Product Information: DAS-ELISA

Xanthomonas campestris pv. *pelargonii* (Xcp)

Bacterial blight of geranium is the single most important disease of *Pelargonium* sp. and is caused by a bacterium named *Xanthomonas campestris* pv. *pelargonii* (2), synonym *Xanthomonas hortorum* pv. *pelargonii* (3). 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 Agroscope, the Swiss centre of excellence for research in the agriculture and food sector (O. Cazelle, pers. communication). Isolates of Xcp can be detected to a concentration of 10^3-10^4 cfu/ml (diluting bacteria from pure culture in extraction buffer). This detection limit is nearly reached when bacteria are diluted in pelargonium sap. All Xcp isolates tested so far can be detected. There are cross-reactions with some related bacteria of the *Xanthomonas*, especially with *Xanthomonas campestris* pv. *campestris* (Xcc), but only at high concentration of bacteria. No cross-reaction was observed with *Xanthomonas campestris* pv. *begoniae*, or with unrelated bacteria such as *Agrobacterium tumefaciens*, *Rhodococcus fascians*, *Pseudomonas syringae*, *P. cichorii*, *P. fluorescens*, *Erwinia chrysanthemi*, *E. herbicola*, *E. carotovora* subsp. *carotovora* and *E. carotovora* subsp. *atroseptica* (1). Stem and petioles at the lower part of the plant are the most reliable source for sampling. Best results are obtained with an 1:10 (w/v) plant tissue extraction with extraction buffer «General» (Art. No. 110120).

This product has been developed in cooperation with Agroscope, the Swiss centre of excellence for research in the agriculture and food sector.

Information on the antibodies

Coating IgG: polyclonal; conjugate: polyclonal

References

(1) Brielmaier-Liebetanz, U., and Sadowska-Rybak, M. 1994. Nachrichtenbl. Deut. Pflanzenschutzd. 46 (1), pp. 37-40.

(2) McPherson, G.M., Bradbury, J.F., and Preece, T.F. 1977. Descriptions of Pathogenic Fungi and Bacteria. No. 560. CMI. 2 pp.

(3) Vauterin, L., Hoste, B., Kersters, and Swings, J. (1995): Reclassification of *Xanthomonas*. Int. J. Syst. Bacteriol. 45: 472-489.

Ordering Information

BIOREBA offers the following formats:

Individual ELISA reagents for 96, 480 or 960 assays: IgG and/or conjugate for the working volume of 200 µl/test/well.

Reagent sets for 480 or 960 assays: IgG and conjugate, positive and negative controls, and microtiter plates (F-96) for a working volume of 200 µl/test/well.

Complete kits for 96, 480 or 960 assays: All reagents, controls, microtiter plates (F-96), buffers, and substrate necessary for a working volume of 200 µl/test/well.

ELISA buffers, equipment for sample preparation and disposables are also available.

For all Art. No. please refer to our product catalogue or our homepage www.bioreba.com and for prices and further information on any other product from BIOREBA, please contact your local distributor or our office in Switzerland.

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

BIOREBA AG *Your Partner in Agro-Diagnostics*
Christoph Merian-Ring 7
CH-4153 Reinach BL1
Switzerland
phone +41 61 712 11 25
fax +41 61 712 11 17
admin@bioreba.ch
www.bioreba.com