Cover Crops, Soil Health, and Resiliency

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Cover crops have increased in popularity across the U.S. Cornbelt over the past five years, in part due to their beneficial effects on soil health and water quality. Farmers and researchers have found many benefits from growing cover crops, including reduced erosion, increased soil aggregation, increased water holding capacity, greater soil biological activity, and greater nutrient retention over the winter-spring leaching period. As the climate becomes more variable, how might cover crops improve productivity and increase the resilience of cropping systems to short-term weather stresses? What data and experience exist to document the magnitude of changes in soil health that may accrue from cover crops, and how long does it take for these benefits to appear? What tools exist to help farmers and advisors choose appropriate cover crops for their system, geographic location, and main purposes for growing the cover crops? This presentation will examine some of the data on soil health and cover crops from our local and regional studies in the US "Midwest" region and will help put them in the context of resiliency to climate stresses. It will also highlight some practical tools available to assist farmers and advisors with selection and management of cover crops.

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