UNIVERSITY OF MARYLAND

COLLEGE OF AGRICULTURE AND NATURAL RESOURCES
Department of Plant Science and Landscape Architecture

Melissa Leiden Welsh, Ph.D.
Assistant Clinical Professor Agriculture Education
4291 Fieldhouse Drive. Room 2130
College Park, Maryland 20742
301.405.6969 TEL 301.314.9308 FAX

Greetings Teachers,

The Maryland Agronomy CDE creators team is excited to see you all again in person at the April spring judging CDE event. Although the National contest includes a much broader set of skills and content knowledge, our Maryland state CDE will provide a smaller scale agronomy challenge related to Maryland plants, soils and the respective environments. This year we are continuing to embrace the newly renovated contest. Many of the sections are similar in format to previous years. This year we will continue with the soils featured section as well as a nutrient management diagnostic section. The nutrient management section will be an orally presented answer to a pool of possible questions based upon the content the participants view in their randomly selected nutrient management plan. Teams will view a single plan with each individual answering a single question (4 questions in total). Any schools with only an individual from a school will answer a single question based upon the plan they select. Teams and individuals will be given preparation time to view their selected plan and supportive information, such as (but not limited to) past tillage practices, fertility reports and tissue analysis. This portion will be an opportunity for students to demonstrate valuable public speaking and social skills that many professionals in the field have noted as highly desirable functions in an entry level agronomist's job.

Thus, the 2025 Maryland Agronomy CDE will be individual events consisting of crop, weed, insect, disorders, soils, a written exam and nutrient management diagnostic section.

The crop plants/crops seeds Weed plants /Weed seeds (150 points)

- The crop identification may include a mixture of live specimens (plants), seeds and color photographs.
- The weed identification may include a mixture of live specimens (plants), seeds and color photographs.

Insect identification (Pest Management) (100 points)

- Identification will be according to insect name, life cycle, economic impact and mouth parts. Color photographs will be displayed.

Disorder identification (Pest Management) (100 points) [10 samples]

- Identification will be according to category, causal agent and damage location. Color photographs will be displayed.

Soils (100 points total)

Each participant will be responsible for the following activities related to soils:

- Identify various soil structures: web soil survey, custom soil resource report, soil maps.
- Analyze web soil survey data and answer questions related to
    - Relative drainage (e.g., poor, moderate, well).
    - Relative topographic position (e.g., summit, slope, depression).
    - Depth to water table.
    - Frost free period.
    - Identify the USDA land capability classes and answer problem-solving questions

related to various classes.
    - Use soil survey to locate specific sites, use of suggested soil spots and questions related to the soil survey map.
    - Interpret graphs and tables of data based on soil parameters

Written Exam (100 points)

- The written exam has 50 multiple choice questions that cover a wide range of agronomic areas including crop production, soils, pest management, forages and environmental issues.

Nutrient Management Diagnostics (100 points)

- A team member or a single participant will blindly select a nutrient management plan. They will be provided 10 minutes to review the plan and develop a simple summary of information and respond to a randomly selected question at the time they are in front of the panel of judges. Teams will have each member draw a question to respond individually based upon the same team selected plan. Single students from a school will only answer a single question based upon the plan they view. (Hence individuals are welcome to attend this CDE event!)

Event scoring will be as follows. Individual participants scores are the total sum of each participant's correctly scored responses within each section. The team scores will be the compiled scores of participants according to the declared team members at the start of the event. Once the event starts, team members can't be altered. In the event of a tie the written exam scores will be used to declare the winners. For team ties all written scores will be compiled to achieve one score to compare across the tied teams.

I encourage coaches and advisors to reach out to me with questions. We are looking forward to another outstanding group of students at this year's competition.

Respectfully,

Melissa Leiden Welsh

Melissa Leiden Welsh, Ph.D., CFCS, CPFFE
Maryland Agronomy CDE Superintendent