Program Schedule

Poster Titles and Presenters

GROUP 3

GROUP 4

22. **EVALUATION OF WHEAT KERNEL AND FLOUR QUALITY AS INFLUENCED BY CHLORINE DIOXIDE GAS TREATMENT**

GROUP 5

GROUP 6

36. **LIFE CYCLE CLIMATE PERFORMANCE (LCCP) FOR DROP-IN LOW GLOBAL WARMING POTENTIAL ALTERNATIVES**
Michael Akinseloyin

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Poster Abstracts

GROUP 1

SEASONAL VARIABILITY OF SOIL HEALTH INDICATORS UNDER DIFFERENT CROPPING SYSTEMS IN THE SOUTHERN GREAT PLAINS

César Augusto Guareschi,

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THE COMPLEX RELATIONSHIP BETWEEN NATIVE MYCORRHIZAL COMMUNITY AND PHOSPHORUS ADDITION IN COMMERCIAL MYCORRHIZAL INOCULANT EFFECTIVENESS

A PRECIPTATION GRADIENT'S EFFECT ON

QUANTIFYING N_2O EMISSION IN CORN PRODUCTION WITH A NOVEL

GROUP 2

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INSECT ABUNDANCE AND COMMUNITY COMPOSITION DIFFERS AMONG HABITATS AND ALONG EDGES

Magdeline Anderson and Tania Kim
Department of Entomology, College of Agriculture

BACKGROUND AND PURPOSE: The border cropping practice (grassland habitat strategically positioned adjacent to working land) can reduce the need for harmful insecticides because it provides refuge, additional

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MOLECULAR AND MORPHOLOGICAL CHARACTERIZATION OF *FUSARIUM* SPECIES IN KERNZA®

Anusha Dahal[1], Myron Bruce[1], Kathryn Turner[2], and Jessica Rupp[1]

[1]Department of Plant Pathology, College of Agriculture; [2]

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IMPACTS OF WOODY ENCROACHMENT ON GRASSLAND WATER YIELD

Rachel Keen

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IMPACT OF GRASSY EDGES ON JAPANESE BEETLE INVASION IN SOYBEAN

Nicole Kucherov and Tania Kim
Department of Entomology, College of Agriculture

BACKGROUND AND PURPOSE: Invasive species pose a significant threat to agriculture, and Japanese beetles, *Popillia japonica,* are one of the most economically damaging pests in the United States. Their significance in the Midwestnce9Vanc1ve sp tgETQq0.00000912 0 612 792 reW*nBT/F5 12 Tf1 0 0

GROUP 3

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EFFECT OF SORGHUM ACCESSIONS AND SMALL GRAINS ON PET FOOD EXTRUSION

Katelyn Bailey and Charles G. Aldrich
Department of Grain Science and Industry, College of Agriculture

INTRODUCTION: Pet owners are more concerned today about the ingredients used in pet food.

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GRAIN SORGHUM AS A SUSTAINABLE INGREDIENT IN AQUATIC FEED ï GRINDING AND PROCESSING ENERGY STUDIES

Tucker Graff[1], D. Allen Davis[2] and Sajid Alavi[1]

[1]*Department of Grain Science and Industry; College of Agriculture;* [2]*School of Fisheries, Aquaculture, and Aquatic Sciences, Auburn University*

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EVALUATION OF FERMENTABILITY OF WHOLE SOYBEANS AND SOYBEAN OLIGOSACCHARIDES BY A CANINE *IN VITRO* FERMENTATION MODEL

Hee Seong Kim and Charles Greg Aldrich
Department of Grain Science and Industry, College of Agriculture

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UTILIZING PROTEIN FUNCTIONALITY INFORMATION TO TAILOR QUALITY OF PLANT-BASED MEAT ANALOGUES

Jenna Flory and Sajid Alavi
Department of Grain Science and Industry

IMPACT OF CRICKET PROTEIN POWDER ADDITION ON WHEAT DOUGH

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MICROBIAL COMMUNITIES IN THE TROPICAL HORSE TICK, *Dermacentor*

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SURVEILLANCE OF *ECHINOCOCCUS MULTILOCULARIS* IN COYOTES IN THE MIDWEST UNITED STATES

[1]Kamilyah R. Miller, [2]Todd M. Kollasch, [3]William Ryan, and [1]Brian H. Herrin
[1]*Department of Diagnostic Medicine and*

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INVESTIGATING THE EFFECTS OF FAST NEUTRON IRRADIATION ON ADDITIVE MANUFACTURED METALS

Mohanish Andurkar[1], Valentina OôDonnell[2], John Gahl[2], Tahmina Keya[3], Bart Prorok[3]

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A SELF-ASSEMBLED RECOMBINANT PROTEIN COATING PLATFORM FOR CALCIUM ION SENSING

Suna Jo, *Tim Taylor*
Department of Chemical Engineering, College of Engineering

BACKGROUND AND PURPOSE: Proteins are functional building blocks that are beneficial for the fabrication of biological materials. Functional protein-based coating materials have been investigated in broad technological applications. However, mos0 g0oatig0f1(br(a)4(5ic)-4(a)4(ti)-3(g0(a)4(qu

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PHYSICS IN THE FIELD: APPLICATION OF A FIELD-DEPLOYABLE ULTRAFAST LASER TO MEASURE AGRICULTURAL SIGNIFICANT GASES

Lindsay Morris[1], Chinthaka Weerasekara[2], Daniel Herman[3,4], Brett DePaola[1], Eduardo Santos[2], Stephen Welch[2], and Brian Washburn[3]

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PRINTABLE CONDUCTING LAYERED MATERIALS FOR ELECTRONIC AND ENERGY APPLICATIONS

Shiseido Robinson[1], Rajavel Krishnamoorthy[1]

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MULTIAGENT WIRELESS DATA COMMUNICATION FOR PRECISION AG SYSTEMS

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TRANSITIONING TO OPEN EDUCATION RESOURCES IN GENERAL EDUCATION MATHEMATICS COURSES: A MIXED METHODS STUDY OF THE PERCEPTIONS OF COLLEGE STUDENTS REGARDING THE QUALITY AND EFFICACY OF OER

Bader Abukhodair
Department of Curriculum and Instruction, College of Education

BACKGROUND AND dFCOUR

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LABOR SHORTAGE IN THE HOSPITALITY INDUSTRY: HOW TO OVERCOME THE ONGOING LABOR SHORTAGE?

Myung Cho and Jichul Jang
Department of Hospitality Management, College of Health and Human Sciences