Effect of Latitude and Harvest Date on Phomopsis Resistant and Susceptible Soybeans. (C01-shannon104240-Poster)

Authors:

- J.G.Shannon - *University of Missouri*
- D.A.Sleper - *University of Missouri*
- J.A.Wrather - *University of Missouri*
- G.L.Sciumbato - *Mississippi State University*

Abstract:

Phomopsis seed decay has increased in mid south soybeans due to early planting of early maturing cultivars that mature under warm, humid conditions. Soybean strains with phomopsis resistance and susceptiblity each in maturity groups III and IV were compared for phomopsis seed infection, germination and other traits. Comparisons were made at maturity and when harvest was delayed two to three weeks. Evaluations were conducted at three latitudes from north to south -Columbia, MO , Portageville, MO , and Stoneville, MS. Seed infection from Phomopsis was least in the Missouri environments and most at Stoneville. Seed of resistant lines showed less phomopsis than susceptible strains at each harvest date. However, delayed harvest increased phomopsis infection in resistant strains regardless of latitude. Delayed harvest at Stoneville resulted in 30 to 40% seed infection in resistant strains compared to only 1 to 2% when harvest was on time. Germination was higher from north to south and for resistant versus susceptible lines. However, germination was poor (<60%) for all strains over all harvest dates at Portageville and Stoneville. Factors other than phomopsis also account for poor seed quality in early maturing soybeans grown in the mid south.

Corresponding Author Information:

James G. Shannon
University of Missouri
Delta Center P O Box 160
Portageville, MO 63873

phone: 573-379-5431
fax: 573-379-5875
e-mail: shannong@missouri.edu

Presentation Information:

Presentation Date: Tuesday, November 12, 2002

Presentation Time: 4:00-6:00 pm
Poster Board Number: 1011

Keywords:
Phomopsis resistant soybeans, Phomopsis infection and harvest date, Latitude and Phomopsis infection