

Midwest Cover Crop Council

Missouri Report

Meeting in Madison, WI
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Publications

Cover Crops in Missouri: Putting Them to Work on Your Farm (G4161)

Selected New Initiatives

MU-CAFNR Soil Health Assessment Center (SHAC)

The College of Agriculture, Food and Natural Resources in partnership with University of Missouri Extension (MUEXT) has increased its financial commitment to the soil health issue. MU invested in new equipment, lab space and leadership. The partnership with Missouri's Department of Natural Resources (DNR) and the Natural Resources Conservation Service (NRCS) to develop a soil health data base has resulted in contracts for 1,800 samples from crop production systems and soils around the state.

Soil & Water Conservation District (SWCD) Cover Crop Cost-share Initiative

Missouri has a state wide tax for soil conservation, which is administered by the DNR. In 2015 a farmer program to cost-share for cover crops required a baseline soil health sample for each contract, with a follow up sample to be taken in 2016. As a result, Missouri farmers planted some 95,000 acres at a cost of \$3.3 million, generating 1,800 samples for analysis by MU's SHAC. This will make only the second public data base available to researchers.

University of Missouri Strip Trial Program

MUEXT faculty obtained funding from the Missouri Soybean Association and the Missouri Corn Growers to fund replicated on farm strip trials to obtain production system information. The multiple year grant has a farmer advisory board, which selected cover crop trial work as its first area of emphasis. The program will make use of extension field faculty to guide implementation and assure quality control of efforts with farmers.

Missouri Soil Health Consortium

Kristen Veum, ARS Soil Microbiologist, has establish a soil health consortium to bring together the people from various state and federal agencies, university and extension units working on soil health issues. The consortium has been meeting regularly to communicate information on project and identifying opportunities for combining effort for synergy of effort.

Alternative Crop Suitability Decision Tool

Work is being completed by agriculture economist, Joe Parcell and the Center for Applied Research and Environmental Systems (CARES). The tool is designed to give probability of successful growth of crops by soil association, allowing farmers to assess management risk by identifying their farm on a geographical information system available without charge.

Research Centers with ongoing Cover Crop Work

Bradford Research Center, Central Missouri; Tim Reinbott,
Graves-Chapple Research Center, NW Missouri; Wayne Flanary, Jim Crawford
Hundly-Whaley Research Center, NC Missouri; Bruce Burdick
Greenly Memorial Research Center NE Missouri; Kelley Nelson
Goodwater Creek Experimental Watershed; Central Missouri; ARS facility; Newell Kitchen, Ken Sudduth

Educational Events

Mid Missouri Soil Health & Cover Crop Seminar
Numerous County Cover Crop/Soil Health Meetings, SWCD, NRCS, Extension sponsorship

Long Term Cover Crop Research Plots

Willott Farms Cover Crop Plots
Chariton County SWCD/Associated Electric Cooperative Inc., Research Farm

Grant Activity

Mizzou Advantage; Todd Lorenz primary investigator
Development of soil health publications based on Missouri research

Program Integration Cover Crops; Rich Hoormann primary investigator
Development of cover crop publications bas on Missouri research.

SARE Cover Crop Grants
Several investigators with cooperators

Water Quality Grants by MDC & DNR

Use of cover crops to reduce off field movement of herbicides, soil and the reduction of herbicide due to weed suppression. Primary investigators: Charles Ellis, Tim Reinbott, Kent Shannon, Rich Hoormann

Cover Crop Influence on Ground Beetles

Retired MUEXT entomologist, Wayne Bailey, investigating ground beetle populations influence by presence of different cover crop species. Work beginning in 2016.

