



Andy Michel

Project Title

Monitoring, Researching and Management of Ohio Insect Pests

Biography

Dr. Michel received his B. S. in Entomology from Purdue University (2001) and Ph.D. in Biology from the University of Notre Dame (2005). After post-doctoral research at the University of Notre Dame (2005-2007), he joined the Department of Entomology at The Ohio State University with a 70% research and 30% extension appointment. He has studied the genetics of adaptation in various systems, but focuses much of his research on the soybean aphid, *Aphis glycines*. Overall, he has published over 35 peer-reviewed papers and 2 book chapters. Additionally, he has provided over 70 extension presentations on field crop insect management, reaching thousands of participants.



Project Description

Soybean growers are continually faced with the threat of insect pests inflicting heavy damage to soybean. The stink bug complex, particularly the brown marmorated stink bug (BMSB), continues to be an expanding problem for soybean producers. In 2013, there was much acreage affected by not only BMSB, but from green stink bugs as well. Similarly, the kudzu bug, already prevalent in nearby states, has a strong potential to invade and damage soybean in Ohio. Furthermore, the soybean aphid continues to impact soybean yield in Ohio—in 2014, chemical applications were needed in northern Ohio to limit aphid damage. **Impacts of emerging pests can be minimized by understanding their distribution, determining potential risks, and developing novel management strategies through resistance breeding and modern molecular techniques.** Andy and his team will use their interdisciplinary expertise to provide information on the expanding impact of invasive soybean insects and further advance research for insect resistance using state of the art methods.

Objectives

- 1) Map the distribution of invasive pests
- 2) Understand and improve economic impacts and management strategies
- 3) Develop novel approaches for their management

