

Healthy Garden



The hosta on the left is sick. These are two 'Golden Tiara' hostas, but the one on the left shows the mottled leaf characteristic of hosta virus X. The plant on the right is healthy.

Hostas with odd-looking leaves MAY HAVE A NEW VIRUS

The first time I heard about hosta virus X was five years ago when I dragged a sick-looking hosta to Dr. Ben Lockhart at the University of Minnesota. He told me about a new virus he had found called hosta virus X (HVX). After that, anytime I visited a garden or nursery I kept an eye out for odd-looking hostas. When word got around that I was interested in hostas with viruses, members of my hosta society began giving me samples to pass on to Lockhart. Two years ago, I began a field study with him to look at the reaction of different hosta varieties to HVX.

First reported in 1996, HVX is showing up in nurseries and gardens across the country. Because its symptoms are so varied, it's hard to describe what a plant with HVX looks like. The most common symptom is mottling of the leaves (photo, right). In some cases, the

mottling is so subtle you have to hold the leaves up to the light to see it. In other cases, it is obvious, with the discoloration scattered over the leaf or clustered along the veins. Symptoms may also involve stunting, crinkling, twisting, or drying out of the leaves.

While some hostas with mottled leaves look "sick" because their leaves are small and terribly deformed, others appear to be growing vigorously and seem unaffected except for their color. Some hosta varieties don't show any symptoms at all when they are infected with the virus.

INFECTED PLANTS MUST GO

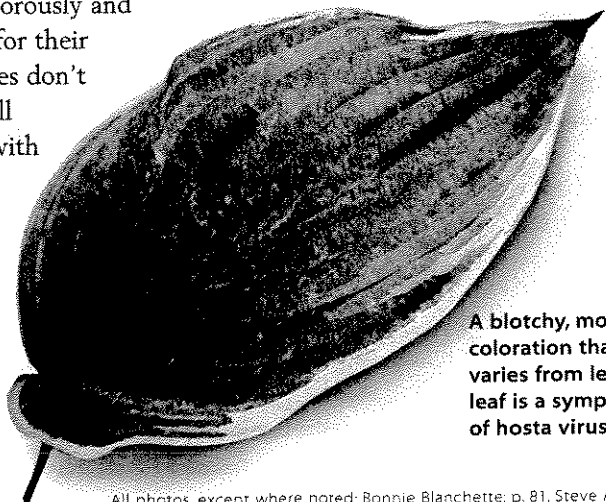
If you think you have a hosta with the virus, discard it, because there are no chemicals to

treat plant viruses. Even if later flushes of leaves look normal on plants that showed symptoms earlier in the season, the plant still has the virus. Virus testing is expensive, but if you have a valuable plant with symptoms of HVX and you want confirmation, send a leaf sample to AGDIA, Inc., a disease-testing service (800-622-4342).

Once you have removed an infected hosta from your garden, you may plant another in the same spot because the virus is in a plant, not the soil. You may want to wait a few weeks, though, so that root fragments from the infected plant you removed have had time to start decomposing. HVX can't survive long without living cells.

THE BEST PREVENTION IS BUYING HEALTHY PLANTS

The best way to keep your garden free of HVX is not to introduce it. Don't buy hostas that have a mottled appearance or distorted growth. In most healthy variegated hostas, the color of the margin of the leaf differs from the center, and the leaves don't look speckled or blotchy. Be suspicious of new variegated hostas with bands of



A blotchy, mottled coloration that varies from leaf to leaf is a symptom of hosta virus X.

color along the veins. Some growers have unwittingly propagated and sold these diseased plants because they thought the variegation was interesting and believed the hostas to be new sports (plants arising from genetic mutations).

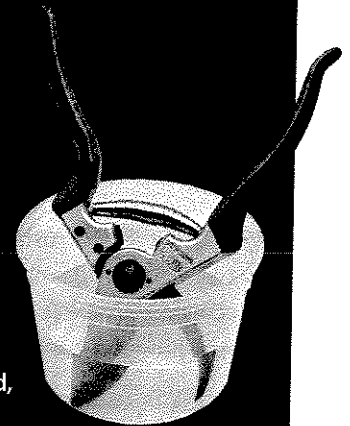
When you see a hosta with strange variegation, especially when it varies from leaf to leaf or is only present on some of the leaves, avoid the plant or ask if it has been tested for HVX. Unfortunately, since symptoms aren't always present on infected hostas and nurseries don't routinely screen all their stock plants for HVX, no matter how careful you are about purchasing new plants, there's no foolproof way to prevent getting a plant with this disease.

—Bonnie Blanchette gardens in Shoreview, Minn.

GOOD PRACTICES can keep the disease from spreading

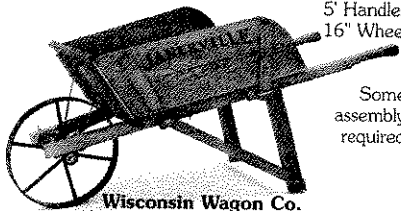
So far, HVX has only been found in hostas. Since it isn't known yet if any are resistant to the virus, use good sanitary and cultural practices when working with these plants.

- HVX is transmitted on contaminated tools, hands, and machinery.
- If you are dividing hostas or removing leaves or flowers, sterilize your knives and pruning tools in 10 percent bleach after working on each plant.
- Be careful not to clip the hosta leaves when you are mowing near them. Leaves simply touching each other won't spread the virus unless wounds from an infected and a healthy plant are in contact.
- This virus is not spread by insects, nematodes, seed, or pollen from an infected plant.



JANESVILLE® No. 3 WHEELBARROW

Solid Oak & Maple Replica
with Velvet Oil Finish
18" to 24" x 27" Bed
10" High Removable Sides
5 Handles
16" Wheel



Some assembly required

Wisconsin Wagon Co.
507 Laurel, Janesville, WI 53545
608-754-0026
www.wisconsinwagon.com

READER SERVICE NO. 148

Old World Craftsmanship New World Technology



Escort Lighting

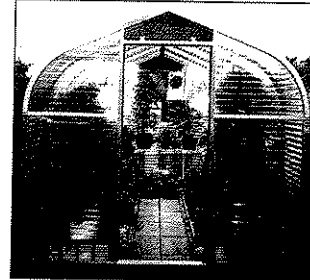
Distinctive illumination
for your garden

1-800-856-7948

51 North Elm Street, Wernersville, PA 19565

READER SERVICE NO. 41

SEND FOR YOUR FREE BROCHURE



SUNGLO

214 21st SE, Auburn, WA 98002
800-647-0606
www.sunglogreenhouses.com

READER SERVICE NO. 93

Authentic Maine Millstones



Perfect for Fountains
Bring History to Your Landscape

MAINE MILLSTONES

Southport, Maine 04576-0228
207-633-6091
www.mainemillstones.com

READER SERVICE NO. 99

Home of Garden Treasure



Hollingsworth Nursery

Peony List Available
(660) 562-3010
www.hollingsworthpeonies.com

READER SERVICE NO. 170