

A NEW EXTENSION PUBLICATION CONCERNING AND WINTER ANNUAL WEEDS AND SOYBEAN CYST NEMATODE. Valerie A. Mock, William G. Johnson, Kevin L. Smith, and Kevin Bradley. Graduate Research Assistant and Associate Professor, Department of Botany and Plant Pathology, Purdue University, West Lafayette, IN 47907, Editor, Department of Agricultural Communication, Purdue University, West Lafayette, IN 47907, and Assistant Professor, Division of Plant Sciences, University of Missouri, Columbia, MO 65211.

In soybean producing regions of the United States, soybean cyst nematode (*Heterodera glycines* Ichinohe; SCN) is one of the most yield limiting pathogens in soybean production. Winter annual weeds are becoming more problematic due to the adoption of conservation tillage and the reduction in use of residual herbicides. Currently, six winter annual weeds have been identified as being alternate hosts to SCN. These winter annual weeds are identified as weak, moderate, and strong hosts to SCN. In this publication, the SCN and winter annual weed life cycles described in relation to the overlap of their lifecycles and that of soybean. It also describes some of our research on the interaction between winter annual weeds and SCN and how SCN population density can increase on winter annual weed hosts after crops are harvested in the fall. Possible management tactics of controlling SCN and winter annual weeds are included, as well as, a weed identification guide with pictures to aid in diagnosing fields with winter annual weeds that are alternate hosts to SCN.