Validation Report: ELISA

SRA 16301 • *Beet necrotic yellow vein virus* (BNYVV)

Test Characteristics

Test Name	Beet necrotic yellow vein virus	**Capture Antibody**	Polyclonal (Rabbit)
Catalog Number	16301	**Detection Antibody**	Monoclonal (Mouse)
Acronym	BNYVV	**Format**	Compound-ELISA
Genus	Benyvirus	**Diluents**	GEB/ECI
		Sample Dilution	1:10

Summary

This ELISA test is a qualitative serological assay for the detection of Beet necrotic yellow vein virus (BNYVV), the casual agent of rhizomania, in beet, potato, spinach, and tobacco leaves, roots, and stems. BNYVV is a member of the Benyvirus genus known for their non-enveloped, rod shaped virus particles.

Diagnostic Sensitivity

True Positives	19
Correct Diagnoses	19
Percent	100%

Analytical Sensitivity

Limit of Detection: 1:48,600 dilution of infected tissue (pathogen titer unknown)

Analytical Specificity

Inclusivity:

This assay was designed to detect all strains and isolates of BNYVV. Nineteen distinct samples of BNYVV have been experimentally proven to be detected.

Exclusivity:

Cross-reacts With:

None known	

Does Not Cross-react With:

None known	

Diagnostic Specificity

True Negatives	18
Correct Diagnoses	18
Percent	100%

Selectivity:

No Matrix Effect Observed With:			
Beet leaves	Beet roots	Beet stems	Potato leaves
Potato roots	Potato stems	Spinach leaves	Spinach roots
Spinach stems	Tobacco leaves	Tobacco roots	Tobacco stems

Agdia, Inc.
52642 County Road 1
Elkhart, IN 46514
574-264-2014 / 800-622-4342
www.agdia.com / info@agdia.com