

Product Information: AgriStrip

Tomato spotted wilt virus (TSWV)

Intended use

This rapid one-step assay is intended to identify TSWV, which occurs worldwide and has a wide host range. TSWV is transmitted by thrips, but can also readily be transmitted by mechanical inoculation. More than 800 different plant species have been reported to be susceptible to TSWV. The virus causes significant yield losses in a large number of economically important crops e.g. groundnut, lettuce, papaya, pea, potato, sweet pepper, tobacco, tomato and in many ornamental crops, including alstroemeria, begonia, chrysanthemum, cyclamen, dahlia, gerbera, gloxinia and impatiens. Disease symptoms range from chlorosis, mottling, stunting and wilting to severe necrosis of leaf, stem and fruit tissues. Synonyms: BR-01, CNPH₁, TSWV-L3.

Specificity and Sensitivity

The antibodies used for this AgriStrip assay react specifically with TSWV (serogroup I within the genus Tospovirus). The TSWV AgriStrip reacts weakly with GRSV and TCSV (serogroup II within the genus Tospovirus) but does not cross-react with INSV (serogroup III within the genus Tospovirus). Strongest coloration of testbands was obtained with a 1:60 (w/v) dilution of an extract of infected tomato and chrysanthemum leaves.

Instructions for use

- 1) Place approx. 0.1 g of leaf (corresponds to the size of 1 Euro coin or ≈ 5 cm²) into an extraction bag (Fig. 1*) and add 3 ml of **AgriStrip Extraction buffer A** with a disposable pipette (1:30 w/v).
- 2) Homogenize the tissue with a handheld homogenizer with a few movements for not more than 2 seconds (Fig. 2*).
- 3) **Transfer 2 drops of extract into a cuvette (Fig. 3*) and dilute with 2 drops of extraction buffer.**
- 4) Insert the end of the strip marked «sample» into the extract (Fig. 4*) and observe formation of colored bands.

* For figures, please refer to «AgriStrip General Information».

Maximal sample size



Ordering Information

Product	Art. No.	Assays
TSWV AgriStrip Complete kit 25	190181	25
TSWV AgriStrip Set 25	190182	25
TSWV AgriStrip Set 100	190183	100
Optional Products	Art. No.	Size
Cuvette rack, holds 12 cuvettes	2166	1
Cuvettes, disposable	2534	100
Pipettes, disposable	2292	500
Extraction bags Universal	430100	100
Homogenizer hand model	400010	1

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Adaptations from last version: new ordering information; minor modifications.