



# Plant Disease in Kansas

## Greenhouse diseases present problem to growers

### Special points of interest:

- *Reports of TMV in Calinbrachea and Geranium*

In the first PDK report of 2014, Tobacco Mosaic Virus problems were described. TMV was imported into Kansas greenhouses from El Salvador either directly or by rooting stations here in the US that received cuttings from the El Salvador plant. In early March, almost 30 planting varieties were known to be positive in Kansas. Three weeks later, several additional locations have gone positive for the virus and the known TMV variety list is near 40.

In addition to petunia, Calinbrachea or million bells had been added to the list of Kansas positives. The Calinbrachea was found to be infected in a location that previously was TMV petunia positive. The plants arrived in the same shipment as the petunia from El Salvador and could have been infected in packing or propagation.

In the state of Oregon, geraniums have been found to be TMV infected. It is believed infection was from contamination with TMV petunias from the same El Salvador/rooting station source.

Other diseases reported to growers have been Impatiens Necrotic Spot and Tomato Spotted Wilt viruses. These viruses are vectored by the thrips insect or propagation. Host plants associated with TSWV have been Swedish ivy and Shasta Daisy at separate locations. Impatiens Necrotic Spot has been observed in various succulents, Impatiens, begonia, coleus, and garden pepper. Again multiple locations have been reported with the viral diseases. Many of these reports were associated with growers carrying over plants from last year and then propagating from such.

Viruses are regulated under the Kansas Plant Pest Freedom Standards with a tolerance level of 0% in the greenhouse trade.

Other diseases observed have been powdery mildews on miniature rose, Kalanchoe, and Gerber daisies. Gray mold and damping off reports have been fewer than normal.

As of yet, downy mildew of Impatiens has not been observed this year in Kansas greenhouses .

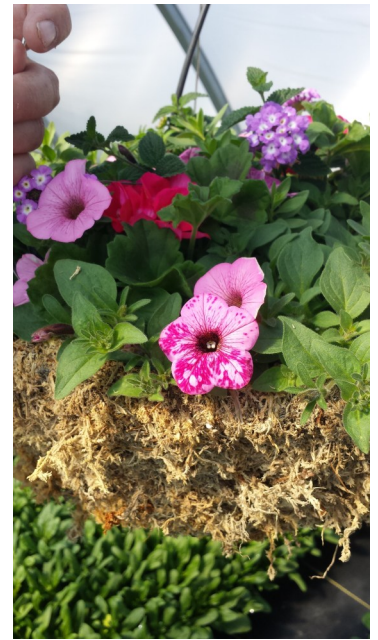


Figure 1. A petunia bloom with the flower breaking symptom of virus infection, TMV. Jennifer Smith, KDA

PLANT PROTECTION AND WEED CONTROL  
PROGRAM

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**INVASIVE SPECIES**

## Plant Protection and Weed Control Program

Plant Protection and Weed Control staff work to ensure the health of the state's native and cultivated plants by excluding or controlling destructive pests, diseases and weeds. Staff examine and analyze pest conditions in crop fields, rangelands, greenhouses and nurseries. Action taken to control potential infestations of new pests, whether they are insects, plants diseases or weeds, is beneficial to the economy and the environment.

### **Our Mission is to:**

- Exclude or control harmful insects, plant diseases, and weeds;
- Ensure Kansas plants and plant products entering commerce are free from quarantine pests;
- Provide customers with inspection and certification services.

The Plant Disease Survey in Kansas has been conducted since 1976. The survey addresses disease situations in field crops, native ecosystems, and horticultural trade. The Kansas Department of Agriculture works cooperatively with Kansas State University and Extension programs, United States Department of Agriculture, and various commodity groups.