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MANAGEMENT OF TOMATO SPOTTED WILT VIRUS

Tomato Spotted Wilt Virus (TSWV) occurs globally and is prevalent in temperate, sub - tropical, and tropical regions.

The virus has a broad host range, including weeds, ornamentals, and crop hosts, making it one of the few plant viruses that infect both dicots and monocots (e.g. tomatoes and onions).

Symptoms

- ☐ Dark brown streaks on stems and leaf petioles.
- Yellowing and upward curling of the leaves, which mottle and appear crumply.
- Systemic necrosis on growing tips and stunted growth.
- Immature fruit have mottled, light green rings with raised centers.
- ☐ Broad dark necrotic spots with chlorotic halos on lower and upper leaves.

Spread

TSWV is transmitted by Thrips and also by movement of virus-infected plant material

Management

- ☐ Strict control of weeds
- ☐ Use of clean seed materials.
- \square Practise crop rotation.
- ☐ Manage thrips to reduce spread of the virus by:
- disinfection of farm tool and equipment.
- · use of natural enemies like lady bids
- use of blue sticky traps and yellow water traps to minimize thrips population.
- spraying with insecticides containing lambdacyhalothrin (e.g. Pentagon 5%EC, Duduthrin, Voltage 5EC), or Deltamethrin (e.g. Atom 2.5EC, Decis 2.5EC) at manufacturers' recommendations.

Dark brown streaks on tomato leaves (Source: SDSU extension service)

Brown dark spots and necrotic spots (Source: SDSU extension service)

TSWV symptoms on tomato fruit (Source: Lusike Wasilwa)



Compiled by: Odhiambo, H., Ong'awa, M., Thuranira, D.M., Ndung'u, J. N., Khabi, S., Ndambuki, J., Ochieng, V., Lelgut, D., Otipa, M. J., Amata, R., Wanjala, B.W., Kirigua, V. and Wasilwa, L.

Edited by: Kinyua Z.M.

Design and Layout by: Nogrecia N. Mnene

For more information Contacts:

FCRC KALRO-Muguga, P.O. Box 30148-00100, Muguga

