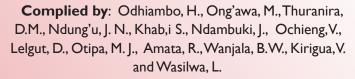


TSWV symptoms on tomato fruit (Source: Lusike Wasilwa)



Edited by: Kinyua, Z.M.

Design and Layout: Nogrecia Mnene

For more information Contacts:

The Centre Director
Food Crops Research Centre - KALRO. Muguga
P.O. Box 30148- 00100, Muguga
Email: cd.director@fcrc.org

KALRO/NAVCDP/Tomato leaflet No. 115/2024



MANAGEMENT OF TOMATO SPOTTED WILT VIRUS







Introduction 9

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.
- 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)