

## Product Information: AgriStrip

# Xanthomonas campestris pv. pelargonii (Xcp)

### Intended use

This test is intended to detect Xcp in suspicious plant samples. The bacterium can cause disease in all cultivated pelargonium varieties. Ivy-leaved pelargoniums are particularly susceptible. Certain types of pelargoniums (*Pelargonium X domesticum*) appear resistant but have been shown to carry the disease without exhibiting symptoms.

### Specificity and sampling instruction

The reagent was made against a Xcp isolate multiplied at the Swiss Federal Research Station Agroscope Changins-Wädenswil ACW (O. Cazelle, pers. communication). All Xcp isolates tested so far can be detected. There is a weak cross-reaction with *Xanthomonas fragariae* (Xfr), but only at high concentration (> 10<sup>8</sup> cfu/ml) of bacteria. No cross-reaction was observed with *Xanthomonas campestris* pv. *campestris*, *Xanthomonas arboricola* pv. *fragariae* or with unrelated bacteria such as *Ralstonia solanacearum*, *Pseudomonas syringae*, and *Erwinia carotovora* subsp. *carotovora*.

Stem and petioles at the lower part of the plant are the most reliable source for sampling. Sensitivity was around 10<sup>5</sup> cfu/ml and strongest coloration of testbands was obtained with a 1:120 (w/v) dilution of an extract of infected pelargonium leaf, petiole, or stem.

### Instructions for use

- 1) Place approx. 0.1 g of petiole/stem (1 cm) or of leaf (≈ 2.5 cm<sup>2</sup>) into an extraction bag (Fig. 1\*) and add 3 ml of **AgriStrip extraction buffer B** 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 1 drop of extract into a cuvette (Fig. 3\*) and dilute with 3 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».

Leaf sample

2.5 cm<sup>2</sup>

Petiole/stem sample

1 cm<sup>2</sup>

### Ordering Information

Product	Art. No.	Assays
Xcp <b>AgriStrip</b> Complete kit	170181	25
Xcp <b>AgriStrip</b> Single strips*	170182	25
Xcp <b>AgriStrip</b> Single strips*	170183	100
* including <b>AgriStrip</b> Extraction buffer B, ready-to-use		
Optional Products	Art. No.	Size
Cuvette rack, holds 12 cuvettes	2166	1
Cuvettes, disposable	2534	100
Pipettes, disposable	2292	500
Extraction bags «Universal»	430100a	100
Homogenizer hand model	400010	1

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