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## Pericallis: Leaf Mottling and Necrosis

*While visiting a grower, mottling and necrotic leaf spotting was observed on a few scattered plants. This is a typical symptom of a virus infection. A series of photos provided by this Alert will aid you in identifying this tomato spotted wilt virus (TSWV) infection.*



During a visit to a grower, we were asked to inspect a few, scattered pericallis plants with a distinct leaf mottling (Figs. 1, 2, and 3). Other plants had necrotic regions and black circular spots (Fig. 4). In this case, the black circular spots were only present on two of the inspected plants (Fig. 5). These symptoms are typical of what one would observe with a virus. The problem was not widespread (Fig. 6) and we did not observe insect feeding damage.

Leaves from the symptomatic plants were analyzed with an enzyme-linked immunosorbent assay (ELISA) test for impatiens necrotic spot virus (INSV) and tomato spotted wilt virus (TSWV) by Mike Munster of the NC State University PDIC. The test confirmed TSWV.

Luckily, no western flower thrips were found on the plants to spread the disease. In this instance, the virus was likely spread during propagation of the cuttings. If you suspect a virus problem, have the plants tested by a diagnostic clinic. You can also conduct in-house testing with ELISA kits from Agdia (<http://www.agdia.com/>). It is important to sample multiple leaves from the same plant.



Figure 1. Pericallis plant with leaf mottling due to a tomato spotted wilt virus (TSWV) infection. Photo by: Brian Whipker.

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## Management

Plants infected with TSWV, INSV, or any other virus cannot be cured. Discarding infected plants is the only option, and this will help prevent the virus from spreading further. It is important to note that some plants may be asymptomatic, but still have INSV or TSWV. Since the primary method of spreading these viruses is via Western Flower thrips (*Frankliniella occidentalis*) feeding, it is critical to keep them under control.



Figure 2. A less severe case of leaf mottling on Pericallis due to a tomato spotted wilt virus (TSWV) infection. Photo by: Brian Whipker.



Figure 3. More pronounced leaf mottling due to a tomato spotted wilt virus (TSWV) infection. Photo by: Brian Whipker.

Figure 4. Necrotic leaf tissue denotes advanced signs of a tomato spotted wilt virus (TSWV) infection. Photo by: Brian Whipker.



Figure 5. Close up view of black spotting associated with tomato spotted wilt virus (TSWV) infection. Photo by: Brian Whipker.

Figure 6. Luckily only a few scattered plants were observed with symptoms. Without thrips to vector the virus, the problem did not spread from the initially infected plants. Photo by: Brian Whipker.



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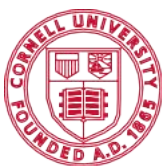
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