

Hosta Virus X

Hosta Virus X (HVX) was recently found during a routine nursery inspection in the state of Delaware this summer. This virus was first detected in the United States in 1996 at the University of Minnesota and has been prevalent in the nursery trade since then. It is not spread via insects, mites, fungi, or nematodes, but rather mechanically, via vegetative propagation. It can be spread on hands, pruning tools, and by propagation (divisions) via sap.

Symptoms:

Symptoms of HVX vary widely amongst different Hosta varieties. Some of the more common symptoms include leaf and tissue mottling, unusual streaking, and collapsing or puckering of plant tissue. It is also important to note that some varieties of Hosta may still have HVX if they don't exhibit symptoms, and some common symptoms may also take years to express.

Control and Testing:

The best management practice against this virus is to prevent its introduction and spread. A good practice against HVX is to buy in plant material that has been inspected and has been found apparently free of HVX or any other plant pest issue. Infected plants cannot be treated and must be destroyed in order to prevent further spread of the virus to healthy plants. Disinfecting pruning shears and material that comes in contact with infected Hostas with 10% bleach solution will help mitigate the spread of the virus while cutting. Diseased plants also cannot be composted and should be removed from the property.

Testing is available to detect HVX from a Hosta plant sample tissue. AgDia has developed The HVX ImmunoStrip that can test leaf and root material for the presence of HVX. For more information on the testing strips, visit <https://orders.agdia.com/agdia-immunostrip-for-hvx-isk-16600>.

Susceptibility: (Provided by University of Arkansas Cooperative Extension and Kansas State Cooperative Extension)

The following list provides Hosta varieties that may be susceptible to HVX, ranging from Highly Susceptible to Varieties with less instances of HVX. Other varieties not included may also be susceptible.

Varieties determined to be highly susceptible to HVX	Varieties considered somewhat susceptible to HVX	Varieties with less instances of HVX
'Birchwood Parky's Gold'	'Abby'	'Frances Williams'
'Blue Cadet'	'Diamond Tiara'	'Elegans'
'Corona'	'El Nino'	'Great Arrival'
'Gold Edger'	'Ground Master'	
'Golden Standard'	'Guacamole'	
'Golden Tiara'	'Janet'	
'Goldrush'	'June'	
'Honeybells'	'Katherine Lewis'	
'Royal Standard'	'Pacific Blue Edger'	
'So Sweet'	'Paradise Joyce'	
'Stiletto'	'Revolution'	
'Striptease'	'Sun Power'	
'Sweet Susan'	'Sugar and Cream'	

'Sum and Substance'

'Undulata Albomarginata'

'Ventricosa'

'Patriot'

'Minuteman'

'Night Before Christmas'

'Yellow Splash Rim'

Images: (Provided by The American Hosta Society, HostaDirect, Missouri Botanical Gardens, and University of Arkansas Cooperative Extension)

Top Right: Hosta 'Golden Standard' leaf mottling with HVX



Below: Hosta 'Sum and Substance' leaf streaking



Above: Hosta 'Striptease' with puckered leaves and leaf mottling



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