

Question: Some of my tomato plants have started dying from the top of the plant. Is this a disease of some sort and what can be done to stop its progression?

Answer: We have had several calls about this problem already this spring. Most likely the problem you are having is tomato spotted wilt virus (TSWV). Relatively speaking this disease is fairly new to the southeast. I saw plants with this symptom here in Jefferson County in the mid 1980's. Someone brought a diseased plant to my office and I found a picture in a book that looked just like the plant I was looking at. I did not realize at the time that this particular disease had not been spotted in the Southeast before. I called our pathologist at Auburn and told him it looked like TMSV but he assured me that this was highly unlikely but to send him a sample for testing. Amazingly the test results confirmed my lucky diagnosis and it was subsequently found all over the southeast on tomatoes, pepper, peanuts and many ornamentals. They did not give any tribute to me for being the first person to find it in Alabama but I will always have that great satisfaction. To me the T in TSWV will always stand for Tony not tomato.

I was talking to Plant Pathologist, Dr. Jim Jacobi here at the Plant Diagnostic Lab and he said he has already seen several cases of TSWV. As a matter of fact it struck in his garden this past weekend. That's kind of like your pediatricians kids getting sick. It worries you. Also, Regional Extension Agent, Dan Porch who works in the tomato growing region of North Alabama says he has seen several cases in his travels and he believes the problem may be worse than what we have had in the last few years.

This virus is usually spread by very small insects called thrips. Infected tomato plants become stunted and often die. Initially, leaves in the terminal part of the plant stop growing, become distorted, and turn pale green. In young leaves, veins thicken and turn purple, causing the leaves to appear bronze. Dead looking spots, or ring spots, are frequently present on infected leaves and stems often have purplish-brown streaks. Fruit, infected with the virus, may exhibit numerous ringspots and blotches and may become distorted if infected when immature.

Currently, there are no real effective chemical controls for this disease in the garden. Keeping the area around the garden as weed free as possible may help by reducing the over wintering host plants. Destroying infected plants as soon as symptoms appear may also reduce spread of the disease. There has been some research that shows a benefit from using an ultraviolet (UV) reflective mulch. UV-reflective mulches are available commercially in small packages for home owners. It is basically plastic mulch with an aluminum foil appearance. It works by repelling the thrips that spread the disease. Lastly, there are some TSWV resistant varieties on the market but they will be difficult to find. The one that is most commonly found and the best choice for home gardeners is probably Amelia. You may have to order seed and start plants yourself because it is not widely grown for retail sales.

If you would like further information on this or other garden related problems call our toll free Master Gardener helpline at 877-252-GROW.

