

## Product Information: DAS-ELISA

# Onion yellow dwarf virus (OYDV)

OYDV (3) is transmitted by several aphid species in a non-persistent manner and by inoculation of sap. It is probably distributed world-wide in *Allium* species. The virus causes onion yellow dwarf: stunting of first-year onion plants, with the leaves showing irregular yellow striping to almost complete yellowing, downward curling, flattening, crinkling and flaccidity. It causes deterioration during storage and premature sprouting of onion bulbs. In onion seed plants, the virus causes striping, curling and distortion of flower stems, reduction in the number of flowers and seeds, and impairment of seed quality. In shallot leaf symptoms are similar, leaf curling and plant stunting is often severe.

### Specificity and sampling instruction

These reagents were made against an onion (*Allium cepa*) isolate of OYDV from Germany (1, 2). The antigen for rabbit immunization was purified from onion. The reagents specifically react with OYDV in DAS-ELISA (4). Isolates from all *Allium* species are detected. A special extraction buffer, «Bulbs & Tubers» (Art. No. 110122) containing egg albumin (ovalbumin), is used for testing *Allium* species. Samples are homogenised 1:20 (w/v).

The product is based on antibodies developed by the Julius Kühn-Institut (JKI) Braunschweig, Germany (Bundesforschungsinstitut für Kulturpflanzen; Institut für Epidemiologie & Pathogendiagnostik).

### Information on the antibodies

Coating IgG: polyclonal; conjugate: polyclonal

### References

- (1) Barg, E. 1996. Göttingen, Univ., Diss. (ISBN 3-931986-40-3). 189 pp.
- (2) Barg, E., Lesemann, D.E., Vetten, H.J., and Schönfelder, M. 1995. Advances in Vegetable Virus Research. Proc. 8th Conf. on Virus Diseases of Vegetables. Prague, Czech Republic, pp. 29-31.
- (3) Bos, L. 1976. Descriptions of Plant Viruses. No. 158. CMI/AAB. 4 pp.
- (4) Clark, M.F., and Adams, A. N. 1977. J. gen. Virol. 34:475-483.

### 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](http://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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Version: 4 - 13.07.2021

Adaptations from last version: new combination of polyclonal antibodies with comparable sensitivity and specificity.