

SYMPTOMS OF STEPHANOTIS INFECTED WITH TOMATO SPOTTED WILT VIRUS

Stephanotis floribunda Brongn., established 20 years ago in three sections of a commercial greenhouse range in Oregon, began exhibiting disease symptoms in 1987.



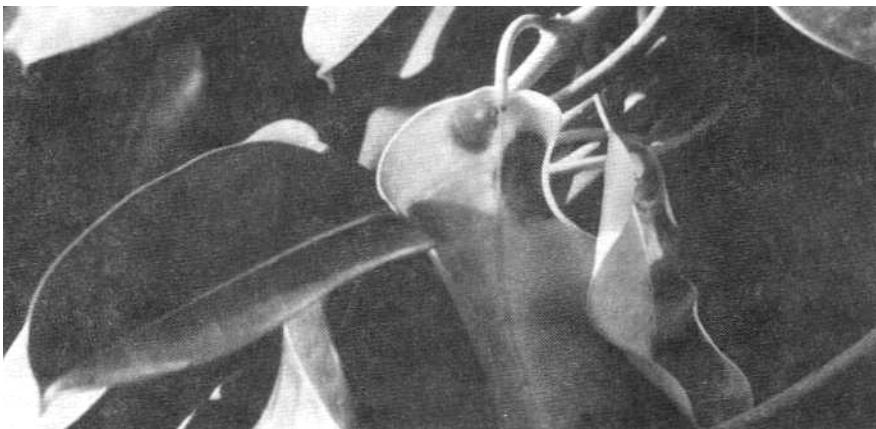
Figure 1. Leaf spots and mottling on Stephanotis plants with confirmed TSWV infection.

Symptoms include wilting and dieback of terminal growth; leaf spots, leaf mottling and chlorosis (Figures 1 and 2); and, brown, necrotic lesions on flowers (Figure 3).

Fungal pathogens were not detected. However, bioassay, electron microscopy of extracts and sections (Figures 4), confirmed the presence of

Figure 1. Leaf spots and mottling on Stephanotis plants with confirmed TSWV infection.

Figure 2.
Leaf spotting
and chlorosis
on TSWV
infected
Stephanotis.



tomato spotted wilt virus. The leaf section examined and photographed with the electron microscope was removed from the leaf inset into Figure 4.

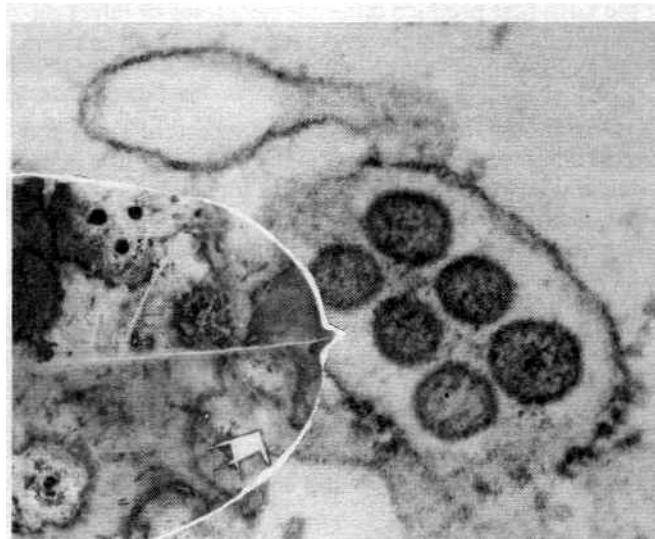


Presence of tomato spotted wilt virus was also confirmed by enzyme-linked immunosorbant assay (antisera provided by D. Gonsalves, Cornell University).

TSWV appears to be spreading rapidly in greenhouse ornamentals (1,2), but has not previously been noted on *S. floribunda*

Figure 3. Necrotic lesions on flowers infected with TSWV.

Figure 4. TSWV was confirmed by electron microscopy (112,000X) of section removed from symptomatic leaf (inset).



References

1. Allen, W.R and A.B. Broadbent. 1988. Outbreaks of tomato spotted wilt virus in greenhouse crops in Ontario. *Plant Disease* 72 (In Press).
2. Baker, J.R and RK Jones. 1988. Update on western flower thrips and tomato spotted wilt virus. *North Carolina Flower Growers Bull.* 33(2):6-9. §

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