Sudden wilt of tomato plants

Q. I planted nine Celebrity tomato plants about four weeks ago. This week one of the plants began to wilt. I watered it but it seemed to have very little effect. Today the entire plant has wilted. It seems to be a sudden wilt. Last year my tomato plants had green tomatoes when the plants wilted. What is causing this and is there something that I can do to stop it from happening?

A. From your description, particularly with the wilt happening quickly, it sounds like bacterial wilt. Bacterial wilt is a common problem with tomatoes in Florida. A web publication that includes information on this disease can be accessed at http://edis.ifas.ufl.edu/PP127.

There is no control for bacterial wilt. There are farmers in Florida that have had to abandon entire fields because of this disease.

The best we can do with this disease is to plant resistant varieties. The problem with this is twofold - (1) there are not many varieties resistant to bacterial wilt and (2) the varieties resistant to bacterial wilt are poorly available.

The definitive test to diagnose bacterial wilt involves cutting the main stem (trunk) at ground level and then placing the cut end in a clear glass container with room temperature water. Within minutes, you’ll see a “milky” colored substance oozing out of the cut stem. It begins faintly and then begins to make the water look a little cloudy. In order for this test to work, the cut stem that goes into the water must be taken from ground level. The bacteria do not move very far up the stem but is mainly functioning in the root area in the soil. When I do this test, I usually make a second cut removing most of the top of the plant so that I do not have to bother with trying to support the plant while doing this test.

Q. I have some plant problems that I’d like diagnosed. When is your next plant clinic?

A. Our next plant clinic will be Wednesday, April 28, 9 a.m. to 1:00 p.m. in Fort Walton Beach at the Okaloosa County Extension Service building, 127 W. Hollywood Blvd. With tree and shrub samples, bring a small branch or stem with at least several leaves attached. With lawn problems, bring in a four inch square of grass with roots attached. It’s important to bring a fresh sample and one that is not completely dead. A sample that is in transition or that is beginning to exhibit the symptoms that are seen in the landscape, lawn or garden is what we need to see.

Larry Williams, UF/IFAS Extension Agent, Okaloosa County, April 21, 2010