

Restrictions

(Moderately

hazardous)

◆ PHI 7 days

◆ WHO II

Bacterial wilt on tomatoes

Prevention

Ralstonia solanacearum



Rapid wilting of the young leaves eventually leading to the death the plant

(Photo by A. Massawe)



Brown discolouration of the vascular system (Photo by: www.seedquest.com)

Carry out soil testing to determine the presence of bacterial wilt before planting

- Avoid planting crop in infested soil.
- Rotate with non-solanacea plants e.g. maize, beans, garden peas, cabbage, and sweet potatoes to reduce the bacterial inoculum
- Plant tolerant and certified varieties if available.
- Avoid planting in low wet areas that are prone to run-off
- Destroy alternative hosts of Solanaceae family growing near the tomato crop, such as night shades and Irish potato
- Clean all farm implements before moving from one field to the next

• Begin scouting for presence of bacterial wilt symptoms throughout the growing crop cycle.

Monitoring

- ◆ Look out for rapid wilting of the entire plant without yellowing
- ◆ Look out for dropping of vegetative parts of the entire plant. Infected plants are still green but have lost turbidity even after watering
- Cut the stem of the affected plant and check for a darkened water soaked appearance
- Cut the affected stem place in a glass of water and check for a milky slimy ooze to confirm presence of bacterial wilt
- ◆ Initiate disease control immediately after one plant is affected

Uproot and destroy by burning and burying all infected plants.

Direct Control

- Diseased plants should be carried away in a container to avoid spilling the affected soil
- Apply wood ash in the affected holes after uprooting plants

Bacterial diseases have no known cure. However the use of Copper based fungicides have been found to suppress further spread of the disease in the field. The following fungicides can be used to minimize bacterial infection in Tomato (copper oxychloride or copper hydroxide at 60gm/20 of water) e.g Amicop 50WP, Cobox 50WP, Cuprocaffaro Micro 37.5 WG Kocide etc)

Direct Control

- ◆ FRAC code M1Toxic to aquatic organism
- Disinfect all farm implements/tools after they have been used in fields with bacterial wilt. Dipping of farm tools in a Jik solution (500ml for every 10 litres of water) for at least 5 minutes is recommended
- When using a pesticide always wear protective clothing. Follow the instructions on the product label, such as dosage, timing of application, pre-harvest interval, max number of sprays, restricted re-entry interval. Do not empty into drains
- ◆ WHO class II pesticides might not be allowed in local IPM schemes
- ◆ Always consult recent list of registered pesticides (PCPB)









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