LOUISIANA FFA

CAREER DEVELOPMENT EVENT

AGRONOMY

Agronomy Career Development Event

Purpose

The Agronomy Career Development Event is designed to create interest and promote understanding in agronomic sciences by providing opportunities for student recognition through the demonstration of knowledge and skills. Since all resources are capable of being utilized inside of a building, it is possible that all phases of the event can be performed there. Therefore, this event would not be affected by inclement weather.

Objectives

Through participation in the national event, participants will be able to

1. Demonstrate knowledge and skills used in agronomic sciences.
2. Explore career opportunities, skills and proficiencies in the agronomy industry.
3. Determine the ability to identify:
    a. Agronomic
    b. Crops
    c. Weeds
    d. Seeds
    e. Insects
    f. Diseases
    g. Plant nutrient deficiencies
    h. Plant disorders
    i. Crop grading and pricing
    j. Equipment
    k. Local, state and global issues
4. Evaluate a scenario and develop a crop management plan including crop selection, production and marketing.
5. Demonstrate understanding of sustainable agriculture and environmental stewardship through the use of integrated pest management and best management practices.

Format

1. Four individuals per school form a team. All four members will be scored and all four scores will count towards the team total.
2. Each contestant will be allotted thirty (30) minutes for each of the five (5) areas of the CDE. (*Revised 8/11)*

Activities	Individual Points
General knowledge exam (state only)	100
Plant identification	150
Soils	100
Insects	100
Plant Disorders	100
TOTAL	550

Part 1 – General Knowledge Examination ..... *100 Points*

- Fifty (50) objective-type multiple choice questions will be given to each participant covering agronomic practices for production of field crops. (2 pts. each)
  - **Resource:** National FFA contest test bank.

Part 2 – Identification .....*150 Points*

- Each participant will identify thirty (30) weed and/or crop plants and/or seeds (live, mounted, or photographs)
- Specimens will come from the weed and crop plants and seed lists (Abbreviated from National Agronomy CDE) Update list to reflect changes in National FFA CDE. No change to the rule, only to the reference list. New list will remove Sudangrass, consolidate Green Foxtail and Yellow Foxtail to just Foxtail species, and will add Cressleaf Groundsel and Silverleaf Nightshade. ***(Adopted 2021)***
- Insects: Identification list updated to reflect changes in National FFA Agronomy contest.
- Insect Identification Practicum: the following specimens will not be included in the Louisiana FFA Agronomy CDE until a new scantron is produced by Judging Card:
  Corn Earworm Adult
  European Corn Borer Adult
  Armyworm Adult
  Cutworm Adult
  (Adopted 2023)

Identify 10 insects (4 points) and determine the insect's Economic Impact (3 points) and Mouth Part (3 points). Each insect is worth 10 total points. ***(Adopted 2021)***

Official Identification Lists can be found on the LA FFA CDE Website (http://www.la-ffa.org/agronomy)

- **Resources:**
  - Crop, weed, and seed abbreviated lists (see attached lists)
  - Preserved plant and seed specimens – various sources
  - www.plants.usda.gov
  - http://ipm.ppws.vt.edu/weedindex.htm (Virginia Tech website)
  - www.wssa.net (Weed Science Society of America)

Part 3 – Soils ..... *100 Points*

Resource: http://www.nrcs.usda.gov/wps/portal/nrcs/soilsurvey/soils/survey/state/ *(Revised 2017)*

- 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.

- Identifying various (3) soil textures and (3) structures:

.

Part 4 –Insects *.....100 Points*

- **Insects –** identify insects and answer questions about impact (pest or beneficial) on field crops.
  Resource: http://insects.tamu.edu/fieldguide
  http://www.uky.edu/Ag/Entomology/entfacts/effldcrp.htm
  (free)
  http:// www.imp.uiuc.edu/fieldcrops/index.html (Illinois IPM for agronomic crops- corn, sorghum, wheat, soybeans, alfalfa)
  http://www.entsoc.org (Entomological Society of America)

Part 5-Plant Disorders**.....***100 Points*

Plant disorders – identify plant disorders from live plants or photographs.

Specimens will come from the insects and plant disorders list (Abbreviated from National Agronomy CDE)

Resources:

http://agri.atu.edu/people/Hodgson/FieldCrops/Mirror/Nutrient%20Def.htm (nutrient deficiencies – good descriptions and pictures)
http://www.back-to-basics.net/nds/index.htm (nutrient deficiency symptoms, various crops)
http://ipcm.wisc.edu/scout/field_pdfs/herbicideinjury.pdf (herbicide injury key)
http://aghort.nmsu.edu/plantdisorders/Cotton/CottonDisorders.html#anchor46437 (disorders of cotton)
http://www.ipm.uiuc.edu/fieldcrops/index.html (Illinois IPM for agronomic crops – corn, sorghum, wheat, soybeans, alfalfa)
http://s142412519.onlinehome.us/uw/pdfs/A3800.PDF#search=%22plant%20disorders%22 (corn smut and rust)
http://www.intersites.co.uk/14040/ (primarily horticulture crops, but does focus on pests, weeds, diseases and disorders and how to determine)
http://www.topturf.net/tsdamage.htm (insect damage of several common insects on landscape plants)

Total Points.....550

Teams and individual ties will be broken using the following tiebreakers: *(Revised 8/11)*

1. Highest score on identification
2. Highest score on soils
3. Highest score on insect practicum
4. Highest score on general knowledge examination
5. Highest score on plant disorders