

## Product Information: DAS-ELISA

# Beet necrotic yellow vein virus (BNYVV) (Rhizomania)

**Synonym: Benyvirus necrobetae**

BNYVV (3) has a narrow host range and is transmitted by the protozoan *Polymyxa betae* and by mechanical inoculation. It occurs wherever sugar beets are grown and causes a disease of economic importance. The virus causes „rhizomania“ disease of sugar beet. In nature, it infects sugar beet, fodder beet, Swiss chard and spinach. The disease is usually distributed as foci (patches) in the sugar beet field. Symptoms are characterized by root stunting and proliferation of lateral rootlets on the main tap roots, and yellow-brown coloration of vascular bundles. These typical root symptoms give rise to the name „rhizomania“ (‐root madness‐). In this condition, the bright yellow colour followed by necrosis along veins is giving the virus name „necrotic yellow vein“.

## Specificity and sampling instruction

These reagents were made against an isolate of BNYVV which causes the «rhizomania» disease in sugar beet (2) and specifically react with BNYVV in DAS-ELISA (1). The best samples for testing are rootlets (fibrous roots) grown after rainfall or irrigation. Samples are homogenised 1:20 (w/v) in extraction buffer «General» (Art. No. 110120).

## Information on the antibodies

Coating IgG: polyclonal; conjugate: polyclonal

## References

- (1) Clark, M.F., and Adams, A.N. 1977. J. gen. Virol. 34:475-483.
- (2) Häni, A., and Bovey, R. 1983. Revue suisse Agric. 15 (6): 305-308.
- (3) Tamada, T. 1975. Descriptions of plant viruses. No. 144. CMI/AAB. 4 pp.

## Ordering Information

**BIOREBA offers the following formats:**

**Individual ELISA reagents** for 100, 500 or 1000 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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Adaptations from last version: added revised taxonomy of ICTV and assays of individual ELISA reagents.