P-144

Incidence of soybean vein necrosis virus in Alabama soybean fields

*Edward Sikora**, Department of Entomology and Plant Pathology, Auburn University, Alabama, USA
Alana Jacobson, Department of Entomology and Plant Pathology, Auburn University, Alabama, USA
Mary Delaney, Department of Entomology and Plant Pathology, Auburn University, Alabama, USA
Kassie Conner, Department of Entomology and Plant Pathology, Auburn University, Alabama, USA

Soybean vein necrosis virus (SVNV) was first reported in the United States during 2008 and has since rapidly spread to all major soybean-producing regions of North America. In 2013, a four-year study was initiated to determine the distribution and incidence of the virus in Alabama soybean fields and investigate its host range within the state. Host range studies focused on populations of morning glory growing adjacent to maturing soybeans fields along with additional commonly occurring weed species. SVNV was detected in 27 counties in Alabama, and was most common in the northern region of the state. The average incidence of SVNV in fields in North Alabama increased from 31.8% in 2013 to 82.6% in 2016. Average incidence of the virus in central Alabama soybean fields ranged from 5.1-14.8% and south Alabama fields ranged from 0-8.8% over the four-year period. Only one population of morning glory tested positive for SVNV during the three-year survey of this potential weed host. None of the 16 additional weed species screened tested positive for SVNV. This study has demonstrated that SVNV is found in soybean fields throughout the state and that soybeans grown in North Alabama are at greater risk for infection.