

Gearhart, K.; Dugan, D.; Grimes, J.; Farley, L.; Fisher, J.; Burskey, C.; Dorrance, A.E. 2010 Survey of soybean diseases in the Ohio River Valley Region of Ohio during 2009. *Phytopathology* 100:S39.

Soybean yields in the Ohio River Valley Region of Ohio have been substantially less than other soybean producing regions of the state. The objective of this study was to determine what the production limitations are in the seven counties during 2009. A total of 132 plant and soil samples were collected at crop growth stages VE to V2 and R5 to R7 from 6 and 4 fields, respectively. Fields were sampled based on crop rotation practices and/or a history of low yields. Plant samples were transported back to the laboratory and symptomatic root tissue was plated onto selective media for both fungi and oomycete pathogens. Soil samples were processed for soybean cyst nematode (SCN) and soil analysis. *Pythium*, *Phytophthora*, *Fusarium*, *Macrophomina*, *Diaporthe*, *Sclerotinia*, and *Rhizoctonia* spp. were isolated from plant material. SCN was identified in 17 of the 38 locations and counts ranged from 0 to 3300 eggs/100cc soil. This is the first reported find of SCN for Pike Co. The next step is to further characterize the disease complexes that may be present, evaluate management strategies, and educate producers in this region.