

What is HVX?

Hosta Virus X is a relatively new virus that infects hostas.



WHAT YOU SHOULD KNOW:

- o Because it can take years before an infected plant shows symptoms, HVX has been spreading around the world since it was first identified in 1996.
- o The virus is permanent and will be with the plant until it dies.
- o HVX is now the most common hosta virus. So far it has only infected hostas.
- o No hostas should be considered immune at this time.

HOW IS THE VIRUS TRANSMITTED?

- o This virus is transmitted primarily when infected sap comes in contact with a healthy plant such as can happen if a cutting tool is not disinfected between plants.
- o In nurseries, some propagation methods can cause infections in thousands of plants.
- o At home, dividing hostas, removing bloom scapes, removing leaves, stepping on them, even accidentally running the lawnmower over them can spread this virus.
- o An infected plant without symptoms is still infectious.

HOW HARMFUL IS THE VIRUS TO THE PLANTS?

- o Eventually, some deterioration in the health of the plant may occur, but a plant can survive for many years after being infected.
- o The expression of virus symptoms can disappear, but this does not mean the plant is cured. The virus is still present in the plant and still able to infect other plants.
- o If we ignore the presence of Hosta Virus X in our gardens or nurseries, it will continue to spread to the point that the number of infected plants could increase beyond any hope of eliminating the virus.

HOW CAN I TELL IF MY HOSTAS ARE INFECTED WITH HVX?

- o If a plant does not show symptoms only scientific testing can determine if it is infected with the virus - there is no way for the gardener to tell.
- o If you have not added new hostas to your garden over the last few years, yours are more likely to be virus free, providing your tools were not used in other gardens.
- o Symptoms can vary considerably with the same virus, and different strains of a virus may cause different symptoms. They include mottling, darker coloured lines along veins ("inkbleed"), sunken green areas, thin and wrinkled leaf tissue, leaf distortion. The virus can also make the infected plant more compact.



Symptom areas burn more easily



Inkbleed symptoms



Mottling symptoms

WHAT SHOULD I DO TO MAKE SURE I DON'T HAVE THE VIRUS IN MY GARDEN?

- o Thousands of virus-infected hostas have already been sold at the retail level, so many gardens could now harbour this disease. All gardeners should be aware of HVX and be careful to avoid spreading it to other plants and to other gardens.
- o If you suspect one of your plants is infected, you should remove the whole plant.
- o Plants should be dug carefully to get as many roots as possible, and the spot should not be replanted with hostas until any remaining roots have died and rotted away. Plants that have been dug out should be left to dry in the sun before disposing of them. HVX survives only in living plant tissue.
- o When you cut hostas, do it safely by cleaning your tools thoroughly with bleach or ammonia after each plant. Get in the habit of also washing your hands after getting hosta sap on them and before touching other hostas. Wearing garden gloves might make it more difficult to avoid transferring hosta sap between plants.
- o Keep string trimmers and lawn mowers away from hosta leaves.
- o Some hosta cultivars have natural colouring or striping, so it is important to know what is "normal" for a given cultivar. Do not buy plants from batches that show even the slightest suspicious markings on even one plant. If you have these plants from such batches, dispose of them immediately.
- o It is best that you buy hostas only at nurseries and only after asking the owners how confident they are that their stock is virus-free.

Some varieties may have actually been named for the virus symptoms they display.

Before this virus was widely known, some infected plants were thought to be new varieties of hosta and were given names. **All** plants with the following cultivar names are thought to be infected and **purchase of these is not recommended:** Breakdance, Eternal Father, Leopard Frog, and Lunacy.

Each of the following cultivars is also thought to be an expression of HVX symptoms and best left out of your garden for now:

Blue Freckles, Dotted Fantasy, Kiwi Dreadlocks, Kiwi Watercolours, Pamela Ann, Parkish Gold, Strip Show, and Tye Dye.

Cultivars that have a high percentage of infected plants in the marketplace

and that should be closely inspected and investigated before purchase: Birchwood Parky's Gold, Blue Cadet, Corona, Gold Edger, Gold Standard, Golden Tiara, Goldrush, Honeybells, Royal Standard, So Sweet, Stiletto, Striptease, Sweet Susan, Sum and Substance, Undulata Albomarginata, *H. ventricosa* (species), and Venucosa.

Cultivars for which there have been some infected batches in the marketplace:

Abby, Diamond Tiara, El Nino, Ground Master, Guacamole, Janet, June, Katherine Lewis, Krossa Regal, Minuteman, Night Before Christmas, Pacific Blue Edger, Patriot, Paradise Joyce, Regal Splendor, Revolution, Sagae, Sun Power, Sugar and Cream, *H. tardiva*, Yellow Splash Rim.

YOU CAN HELP STOP THE SPREAD OF HVX

- o Inform friends and neighbours if you see plants with HVX symptoms in their gardens. Point them to more information and photos if they are not convinced.
- o HVX is still new and some nursery people may still be unaware of it. If you notice any plants on their premises that are possibly infected, you could advise the owner or manager on duty. Inform them about the virus and point them to places where they can receive more information about it.

PLEASE DISTRIBUTE THIS INFORMATION FREELY TO OTHER GARDENERS
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Photos : courtesy of the Hosta Library at <http://www.hostalibrary.org/firstlook/HVX.htm>