

University of Idaho

Extension

Barley Yellow Dwarf Sample Testing (3/22/16)

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BYD is being found in numerous fields this year in southern Idaho. In 2015, fields testing positive for the PAV strain of BYD were widespread. There was, however, a sample that tested positive for the rpv strain of Cereal Yellow Dwarf (CYDV-RPV) in the northern Utah area.

Testing symptomatic plants for PAV strain is suggested. Negative results mean the test did not detect the virus. Although ELISA test is a reliable method, there is a slight chance of false negative in some cases (especially if distinctive visual symptoms are confirmed by specialists). This might happen when virus concentrations (titer) were too low for the test to pick up the virus due to the stage of infection and/or the quality of samples. There may also be infections caused by other strains of the virus (other than PAV). If further testing is needed, Western Labs and AgDia, for example, will test for additional strains and / or the Cereal Yellow Dwarf rpv strain.

Please note that the condition of the samples is important for BYDV testing. Sending plant samples along with roots (with some soil around it) would help to keep sample condition ideal until processing.

Sample testing for Barley Yellow Dwarf Virus is being done (for a fee) by the following people / businesses:

1) AgDia at <http://www.agdia.com/testing-services/by-test.cfm>

https://orders.agdia.com/InventoryD.asp?loc=IN&collection=TSE%20BYDVPAV&attribute_Size=

Test Abbreviation	Test Name	Test Format
BYDV-mav	Barley yellow dwarf virus- mav	ELISA
BYDV-pav	Barley yellow dwarf virus- pav	ELISA
CYDV-RPV	Cereal yellow dwarf virus- rpv	ELISA

Information on sending samples can be found at: <http://www.agdia.com/testing-services/sending-samples-from-usa.cfm>

2) Western Labs in Parma, ID, contact Harry Kreeft

<http://www.westernlaboratories.com/> email Harry@westernlaboratories.com or call (208) 649-4360

Western Labs test for BYDV-PAV and MAV strains on PCR for every BYDV that comes in, and will test for WSMV on the same sample.

3) University of Idaho, Eastern Idaho Entomology Laboratory. Dr. Arash Rashed: (Attn. Dr. Mahnaz Rashidi) <http://extension.uidaho.edu/aberdeen/2014/05/eastern-idaho-entomology-laboratory-eiel/> email: mrashidi@uidaho.edu. Testing is for PAV strain of BYDV. Samples received by Friday will be run on Mondays of the following week.