



Queensland University of Technology
Brisbane Australia

This is the author's version of a work that was submitted/accepted for publication in the following source:

Jefferson, Osmat Azzam & D'Arcy, C.J. (1989) Survey of Spring Oats for Barley Yellow Dwarf Viruses in Illinois. *Plant Disease : An International Journal of Applied Plant Pathology*, 73(7), p. 610.

This file was downloaded from: <http://eprints.qut.edu.au/39793/>

© Copyright 1989 American Phytopathological Society

Notice: *Changes introduced as a result of publishing processes such as copy-editing and formatting may not be reflected in this document. For a definitive version of this work, please refer to the published source:*

[Previous View](#)[APSnet Home](#)[Plant Disease Home](#)

Disease Note.

Survey of Spring Oats for Barley Yellow Dwarf Viruses in Illinois. O. I. Azzam, Department of Plant Pathology, University of Illinois, Urbana 61801. C. J. D'Arcy, Department of Plant Pathology, University of Illinois, Urbana 61801. *Plant Dis.* 73:610. Accepted for publication 21 March 1989. Copyright 1989 The American Phytopathological Society. DOI: 10.1094/PD-73-0610D.

During the spring of 1987, 1,215 samples of spring oats (*Avena sativa* L.) were collected in Madison, Champaign, Woodford, Warren, and DeKalb counties, Illinois. At each site on each of three sampling dates, 45 samples were collected (regardless of symptoms) in a W pattern in 1 ha and tested for the PAY, MAV, RPV, and RMV serotypes of barley yellow dwarf virus (BYDV) by direct double antibody sandwich enzyme-linked immunosorbent assay (ELISA). RMV was not detected at any location. PAY and RPV were detected at all locations, as early as 17 April in Champaign County. The incidences of PAV and RPV from all plants sampled ranged from 2 to 64% and from 2 to 88%, respectively. Highest incidences of both strains were in May samples from Woodford County. MAV was detected in lower incidences (2-16%) only in samples from the central region of the state (Champaign, Woodford, and Warren counties). The presence of MAV serotypes was confirmed in triple-antibody sandwich ELISA with the MAV-specific MAFF2 monoclonal antibody from L. Torrance. In the last previous survey for BYDV in Illinois during 1967-1968 (1), about 75% of the isolates were PAY and about 20% were RPV; single isolates of RMV and MAV were found. Twenty years later, 55% were PAY, 39% were RPV, and 6% were MAV.

Reference: (1) W. F. Rochow and H. Jedlinski. *Phytopathology* 60:1030, 1970.