

EFFECT OF GLYPHOSATE AND FUNGICIDES ON SOYBEAN YIELD UNDER WEED-FREE CONDITIONS. Ryan S. Henry, Kiersten A. Wise, and William G. Johnson, Graduate Research Assistant, Assistant Professor, Professor, Department of Botany and Plant Pathology, Purdue University, West Lafayette, IN 47907

Growers can maximize yield by using management techniques that place a priority on plant health and sound agronomic practices. Strobilurin fungicides provide control of many foliar diseases and have been cited for non-fungicidal effects, such as improving a plant's health and delaying senescence in the fall. The objective of this experiment was to assess the impact of a strobilurin fungicide on soybean yield. Two glyphosate-resistant soybean cultivars were planted in Wanatah and West Lafayette, Indiana in 2009. Foliar treatments consisted of glyphosate, manganese, a strobilurin fungicide (pyraclostrobin), and an insecticide (lambda-cyhalothrin), applied alone or in various combinations. At West Lafayette there was a significant positive fungicide effect on soybean yield but not at Wanatah.