenters and brick masons is apparent in the structure.

Joan Hummel led the way down the many paths comprising the Whitmire Garden, the area around the Bascom House. Joan and Larry told us about the efforts of the Shaw Nature Reserve to reintroduce native sun and shade wildflowers to this area. They identified many of the plants meandering through the beds bordering the paths.

Many types of ferns - Maidenhair, Sensitive, and Ostrich - hugged the ground while purple and white Coneflowers and the red Cardinal Flower poked their heads high into the sky. False Solomon Seal (*Baptisia*) and the green Solomon Seal hung heavy with dark berries. Running amok among these plants were *Cimicifuga*, Goldenrod, Bellflower, purple Milkweed, Wild Ginger, *Heuchera*, Wild Geranium and more.

Around the corner from the spring-fed pool and waterfall, edged with wet-loving sedges and ferns, was the Savanna. Here a grove of native Persimmon trees provided shade for a mass of large Ostrich ferns. Progressing up a small slope to the back of the Bascom House, we arrived in a butterfly garden. Monarchs and Black Swallowtails flitted about the *Coreopsis*, Phlox, Asters, Goldenrod and Coneflowers.

Several plants were jotted on member's lists – the Palm Sedge (*Carex muskingumensis*) in the Woodland Garden, the golden Amsonia in the Butterfly Garden, the American Aloe (*Manfreda virginica* agavaceae) near the classroom and the small white-edged ground cover, *Antennaria parlinii*.

Thank you

Joan & Larry Hummel

for introducing us to the beautiful world that you love – even though we saw nary a hosta.



Ostrich ferns in the Savanna

Hosta Virus X

At the 2010 American Hosta Society Convention held in June in Minnesota, the keynote speaker, Dr. Ben Lockhart, summarized the results of his two-year study on Hosta Virus X (HVX). This study was funded in part by contributions from local and regional hosta societies, ours included. There was good news and bad.



photo from www.mobot.org

Dr. Lockhart's results indicate that the virus is transmitted only

by propagation of an infected plant or by the sap of such a plant entering a healthy plant through a wound of some sort or a broken root. The virus is not spread by insects, fungi, nematodes, or pollen. It is not yet known how long soil containing infected broken roots or plant debris remains infected. While further study is needed to determine if HVX affects only hosta, there appears to be no truly resistant variety of hosta.

AHS' current recommendations are to remove any hosta suspected of being contaminated and dispose of it in a landfill, not the compost pile. No sense keeping the plant; there is NO cure. Scrub, not just dip, tools with household detergent or a 10% bleach solution. Don't forget your hands and gloves. All dirt and plant debris must be removed from the soil. Finally, be proactive! Don't bring suspicious plants into your garden. That unusually variegated hosta might not be a rare plant, just an infected one.

AHS plans to undertake another two-year study to answer questions that arose during the course of the first study. AHS is again asking local societies to help with the funding. St. Louis Hosta Society members present at the September meeting will discuss this question and vote whether to donate funds, and if so, how much. Attend, discuss and vote in September.

For more information on HVX, read the American Hosta Society brochure printed on two pages at the end of this newsletter (postal copy) or the second attachment (e-mail copy). The full report of Dr. Lockhart's study and the AHS proposed follow-up study, along with pictures depicting infected plants, can be found on the AHS website: www.hosta.org

In Memoriam

We are deeply saddened by the death of fellow Society member Norman Hall. After a long illness, Norman passed away peacefully on August 9, 2010. Before his illness, Norman and his wife Rose were regulars at Society events. His love of gardening evolved early in life as his parents were truck farmers. He would accompany them as they brought their produce to markets in the Valley Park area, often selling door to door. He and Rose passed this love of nature and plants on to their son.

On behalf of the Society, we extend our sympathies to his wife Rose Hall and son and daughter-in-law Jeff and Kelly Hall.

Other AHS news affecting our members

At the beginning of August, Tom Micheletti, AHS president, sent an e-mail to all local hosta societies. Tom stated that last year AHS experienced a major budget deficit and this year's budget was looking to be the same. AHS receives its funding primarily from membership dues, the online and convention auctions and 15% of vendor sales at conventions. The cost of a membership is \$30; the three editions of The Hosta Journal, which everyone receives with their membership, cost approximately \$47 to produce – a deficit of \$17. While the auctions and vendor sales did well this year, they cannot be counted on to do so every year. For the last few years, memberships have been on the decline. Some changes have to be made to balance the budget.

Tom writes “In order to take the AHS into the future and also to begin to become a more environmentally responsible as well as fiscally responsible society, the board took an unprecedented step to achieve both goals. The third issue of our beautiful “*The Hosta Journal*” will go in the members section of our website. This is typically referred to as the “Convention Issue” and will contain more information about our annual convention than can be published in our hard copy Journal. There will be more thorough garden descriptions, more photos of the gardens, the awards, the events, and the attendees.” This addition to the web site is scheduled to be ready sometime in September. Although considered, it was deemed to be cost prohibitive to produce paper copies for members who do not have computer access.

Along the same lines, Tom stated that the paper Newsletter, which is sent out at the beginning of each year, will be replaced by an email newsletter that will be sent out periodically throughout the year. “It will contain timely information about hostas and the AHS as well as pictures pertaining to the articles.” It is important that every AHS member send their current email address to:

Membership Secretary Sandie Markland
ahsmembershipsecretary@charter.net

Welcome new members

The Society is delighted to welcome new members for 2010:

Martha Brown of St. Joseph, IL
Cynthia and Frank Francis of Oakville, MO
Leada Hadley of Arnold, MO
Basil Honaker Jr. of Lake Saint Louis, MO
JoAnn Rawson of St. Louis, MO
Beth Townsend of St. Louis, MO

Look for them at future meetings and introduce yourselves. Show them how welcoming and friendly we all are. We were happy to see some of our new members at the Shaw Nature Reserve outing. We hope all our members, new and old alike, will join in the rest of this year's fun.

St. Louis Hosta Society Officials

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Barb Moreland – Hospitality
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Bmore433@aol.com

Joan Poos - Newsletter Editor
314-821-1622
dpoos@juno.com

Membership Information

The American Hosta Society

Contact: Sandie Markland
8702 Pinnacle Rock Ct.
Lorton, VA 22079-3029
AHSMembershipSecretary@earthlink.net
Dues: Individual \$30 per year, Family \$34 per year

Midwest Regional Hosta Society

Contact: Barb Schroeder
1819 Coventry Drive
Champaign, IL 61822
mrhs.treasurer@midwesthostasociety.org
Dues: Individual \$20 for two years

St. Louis Hosta Society

Contact: Dave Poos
9904 Crestwood Drive
Crestwood, MO 63126
dpoos@juno.com
Dues: \$7 per year, \$18 for three years
Family or Individual

Meetings held at 1:00 PM at the **Creve Coeur Government Center, 300 N. New Ballas, 63141** (between Ladue Road and Olive), unless otherwise noted.

Visit our Web site

www.stlouishosta.org

Other Hosta and Garden Web Sites

American Hosta Society – <http://www.hosta.org>

Midwest Hosta Society – <http://www.midwesthostasociety.org>

Hosta Library – <http://www.hostalibrary.org>

Hosta Forum – questions/answers – <http://forums.gardenweb.com/forums/hosta/>

Mini Hosta forum – <http://groups.yahoo.com/group/minihosta>



WHAT IS THE BEST PROTECTION AGAINST HVX?

Know whether the original sources of plants you buy test for HVX. Your retail source for hostas will know where its plants come from and if the original sources test for HVX. Wholesale vendors provide this information to their customers.

AREAS THAT WARRANT FURTHER INVESTIGATION

⇒Root/soil contamination issues. We found that clean plants could be contaminated by soil and infected debris. We need to study what occurs and why.

⇒The effectiveness of different cleaning solutions on tools exposed to HVX (important for field crop production).

⇒Latent development of the virus. Test plants left in the field will be monitored and tested for up to three years to address this issue. We will observe plants inoculated with different isolates of HVX, plants of varying ancestry infected with the virus and plants inoculated by different mechanical means.

⇒Methods of harvest and propagation by growers.

⇒The role of harvesting and wash water in spreading the virus.

⇒Whether HVX is truly hosta-specific.

The American Hosta Society

www.hosta.org

The American Hosta Society is dedicated to the study and improvement of the genus *Hosta* and the dissemination of general and scientific knowledge about hostas. There are many benefits for the members that result from these efforts, both social and in the nursery trade.

The AHS Board of Directors works hard to define and balance the activities and focus of the Society. Most ongoing activities are delegated to specific committees that function under the guidance of the Committee Chair and report to the President and the Board of Directors at regular intervals. In addition, many committees report their progress at AHS meetings and publish their findings (particularly in the areas of basic sciences and nomenclature) in *The Hosta Journal*.

To read about the entire HVX research project go to:

www.hosta.org/HostaVirusX.html

More photos are available at:

www.hosta.org/PDF/HostaViruses.pdf

Special thanks to:

The local and regional hosta societies that gave generously to support this research.

Cynthia Miller Wilhoite, AHS VP Genus *Hosta*, for the design, management and successful completion of this four year study.



The American Hosta Society

Transmission of Hosta Virus X (HVX) Under Normal Conditions of Hosta Cultivation and Commercial Production



INTRODUCTION AND BACKGROUND OF RESEARCH

Hosta Virus X (HVX) was first identified and described at the University of Minnesota in 1996 (Currier and Lockhart, 1996). Since then, HVX has been found to occur widely in the U.S. as well as other countries throughout the world where hostas are grown. The danger posed by HVX to both hobby and commercial hosta cultivation has led to a need for a scientific study of the dynamics of HVX spread, in order to provide hosta growers and producers with the information needed to manage the disease.

Principal Investigators:

Dr. Benham E. Lockhart, PhD, Professor
Grace Anderson, Master of Agriculture

Department of Plant Pathology
University of Minnesota
St. Paul, Minnesota

Hosta 'Gold Standard' with HVX



Hosta Virus X is a member of the plant virus genus *Potexvirus*. Potexviruses characteristically become highly concentrated in infected plants and are very stable outside the plant cell. They are not spread by insects, mites, fungi, nematodes, seed or pollen. Viruses like HVX are known to be spread only by vegetative propagation of infected mother plants or by infected plant sap that enters a healthy plant via non-lethal tissue damage (wounding). This mode of virus spread may possibly occur during normal gardening and commercial production, but there is no empirical evidence of its occurrence or probability. This research project is designed to provide research-based information.

GOALS AND OBJECTIVES

The study was designed by the AHS to address the hosta gardener's questions about Hosta Virus X. There are major concerns about this virus in both the home garden and in the ornamental horticultural industry. Our research project was designed to provide empirical data useful to the hosta gardener. An attempt is made in this study to clarify the method of HVX transmission and to understand the dynamics of Hosta Virus X spread, so steps can be taken to protect plants and gardens from the virus.

QUESTION: Can HVX be transmitted during normal cultivation?

Experiments were done to determine if HVX can be transmitted mechanically via tools, hands, fingers, plant debris in soil, or by root contact. In completed experiments, the virus was transmitted via tools and in soil infected with HVX plant debris, but not via fingers or uninjured root contact.

QUESTION: If HVX can be spread by the described cultivation practices, how long does the virus remain on tools and in soil?

Infected plant material kept in the refrigerator at 39°F (4°C) remained infective for more than nine weeks. Fresh infected plant material was always infective. Soil with HVX plant debris and root material was infective for more than two years. **It is necessary to remove all infected live plant debris before reusing soil.** Broken roots and plant parts can infect new plants.

QUESTION: If HVX remains infective on contaminated tools or in soil, what practical measures can be used to eliminate it?

All tested methods of decontamination — household detergent (Dawn), 70% alcohol and 10% solution of household bleach — were effective in eliminating infectivity of the virus. The decontamination process included intense scrubbing and cleaning of tools, hands, and pots to remove plant material, soil and sap. Viral material was visibly dislodged. **It is not enough to simply dip tools in cleaning solution. Tools must be scrubbed free of all dirt and debris.**

QUESTION: Is HVX transmission dose-dependent (titer-dependent)?

No difference in infectivity or speed of infectivity was related to the source or dose of the virus isolate. A significant difference in the rate of infectivity was dependent on the stage of plant growth. The virus was most easily transmitted **prior** to flowering and when the plant was rapidly growing in spring. **We were not able to transmit the virus while the plants were flowering in late summer/fall or dormant.**

QUESTION: Are all HVX isolates transmissible?

We collected and mechanically transmitted 15 isolates of HVX. We again noted that the success of **transmission** was not only **dependent on mechanical injury** with new or old infection, but **also on the season** in which the contact occurred.

QUESTION: Are there any HVX resistant hosta varieties?

While this question warrants further study, we were able to infect with HVX all hosta varieties tested under the proper conditions in either the field or greenhouse. At this time **we believe all hostas are susceptible to the virus.** We understand this to mean that certain varieties are not more or less susceptible. It is the timing of exposure to the virus that will result in infection.

QUESTION: What is the best way for home growers and nurseries to test for HVX?

ELISA testing through Plant Disease Clinics and certified labs is the most reliable method of testing. The new **rapid test strips** are reliable and portable. The strips can be used in the field or greenhouse and work with leaf or root material.



HVX-infected Hosta 'Sum and Substance'