

WEeping YOSHINO CHERRY TREE HAS MYSTERY VIRUS

In May 2019 members of KDA discovered Yoshino Weeping Cherry saplings for sale at two box stores with symptoms resembling virus. These plants came from a nursery in Oklahoma. They took leaf samples and submitted them for testing for various viruses, including Apple Mosaic Virus, Prunus Necrotic Ringspot Virus, Tobacco Rattle Virus, Tobacco Ringspot Virus, and American Plum Line Pattern Virus. All of these tests gave negative results. It was submitted for electron microscope analysis, at which time virus particles were found to be present. However, it was still undeterminable which virus was causing the symptoms to occur. The leaf samples have been submitted to USDA in Beltsville for genetic sequencing. KDA is hoping this will result in a confirmatory diagnosis, whether it's of a common virus or novel one.



Figure 1: The mystery virus causes yellow streaking in leaves, similar to the symptoms caused by Rose Mosaic. Pictures by Amy Jordan, KDA.

ALTERNANTHERA MOSAIC VIRUS IN PORTULACA AND PURSLANE

This spring, as KDA inspectors performed annual commercial greenhouse inspections, numerous greenhouses in Northeast and Southeast Kansas had portulaca and purslane plants symptomatic for virus. Upon further testing, they were determined to be infected with Alternanthera Mosaic Virus. This virus is commonly considered synonymous with Papaya Mosaic Virus, although they differ slightly genetically. The disease causes stunting and mottling, as well as notched leaf edges (Fig. 2). This may resemble thrips feeding.

If you see a plant in your garden or business with symptoms resembling virus, submit a sample to your local university plant diagnostic lab for testing, and if confirmed, best management practices dictate roguing the plant promptly. If the plant is not removed and disposed of right away, it may allow spread of the virus (depending on the mode of transmission, which varies from virus to virus). There are no forms of treatment for or ways to cure plants of viruses.



Fig. 2: Alternanthera Mosaic Virus causes mottling and stunting of plants, and notching in leaf edges.

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