



Research Q1: Does planting green impact the number of "field fit" days in spring?

Research Q2: How does weed suppression potential differ across production regions?

Research Q4: Can planting green permit reduced herbicide inputs?

Research Q3: Is planting green a viable IWM tool for herbicide resistant weeds?

GROW 'Legacy' Experiment: Integrating cover crops & residuals in soybean rotations

Cover crops can be an effective addition to the weed management toolbox, in addition to their soil and water quality benefits. Waiting to terminate cover crops until at or after cash crop planting, referred to as "planting green", can allow cover crops to put on more biomass to act as a weed suppressive mulch. More cover crop biomass also requires more water and nutrients, and may intercept soil-active residual herbicides, so trade-offs between management practices may occur.

The GROW Integrated Weed Management network is conducting a multi-state systems trial to examine how cereal rye cover crop management and residual herbicide programs interact with field history and environmental factors to affect weed populations and soybean yields across soybean producing regions of the United States. Results from this nine state, four-year project will be used to inform tools for site-specific cover crop management decisions.

Visit www.GROWIWM.org for more information about growing cover crops for weed suppression and other strategies for combatting herbicide resistance with integrated weed management tactics.

Figure 1. Preliminary data from Ohio for broadleaf and grass weed emergence at 21 days after soybean planting, as influenced by prior cash crop, rye cover crop management, and herbicide programs.

