# **Validation Report: ELISA**

SRA 28001 • Cereal yellow dwarf virus-RPV (CYDV-RPV)



#### **Test Characteristics**

Test Name Cereal yellow dwarf virus-RPV

Capture Antibody Polyclonal (Rabbit) Catalog Number 28001 **Detection Antibody** Monoclonal (Mouse)

Acronym CYDV-RPV Format Compound-ELISA

Diluents GEB/ECI Genus Polerovirus

Sample Dilution 1:10

### Summary

This ELISA test is a qualitative serological assay for the detection of Cereal yellow dwarf virus-RPV (CYDV-RPV) in cereal leaves. CYDV-RPV is a member of the Polerovirus genus known for their non-enveloped, spherical-shaped virus particles. This virus is phloem limited and special care should be used during extraction.

#### **Diagnostic Sensitivity**

## **Analytical Sensitivity**

True Positives 20

Limit of Detection: 1:2,700 dilution of infected tissue (pathogen titer unknown)

Correct Diagnoses 20

Percent 100%

## **Analytical Specificity**

#### Inclusivity:

This assay was designed to detect all strains and isolates of CYDV-RPV. Twenty distinct samples of CYDV-RPV have been experimentally proven to be detected.

#### **Exclusivity:**

#### Cross-reacts With:

Barley yellow dwarf virus-RMV (BYDV-RMV)	

#### Does Not Cross-react With:

Barley yellow dwarf virus-MAV (BYDV-MAV)	Barley yellow dwarf virus-PAV (BYDV-PAV)
Barley yellow dwarf virus-SGV (BYDV-SGV)	Cucurbit aphid-borne yellows virus (CABYV)

## **Diagnostic Specificity**

True Negatives 18

Correct Diagnoses 18

Percent 100%

#### Selectivity:

No Matrix Effect Observed With:				
Corn leaves	Grass leaves	Wheat leaves		



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p214.2 Revised: 04/12/2023

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