Aphid population and feeding time required to transmit barley yellow dwarf virus at selected growth stages of wheat. (A00-rounds110340-Oral)

Authors:

- E.W.Rounds* - *Oklahoma State University*
- A.R.Klatt - *Oklahoma State University*

Abstract:

Barley yellow dwarf is a complex virus that effects nearly all members of the Gramineae family. There are five known isolates of BYDV that are transmitted by four primary aphid vectors. Studies have shown that wheat plants can develop tolerance or resistance to the disease in the later part of the crop cycle. The objective of this experiment was to determine the aphid-days required to transmit the disease and whether crop stage influenced its transmission. This experiment demonstrated that viruliferous Rhopalosiphum padi (L.) requires less than 12 hours of feeding to transmit BYDV-pav to hard red winter wheat (Triticum aestivum L.). It has also been shown that the plant does not develop resistance to transmission in any of the three growth stages that were tested.

Corresponding Author Information:

Elliott Rounds
Oklahoma State University
3305 S. Boomer Rd. Lot
Stillwater, OK 74074

phone: 4056248475
e-mail: Ewrounds@aol.com

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