



South Dakota Nutrient Research and Education Council

July 7, 2022

8:15 AM – 5:00 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
COLIN NACHTIGAL - SECRETARY*	GROWER ORGANIZATION
JIM LOKEN - TREASURER*	FERTILIZER INDUSTRY
KEVIN BACHMEIER*	FERTILIZER INDUSTRY
JERRY RUNIA*	GROWER ORGANIZATION
KYLE GUSTAFSON*	CERTIFIED AGRONOMY ASSOCIATION
BRUCE HAINES*	FARMER MEMBER OF THE STATE CONSERVATION COMMISSION
ROBERT WALSH*	COMMODITY ORGANIZATION
BRYAN JORGENSEN	ENVIRONMENTAL ORGANIZATION
VACANT	ENVIRONMENTAL ORGANIZATION
BILL GIBBONS	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	
KATHY ZANDER	SOUTH DAKOTA AGRIBUSINESS ASSOCIATION – EXECUTIVE DIRECTOR
ANGELA LOFTESNESS	SDSU COLLEGE OF AGRICULTURE, FOOD, AND ENVIRONMENTAL SCIENCES – ASSISTANT TO THE DEAN

8:15 – 9:15 AM	<p>WELCOME & APPROVAL OF AGENDA – RYAN WOLF</p> <p>APPROVAL OF MINUTES – COLIN NACHTIGAL</p> <p>FINANCIAL REPORT – JIM LOKEN AND ANGELA LOFTESNESS</p> <p>APPROVAL OF REQUEST FOR PREPROPOSALS – RYAN WOLF AND ANGELA LOFTESNESS</p> <p>APPROVAL OF REQUEST FOR PROPOSALS – RYAN WOLF AND ANGELA LOFTESNESS</p> <p>REVIEW OF COUNCIL TERMS – RYAN WOLF</p> <p>REVIEW OF BYLAWS - RYAN WOLF</p> <p>REVIEW OF GRANT TERMS AND CONDITIONS - RYAN WOLF RYAN WOLF AND ANGELA LOFTESNESS</p> <p>CONSENT PROJECTS FOR DECEMBER AGENDA - RYAN WOLF</p>
9:15 – 9:30 AM	BREAK
9:30 AM – 12:00 PM	PROJECT PRESENTATIONS AND Q&A

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9:30 AM	JASON CLARK	COMBINING SOIL FERTILITY AND SOIL HEALTH TO IMPROVE CORN POTASSIUM, PHOSPHORUS, AND SULFUR FERTILIZER RECOMMENDATIONS
9:45 AM	JASON CLARK	BUILDING POTASSIUM FERTILIZER GUIDELINES TO INCLUDE SOIL CLASSIFICATION INFORMATION
10:00 AM	JASON CLARK	FERTILIZER N RATE RECOMMENDATION UPDATE FOR CORN
10:15 AM	JASON CLARK	INFLUENCE OF INTERSEEDING COVER CROPS ON NITROGEN FERTILIZER RATE REQUIREMENT FOR OPTIMAL CORN GRAIN YIELD IN A NO-TILL SYSTEM
10:30 AM	SUNISH SEHGAL	BREEDING FOR IMPROVED NITROGEN USE EFFICIENCY (NUE) IN SOUTH DAKOTA WINTER WHEAT UNDER REGENERATIVE AGRICULTURE MANAGEMENT
10:45 AM	DAVID KARKI	CALIBRATION OF NITROGEN REQUIREMENT OF OATS GROWN FOR GRAIN IN SOUTH DAKOTA
11:00 AM	ROBERT MILLER	EVALUATION OF SOIL TEST POTASSIUM AND SIDE DRESS APPLICATION OF POTASSIUM AND BIOCHAR ON CORN NUTRITION AND GRAIN YIELD IN EASTERN SOUTH DAKOTA
11:15 AM	ROBERT MILLER	EVALUATION OF ZINC AND BORON MICRO-NUTRIENTS ON CORN NUTRITION AND GRAIN YIELD IN EASTERN SOUTH DAKOTA
11:30 AM	LIN WEI	APPLICATION OF BIOSOLID-BASED NITROGEN CONTROL RELEASE FERTILIZERS TO IMPROVE NITROGEN USE EFFICIENCY OF CORN PRODUCTION AND SOIL HEALTH IN SOUTH DAKOTA
11:45 AM	SRINIVAS JANASWAMY	SYNTHETIC NODULES FOR NITROGEN NUTRITION IN CEREAL CROPS

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

1:00 – 4:30 PM PROJECT PRESENTATIONS AND Q&A

1:00 PM	JOHN McMAINE	IDENTIFYING NUTRIENT LOSS HOT SPOTS IN TILE DRAINAGE
1:15 PM	JOHN McMAINE	PRECISION CONTROLLED DRAINAGE FOR REDUCING NUTRIENT LOSS THROUGH TILE DRAINAGE AND IMPROVING YIELD
1:30 PM	JOHN McMAINE	ENGAGING, EDUCATING, AND EMPOWERING AGRICULTURE THROUGH AN NREC FOCUSED PODCAST SEASON
1:45 PM	SAM IRELAND/ DWAYNE BECK	THE IMPACT OF PHOSPHORUS SOIL TEST LEVEL DIFFERENCES ON CROP RESPONSE, PHOSPHORUS LEACHING, AND PHOSPHORUS RUNOFF UNDER LONG-TERM NO-TILL MANAGEMENT IN SOUTH DAKOTA
2:00 PM	DAVID CLAY	THE INFLUENCE OF NITROGEN STABILIZERS AND APPLICATION DATES IN NO-TILLAGE CORN PRODUCTION ON NITROGEN USE EFFICIENCY AND N LOSSES TO THE GROUNDWATER AND THE ATMOSPHERE
2:15 PM	DAVID CLAY	BUILDING A SOUTH DAKOTA CORN NO-TILLAGE N RECOMMENDATION ALGORITHM THAT CONSIDERS IMPROVEMENTS IN SOIL HEALTH

2:30 PM	ALI NAFCHI	DEVELOPMENT OF AN INEXPENSIVE Y-DROP SYSTEM COMBINED WITH A COVER CROP PLANTER TO IMPROVE NITROGEN USE EFFICIENCY WHILE INTER-SEEDING COVER CROPS
2:45 PM	PÉTER KOVÁCS	INVESTIGATING IMPACT OF STARTER FERTILIZER PLACEMENT ON PLANT DEVELOPMENT, GRAIN YIELD, AND NUTRIENT UPTAKE – YEAR 2
3:00 PM	PÉTER KOVÁCS	INVESTIGATING FERTILIZER RESPONSE AND REQUIREMENT IN HIGH PROTEIN SOYBEAN VARIETIES
3:15 PM	PÉTER KOVÁCS	INFLUENCES OF MANURE AND FERTILIZER APPLICATION IN CORN-SOYBEAN-SPRING WHEAT/COVER CROPS ROTATION ON WATER AVAILABILITY AND QUALITY, SOIL FERTILITY, AND CROP YIELD

3:30 – 3:45 PM

BREAK

3:45 – 5:00 PM

EXECUTIVE SESSION – ADDITIONAL BUSINESS, WRAP-UP