

South Dakota Nutrient Research and Education Council July 11, 2024

9:00 AM - 4:30 PM

SDSU Raven Precision Agriculture Center 234 1030 N Campus Drive, Brookings, SD 57007

MEMBER	Representing
RYAN WOLF – CHAIR*	Specialty Fertilizer Industry
RYAN SCHUCHHARDT – VICE CHAIR*	FERTILIZER INDUSTRY
Kyle Gustafson – Secretary*	CERTIFIED AGRONOMY ASSOCIATION
JIM LOKEN – TREASURER*	FERTILIZER INDUSTRY
KEVIN BACHMEIER*	FERTILIZER INDUSTRY
COLIN NACHTIGAL*	GROWER ORGANIZATION
Jerry Runia*	GROWER ORGANIZATION
Bruce Haines*	FARMER MEMBER OF THE STATE CONSERVATION COMMISSION
Travis Strasser*	COMMODITY ORGANIZATION
Bryan Jorgensen	ENVIRONMENTAL ORGANIZATION
GEORGE SPERRY	ENVIRONMENTAL ORGANIZATION
JOHN BLANTON	SOUTH DAKOTA AGRICULTURAL EXPERIMENT STATION AT SDSU
Tom Gere	SECRETARY OF THE DEPARTMENT OF AGRICULTURE & NATURAL RESOURCES
Paul Wegleitner	SECRETARY OF THE DEPARTMENT OF AGRICULTURE & NATURAL RESOURCES
	* VOTING MEMBER

INVITED PARTICIPANTS	ED PARTICIPANTS		
LIV STAVICK	South Dakota Agribusiness Association – Executive Director		
ANGELA LOFTESNESS	SDSU COLLEGE OF AGRICULTURE, FOOD, AND ENVIRONMENTAL SCIENCES — ASSISTANT TO THE DEAN		

9:00 – 9:45 AM WELCOME & APPROVAL OF AGENDA – RYAN WOLF

APPROVAL OF MINUTES - KYLE GUSTAFSON

FINANCIAL REPORT – JIM LOKEN AND ANGELA LOFTESNESS

COUNCIL MEMBERSHIP QUESTION - RYAN WOLF

APPROVAL OF REQUEST FOR PREPROPOSALS – RYAN WOLF AND ANGELA LOFTESNESS

APPROVAL OF REQUEST FOR PROPOSALS – RYAN WOLF AND ANGELA LOFTESNESS

CONSENT PROJECTS FOR DECEMBER AGENDA - RYAN WOLF

9:45 – 10:00 AM BREAK

$10:00 \, \text{AM} - 12:00 \, \text{PM}$ Project Presentations and Q&A

10:00 AM	CHRISTOPHER GRAHAM	EVALUATING SELECTED SOIL HEALTH INDICES FOR PREDICTING NITROGEN FERTILIZER REQUIREMENT FOR WINTER WHEAT IN WESTERN SOUTH DAKOTA
10:15 AM	PÉTER KOVÁCS	INVESTIGATING P AND K FERTILIZER APPLICATION TIMING AND MANAGEMENT STRATEGY ON CROP YIELD AND NUTRIENT UPTAKE
10:30 AM	PÉTER KOVÁCS	INVESTIGATING IMPACT OF STARTER FERTILIZER PLACEMENT ON PLANT DEVELOPMENT, GRAIN YIELD, AND NUTRIENT UPTAKE
10:45 AM	PÉTER KOVÁCS FOR KRISTOPHER ÖSTERLÖH	TILLAGE EFFECTS ON LIMING EFFICIENCY IN ACIDIFIED TOPSOIL
11:00 AM	Mazhar Sher	UTILIZATION OF LASER-INDUCED GRAPHENE-BASED SENSOR FOR SOIL NPK MEASUREMENTS AND DEVELOPMENT OF NUTRIENTS MAPS
11:15 AM	SUNISH SEHGAL	Breeding for Improved Nitrogen Use Efficiency (NUE) in South Dakota Winter Wheat Under Regenerative Agriculture Management
11:30 AM	LIN WEI	APPLICATION OF BIOSOLID-BASED NITROGEN CONTROL RELEASE FERTILIZERS FOR SUSTAINABLE CORN PRODUCTION AND SOIL HEALTH IN SOUTH DAKOTA
11:45 AM	TODD TROOIEN FOR JOHN MCMAINE	FIELD MONITORING OF PRECISION CONTROLLED DRAINAGE FOR WATER QUALITY AND YIELD IMPROVEMENT

12:00 – 1:00 PM EXECUTIVE SESSION – LUNCH, PRELIMINARY DISCUSSION

1:00 – 2:15 PM PROJECT PRESENTATIONS AND Q&A

1:00 PM	ROBERT MILLER	EVALUATION OF ZINC AND BORON MICRO-NUTRIENTS ON CORN NUTRITION AND GRAIN YIELD IN EASTERN SOUTH DAKOTA
1:15 PM	JASON CLARK	ACQUISITION OF A COMBINE FOR SOIL FERTILITY RESEARCH TRIALS CROP HARVEST
1:30 PM	JASON CLARK	EVALUATION OF SOIL TEST POTASSIUM AND SIDE DRESS APPLICATION OF POTASSIUM AND BIOCHAR ON CORN NUTRITION AND GRAIN YIELD IN EASTERN SD
1:45 PM	JASON CLARK	INFLUENCE OF INTERSEEDING COVER CROPS ON NITROGEN FERTILIZER RATE REQUIREMENT FOR OPTIMAL CORN GRAIN YIELD IN A NO-TILL SYSTEM
2:00 PM	JASON CLARK	COMBINING SOIL FERTILITY AND BIOLOGICAL MEASUREMENTS TO IMPROVE CORN N RATE RECOMMENDATIONS

2:15 – 2:30 PM BREAK

2:30 – 4:00 PM EXECUTIVE SESSION – REMAINING BUSINESS, WRAP-UP