Bacterial wilt (flaw siki) of tomato

Recognize the problem
Wilting in tomato may be caused by fungi, nematodes or bacteria. In this fact sheet wilt caused by bacteria is discussed. Plants start wilting, turn yellow and eventually die.

Background
The wilting caused by the bacteria is more frequently found on heavy clay soils, which tend to be more acid than calcareous soils. The bacteria live in the soils and especially in the rainy season the problem becomes greater. Since bacteria are very small they can easily enter the roots through very tiny wounds.
Once in the root, they block the passage of water to the upper parts of the plants. This is the reason why in the very early stage of infection, you will see the plants wilt during the hottest part of the day. When it gets cooler in the early evening the plants somewhat recover. Yellowing starts at the lower parts of the plants.
It is simple to distinguish this problem from wilt caused by fungi. Take a piece of the stem from an infected plant and put it in a clear jar with water. Very quickly you will see a white cloud of slime oozing out of the stem. This is bacterial slime and you have your culprit.

Management
Once infected, these plants cannot be cured.
• Remove all infected plants;
• Start preparation of plant beds 3 months before planting; amend the clay soil with some limestone or calcareous soil, which will help neutralize the soil;
• It is very important to have good drainage of the beds;
• Crop rotation with crops not related to tomatoes, such as beans, cucumbers, okra, maize etc. is recommended to lower the bacterial population.

Scientific name(s) > Ralstonia solanacearum

The recommendations in this factsheet are relevant to: Suriname

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