



2026

Agromony

2026 Updates

Below is a summary of updates to the Agronomy CDE Handbook for the 2026 convention cycle. We plan to release handbook changes that may impact instruction in June of the year prior but may finalize smaller updates through February of the competition year. All updates and changes aim to provide a positive, relevant experience for all competitors.

HANDBOOK UPDATE:

JULY 2025

JANUARY 2026

Policies and Guidelines

I. Eligibility of Students

- Added — Eligibility is based on the National FFA membership year (August 1–July 31)—not a school's academic calendar or "rising grade" designation.

***Rationale:** Clarifying that a student must be a 7th-grade member on the date of the qualifying event to compete or qualify at a state qualifying event. A student who is still a 6th-grade member on that date is not eligible to qualify and may compete for 7th-grade consideration only in qualifying events held on or after August 1.*

- Consolidated the Team Activity Presentation and Questions Rubrics into a single Oral Summary rubric, reduced the points from 250 to 100 points, with expanded criteria and updated descriptors. Specific point values are provided for each descriptor level, along with observable behaviors focused on process and communication. An additional support page includes short practice bullets for the components and a list of possible prompts to improve the consultation.

***Rationale:** Clarifies the parameters of the activity, removes replication and improves the evaluation process.*

Refer to the National FFA Career and Leadership Events webpage on FFA.org for the most up-to-date career and leadership development handbook edition.

CONTACT

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FFA VISION

Growing the next generation of leaders who will change the world.

FFA MISSION

FFA makes a positive difference in the lives of students by developing their potential for premier leadership, personal growth and career success through agricultural education.

FFA CODE OF CONDUCT

FFA members participating in National FFA programs understand and agree to abide by the National FFA Code of Conduct at:

<https://ffa.app.box.com/s/x6l2lkovv4x9tgiegy73mei30zvliip5i>

Guiding Principles

National awards and competitive events should:

1. Inspire members to explore, learn, and be prepared for future careers related to the AFNR career pathways and FFA AFNR Value Chain.
2. Recognize achievements in skill development and knowledge, including:
 - a. leveraging relevant technologies
 - b. utilizing creative problem-solving
 - c. meeting developmentally appropriate learning objectives (Bloom's Taxonomy)
 - d. utilizing employability skills (teamwork, communication, collaboration)
3. Be accessible and engaging for all students and FFA members.
4. Provide awards and recognition opportunities for students at all levels.
5. Work with other groups to utilize or partner with existing experiences.
6. Provide feedback that promotes personal and professional growth.

Agriculture, Food and Natural Resources (AFNR)

Career Cluster Content Standards

The National Council for Agricultural Education has provided permission to the National FFA Organization to use the National AFNR Career Cluster Content Standards in the development of their educational resource materials. The National Council for Agricultural Education is the owner and developer of the National AFNR Career Cluster Content Standards © 2016 and reserves all rights to the original material used here with permission. In addition, the National Association of State Directors of Career and Technical Education/National Career Technical Education Foundation (NASDCTE/NCTEF) has provided permission to use the Common Career and Technical Core (CCTC) Standards in support of this project. NASDCTE/NCTEF are the owners and developers of the Common Career and Technical Core (CCTC) Standards © 2012 and reserve all rights to the original material used here with permission.

The National FFA Organization has adopted the AFNR Career Cluster Content Standards and integrated them into the national award and recognition programs for the benefit of members, school administration, and agriculture as a whole. For a complete set of the standards, please visit the [2016 AFNR Career Cluster Content Standards](https://ffa.app.box.com/s/hrxlqv7q6zo54xfi5x5ktylyusqihy0). You may access the standards alignments for this event at <https://ffa.app.box.com/s/hrxlqv7q6zo54xfi5x5ktylyusqihy0>.

Professional Integrity

FFA members participating in national FFA programs and events understand and agree that all work must result from their own effort and ability, created and completed alone (except for partner or chapter applications). When outside sources (direct quotes or phrases, specific dates, figures, or other materials) are used for a project, document, or application, the required reference citation must be completed according to the rules specified by the applicable handbook.

While participating in National FFA programs, FFA members are prohibited from:

- Plagiarizing
- Violating copyright
- Cheating
- Falsifying information
- Using another person's results or thoughts as their own, even with this person's permission. This includes work done by a family member or a mentor.
- Using information or data obtained from the internet without proper citation.

Any attempt to gain an unfair advantage will not be tolerated. Non-compliance, which constitutes plagiarism, will automatically disqualify a member.

Use of Artificial Intelligence (AI) for National Programs and Events

Artificial intelligence (AI) refers to computer systems capable of performing complex tasks that historically only a human could do, such as reasoning, making decisions, or solving problems. As AI continues to evolve, it can be a tremendous tool to help companies, organizations and individuals enhance their productivity and work. Therefore, the National FFA Organization allows the use of AI tools. FFA members may use AI tools, such as ChatGPT, Gemini, and CoPilot, to assist them in their learning.

Appropriate uses of AI may include:

- generating ideas for any FFA-related assignments, projects, contests and award applications
- checking facts of a phenomenon
- checking for and correcting grammatical errors in a paper written by a member

For more information, please see the [Standard Operating Procedures on the Use of Artificial Intelligence \(AI\) for National Programs and Events document](#).

Member Safety

At National FFA, we're committed to creating a safe, inclusive, and supportive environment for all members— students, educators, and families alike. We believe in fostering premier leadership, personal growth, and career success, and that starts with a community built on respect and professionalism. These guidelines outline the expectations for behavior and conduct across all FFA activities and spaces. By upholding these principles, members help ensure FFA remains a place where everyone can thrive.

Please take a moment to review these policies, [here](#) (Member Safety at FFA.org), which includes an agreement to abide by the [National FFA Code of Conduct](#). Adherence is essential—violations may result in disciplinary action, including restricted access to events.

2026 CAREER AND LEADERSHIP DEVELOPMENT EVENTS GUIDELINES

POLICIES AND GUIDELINES

I. Eligibility of Students

- a. Eligibility is based on the National FFA membership year (August 1–July 31)—not a school’s academic calendar or “rising grade” designation.
- b. Each student must be a student FFA member on the current roster in good standing with the local chapter, state FFA association, and the National FFA Organization during the school year in which the student qualified to participate at the national level.
- c. If a student’s name is not on the chapter’s official roster, please work with the National FFA membership team to update the membership before the national event.
- d. The student, at the national event, must be:
- e. A secondary education (grades 7–12) FFA member during the school year in which the participant qualified to participate at the national level as determined by the roster at the time of qualifying.
- f. A graduating senior is eligible to compete in state and national career and leadership development events up to and including their first national convention following graduation.)
- g. Participants in the Creed Speaking and Conduct of Chapter Meetings LDEs must qualify as a 7th, 8th, or 9th grade member.
- h. If a student moves to a different chapter or a different state once the student has qualified as a state representative in an event, that student may be allowed to compete in the national event with the school they qualified with during the qualifying year.
- i. A student may only participate in the same official CDE/LDE once. No student may participate in more than one National FFA event each year.
- j. Each student participating in a national event must complete an online Waiver and release of Liability through the convention registration system.

Selection/Certification of State Teams

- a. Each state will submit a team declaration form by July 1, before the national FFA convention. Participation in each declared event will incur an entry processing fee. [State Staff Declaration Instructions](#)
- b. Each team will be composed of the number of members determined by the specific event rules and formats. The members of a state team must be from the same chapter.
- c. All students must be certified online by the designated deadline of Sept. 1 or within 10 days of the qualifying date if after the deadline. Advisors or state staff must certify members in each event by the certification deadline. [How to certify a team or member Instructions](#)
- d. Once the original certification has been completed, no member may be added without first deleting a member. (See III. Drop/Add Process).
- e. State staff shall approve students are eligible (See I. Eligibility of Students). [State Staff Certification Approval Instructions](#) If an ineligible student participates in any career or leadership development event, the member will be disqualified, which may also impact the team’s ranking.
- f. States may approve teams comprised of fewer members than the required members.
- g. Substitutions of any student or team are subject to the determination and approval of the state association.
- h. If reputable international competitions invite teams to competition the national organization will certify National FFA Career and Leadership Development Event winners for international competition when states request. This is with the understanding that the state team will provide their travel expenses.

II. Drop/Add Process

- a. dropped, the online drop/add process must be used to substitute or drop the team member. A team member must be dropped before another team member may be substituted. [How to Drop/Add a team member Instructions](#)
- b. The Drop/Add must be submitted one hour before the first event component or official activity of an event as listed in the schedule of events. Changes will not be permitted after this time.
- c. Members added to any team must meet all the eligibility and membership requirements described in this Guide's other sections.
- d. Substitutions may be allowed after the online document submission date (See individual Event Handbooks for details).

III. Disqualification

- a. FFA members participating in national FFA programs and events understand and agree that all work must result from their effort and ability, created and completed alone (except for partner or chapter applications). Details about Professional Integrity, the Use of Artificial Intelligence (AI) for National Programs and Events, and the National FFA Code of Conduct are included in event handbooks.
- a. Any verbal or non-verbal communication between students during an event that is not part of the event will be sufficient cause to eliminate the team member involved from the career development event.
- b. Teams or students arriving after the career development event has begun may be disqualified or penalized. This includes a zero or lower score for that team or student for the missed section of the career or leadership development event.
- c. Any assistance given to a student from any source other than the career development event officials or assistants will be sufficient to disqualify that student from the career and leadership development event.
- d. Event superintendents may stop any student if they deem their manner hazardous to themselves or others. Such action may result in a zero or lower score for that student for that section of the career or leadership development event.
- e. Students who start an event and do not complete it without notifying event officials at the time of departure may be disqualified. This can affect the overall team rank and position; in some events, it could also disqualify the entire team.
- f. Students will not be allowed to utilize personal electronic communication devices other than those approved by the event officials during the entire event. Students who access personal electronic communication devices without prior approval from the event officials may be disqualified from the national event.
- g. Any CDE/LDE student, team, advisor, or coach who is proven to have gained access to event materials intended for or utilized by the event committee during the competition will be disqualified from the national event.

Purpose

The National FFA Agronomy Career Development Event aims to create interest and promote understanding of agronomy by providing opportunities for recognition through the demonstration of skills and proficiencies. It also allows students to explore career opportunities available in agronomy and encourages students to pursue careers in agronomy.

Objectives

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

- Demonstrate knowledge and skills used in agronomic sciences.
- Explore career opportunities, skills and proficiencies in the agronomy industry.
- Determine the ability to identify agronomic:
 - Crops
 - Weeds
 - Seeds
 - Insects
 - Diseases
 - Plant nutrient deficiencies
 - Plant disorders
- Evaluate an in-field scenario to determine probable causes and possible management decisions.
- Demonstrate understanding of sustainable agriculture and environmental stewardship through integrated pest management and best management practices.

Event Rules

Review the Career and Leadership Development Event Policy and Guidelines for information on eligibility, selection, certification, team member changes, disqualification and more.

[General Information for National Competition](#) can provide general guidance on preparing for national competition.

Each team will be comprised of four members.

- All four participant scores will determine the total team score.
- It is highly recommended that participants wear FFA Official Dress for this event.
- Under no circumstances will a participant be allowed to destroy any items in the identification portion of the practicums. Any infractions of this rule will be sufficient to eliminate a team from the event.
- Participants will be assigned to group leaders who will escort them to various event-staging sites. Each participant is to stay with his or her assigned group leader throughout the event or until told to change leaders by the event superintendent.

Written Material

All written material will be furnished for the event. No written materials such as tests, problems and worksheets should be removed from the site.

Event Format

Materials students must provide include the following:

- Clean, free-of-notes clipboard.
- Two sharpened No. 2 pencils.
- Calculator — Should be battery operated, non-programmable and non-scientific (basic five function only). No other calculators can be used during the event.

TEAM EVENT OUTLINE

- ❖ 1 Scenario – 1 Field to Diagnose
 - 4 Potential Causes (Packet Sections)
 - Nutrient Management
 - Soil and Water Management
 - Pest Management
 - Crop Management
 - Scenario may include but is not limited to pictures, video, and audio files, along with other resources (graphs, tables, extension resources, etc.) listed below in Team Activity.
- ❖ 50 Written Questions (total value - 250 points)
 - Each Potential Cause – 10 Questions (4 causes = 40 questions)
 - Math Questions
 - Science/ID Questions
 - Resource Questions
- ❖ Final “Crop Condition” Sheet – Summarizes the issue: 10 questions
 - Severity Ratings/Rankings for 4 Potential Causes (4 questions)
 - What is the Primary Agronomic Issue in the field?
 - What is causing the Primary Issue?
 - What is your recommendation to correct the issue?
 - What other changes might need to be made for this recommendation to be effective?
- The team has 60 minutes to complete the Written Component and prepare the Oral Summary

Oral Summary of the Situation and Primary Cause (total value 250 points)

- 5-8 minute Oral Summary
- Plus 4-5 minutes of judging questions/conversation
- Presentation to include:
 - What is the scenario?
 - What is the primary cause?
 - What other issues could be related?
 - What recommendation would you make to correct the issue?
 - What other considerations might you make?

Team Activity (500 Points)

The team will be given a diagnostic scenario (one field, one crop from the region/crop list) that contains four potential causes. Potential causes fall into four categories: Nutrient Management, Soil and Water Management, Pest Management, and Crop Management. The Total Team Activity time (written and oral presentation) will be 90 minutes.

The team event scenario will be chosen from a cropping region of the country, assigned by year on the region map. The [region/crops list](#) follows the map on page 6.

Resources provided for the team activity may include but are not limited to seed tag information, tillage practices, pesticide labels, extension bulletins, fertility reports, tissue analysis, water management, seeding rates, variety information, trial data and application of information such as pesticide application, fertilizer application and irrigation application.

Diagnostic scenario and the four potential causes may include but are not limited to pictures, video, audio, tables, graphs or other documents that outline potential field issues related to the cropping system. Use this link to access the example [2024 Example Team Event](#).

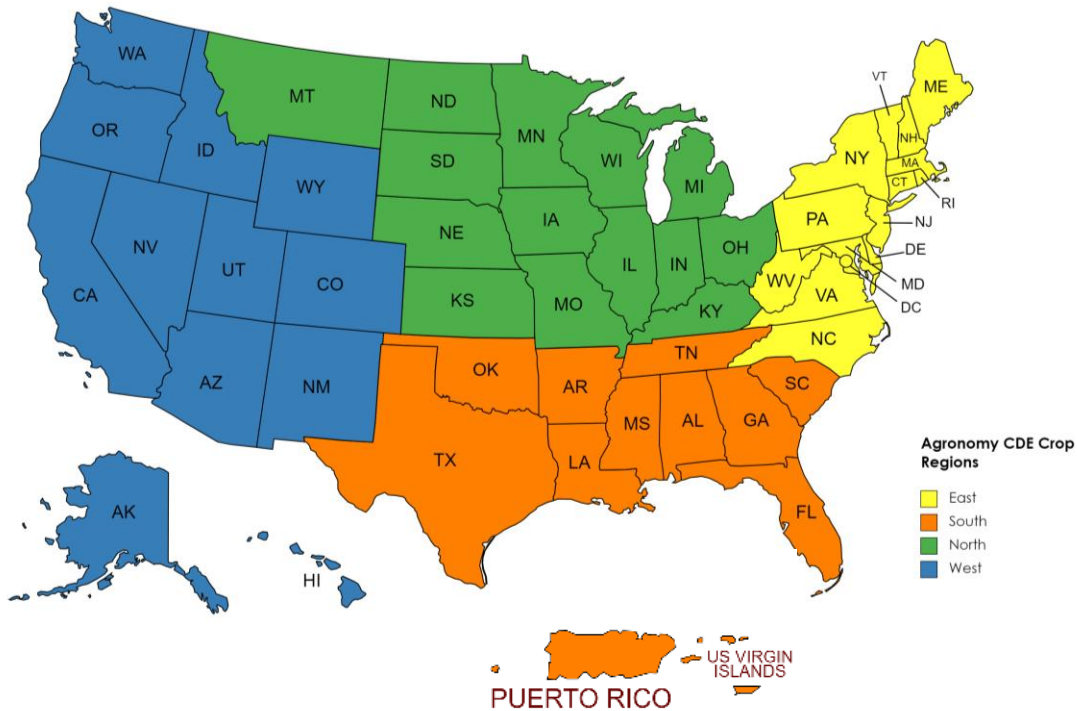
Written Component (250 points)

- The written component of the Team Activity will include a question-and-answer packet with five sections and a total of 50 questions (5 points each). Four sections will focus on a potential cause in each category listed above. Each of these four category/potential cause sections will include ten questions each. Questions for the four causal packets may include math, science/identification or resource questions. The fifth section will summarize the issue with ten questions on the severity of the four potential causes and prepare the oral summary.
- This five-section answer packet will be worth a total of 250 points. The team will have 60 minutes to complete the written component and prepare an oral summary for judging. Time warnings will be given at 45 minutes, 55 minutes and 58 minutes.

Oral Summary component (100 points)

- The team will prepare a 5–8-minute summary and then converse with judges for 10-12 minutes. The team will converse with a group of 3-4 judges; one judge will represent the “client”/grower (asking questions and generating dialogue with the team), and the remaining judges will observe. All judges will individually score the team based on the rubric. The team may use their written answer packet during the oral summary recap to the judges. The team cannot change their answer packet at this time. The answer packet will be turned in after the presentation judging. A list of considerations for preparing for the oral summary and the evidence prompts that might be used along with the rubric is available following the [Oral Summary rubric](#). The conversation should include:
 - What is the scenario?
 - What is the primary cause?
 - What other issues could be related?
 - What recommendation would you make to correct the issue?
 - What other considerations might you make?

National FFA Agronomy CDE Regional Areas



Created with mapchart.net

Regions

East (2024)

Connecticut
Delaware
District of Columbia
Maine
Maryland
Massachusetts
New Hampshire
New Jersey
New York
North Carolina
Pennsylvania
Rhode Island
Vermont
Virginia
West Virginia

North (2025)

Illinois
Indiana
Iowa
Kansas
Kentucky
Michigan
Minnesota
Missouri
Montana
Nebraska
North Dakota
Ohio
South Dakota
Wisconsin

South (2026)

Alabama
Arkansas
Florida
Georgia
Louisiana
Mississippi
Oklahoma
Puerto Rico
South Carolina
Tennessee
Texas
Virgin Islands

West (2027)

Alaska
Arizona
California
Colorado
Hawaii
Idaho
Nevada
New Mexico
Oregon
Utah
Washington
Wyoming

Crops List

East (2024)

Corn Silage
Hay (cool season grass)
Oats
Peanuts

North (2025)

Canola
Corn grain
Soybeans
Sugar beets

South (2026)

Cotton
Rice
Sorghum
Sugarcane

West (2027)

Hay (alfalfa)
Potatoes
Tomato
Wheat

INDIVIDUAL PRACTICUMS

General Knowledge Examination (240 points)

Sixty objective multiple-choice questions will be given to each participant. These questions will be divided equally between the four categories adopted from the performance objectives of the International Certified Crop Advisor (ICCA) exam. These four categories have been adopted from the International Certified Crop Advisor (ICCA) performance objectives: Pest Management, Nutrient Management, Crop Management and Soil and Water Quality. The ICCA Performance Objectives may be accessed at <https://www.certifiedcropadviser.org/files/certifiedcropadviser/international-performance-objectives.pdf>. As we will be using a test bank of questions based on the ICCA performance objectives, the 2019 knowledge exam is the last exam that we will release on FFA.org.

Identification (200 points)

Students will identify 50 weed and/or crop plants and/or seeds. Plants may be presented in any stage of growth following emergence. The list of possible specimens is in the reference section of the handbook.

Soils (200 points)

The practicum will focus on soil fertility, soil properties, and their application, as outlined in the "Soil and Water Management Competency Area" and the "Nutrient Management Competency Area" section of the International Certified Crop Advisor (ICCA) exam performance objectives can be found at:

<https://www.certifiedcropadviser.org/files/certifiedcropadviser/international-performance-objectives.pdf>.

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

- Utilize web soil survey data <https://websoilsurvey.nrcs.usda.gov/app/> and answer questions related to:
 - Soil drainage (e.g., poor, moderate, well) and the impact of these classifications.
 - Topographic position (e.g., summit, slope, depression).
 - Identification of USDA land capability classes and answer problem-solving questions related to various classes.
 - Using a soil survey to locate specific sites, use of suggested soil spots and questions related to the soil survey map.
 - Interpretation of graphs and tables of data based on soil parameters.
- Utilize provided references and situational specific information to answer general questions about soil fertility, soil properties, and their application. While nutrient management and soil fertility recommendations vary by state, this practicum will focus on the foundational concepts as outlined in the International Certified Crop Advisor (ICCA) exam performance objectives. Applications may include, but not limited to:
 - Proper soil sample collection
 - Interpretation of soil test data
 - Determining nutrient application rates
 - Irrigation water management
 - Interpretation of graphs and tables of data based on soil parameters.
 - General references:

- Tri-State Fertilizer Recommendations for Corn, Soybeans, Wheat, and Alfalfa. - extensionpubs.osu.edu/content/sample/e974.pdf
- University of Minnesota Extension - <https://extension.umn.edu/small-farms/soils-sampling-and-nutrient-guidelines>
- Oklahoma Soil Fertility Handbook - <https://extension.okstate.edu/fact-sheets/oklahoma-soil-fertility-handbook-full.html>
- University of Nebraska - <https://cropwatch.unl.edu/soil-fertility>
- University of Kentucky - <https://publications.ca.uky.edu/sites/publications.ca.uky.edu/files/AGR1.pdf>
- Mississippi State University Extension - <http://extension.msstate.edu/publications/publications/nutrient-management-guidelines-for-agronomic-crops-grown-mississippi>
- University of Maryland Extension - <http://extension.msstate.edu/publications/publications/nutrient-management-guidelines-for-agronomic-crops-grown-mississippi>
- Irrigation – University of Wyoming - https://www.wyoextension.org/werawater/region8/PDFs/bmps_colorado/xcm173.pdf
- Demonstrate basic understanding of Soil orders. Students are not expected to know sub orders within a given order. Some good resources include:
 - <https://www.uidaho.edu/cals/soil-orders>
 - https://en.wikipedia.org/wiki/USDA_soil_taxonomy
 - <https://www.soils4teachers.org/profiles/>
 - <https://iastate.pressbooks.pub/introsoilscience/chapter/soil-orders/>
 - https://forces.si.edu/soils/02_03_03.html
 - https://www.youtube.com/watch?v=SGznL_rZSEA

Pest management (200 points)

This portion of the event is designed for the student to accurately diagnose diseases and disorders that could occur in different crops by first narrowing down the list of potential causes by visually reviewing the symptoms seen in the available photos and/or samples.

Disorders (100 points)

Ten samples will be identified according to category, causal agent, and damage location. Refer to the [Agronomic Disorders Practicum Scorecard](#) for the category, agent and damage location lists.

- **Crops:** The only crops included in this part of the practicum will be those included in the National FFA Agronomy CDE Handbook Crops List used for identification.

Special Note: Specific Disease and Disorder practicum guidelines were initiated for the 2024 Agronomy CDE. Previous CDE sample sets and related answer keys may not reflect these guidelines. These guidelines are provided on the pages following the [Agronomic Disorders Practicum Scorecard](#).

Insect Identification (100 points)

Ten samples will be identified according to the insect's name, economic impact and mouth part. For additional details, refer to the [Insect Identification Practicum Scorecard](#).

Event Scoring

Participant scores are the sum of the individual phases of the event, and team scores are the sum of the four participant scores plus the team activity.

Activities	No. of Questions	Question Value	Individual Points	Team Points
Written exam	60	4	240	960
Identification	50	4	200	800
Soils	25	8	200	800
Pest management	20	10	200	800
TEAM ACTIVITY POINTS				350
TOTAL POINTS POSSIBLE			840	3,860

Tiebreakers

If ties occur for awards, the following components will be used to determine the placings:

Team

1. Team activity
2. Total written exam

Individual

1. Written exam
2. Plant and seed Identification
3. Soil

Awards

Awards will be presented at the awards ceremony to individuals and/or teams based upon their rankings. Advisors of cash award recipients will receive information about claiming their award following the convention. Guidelines for amounts and recipients of cash awards can be found [here](#).

References

This list of references is not intended to be all-inclusive. Other sources may be utilized, and teachers are encouraged to use the best instructional materials available. Make sure to use discretion when selecting website references and use only reputable, proven sites. The following list contains references that may prove helpful during event preparation. The most current edition of resources will be used. Please note that universities frequently update or change their web servers, which can invalidate the listed website.

Past CDE materials, an example of the 2024 team activity and other resources are available in the Resources folder [here](#) on [FFA.org](https://www.ffa.org).

Plant Identification

- Flashcards for both seeds and plants are available through Wards Natural Science Establishment: <https://wardsci.com/store/>
- Weeds of the Northeast, Comstock Books, by Richard H. Uva (Author), Joseph C. Neal (Author), Joseph M. Ditomaso (Author).
- Weeds of the Great Plains, Nebraska Department of Agriculture by James L. Stubbendieck (Author).

- Weeds of the West, University of Wyoming Extension, by Tom D. Whitson (Editor).
- Common Weed Seedlings of the North Central States, Michigan State University Extension.
- Sunset Western Garden Book.
- An Illustrated Guide to Arizona Weeds, University of Arizona, <https://www.uapress.arizona.edu/onlinebks/WEEDS/TITLWEED.HTML>
- Weeds of California and Other Western States University of California.
- Interactive Encyclopedia of Weeds of North America, North Central Weed Science Society.
- <http://plants.usda.gov/java/>
 - Agriculture/Pests-and-Diseases/Weeds/Virginia-Tech-Weed-Identification-Guide. <https://weedid.cals.vt.edu/>
 - http://www.ipm.ucanr.edu/PMG/weeds_multi.html
 - <http://wssa.net/weed/weed-identification/>

Seed Identification

- Illustrated Taxonomy Manual of Weed Seeds, North Central Weed Science Society.
- Weed Seeds of the Great Plains, University Press of Kansas. <http://www.oardc.ohio-state.edu/seedid/> At the site, enter the common name or scientific name to find the seed.
- <http://plants.usda.gov/java/> Disease/Disorder
- <http://plantdiseasehandbook.tamu.edu> Insects
- <http://www2.ca.uky.edu/agcomm/pubs/ENT/ENT68/ENT68.pdf>

Soils

- <http://www.nrcs.usda.gov/wps/portal/nrcs/soilsurvey/soils/survey/state/>
- <https://websoilsurvey.nrcs.usda.gov/app/>

Written Exam

There is no one resource for the exam. The Agronomy CDE has adopted these four categories from the performance objectives of the International Certified Crop Advisor (ICCA) exam. You may access these at the American Society of Agronomy, Inc., <https://www.certifiedcropadvisor.org/files/certifiedcropadvisor/international-performance-objectives.pdf>.

Certified Crop Advisor (CCA) Training Resources is a resource guide for validated study materials for the CCA international exam and the National FFA Agronomy CDE.

<https://ffa.box.com/s/llrt6zgvyunmulkq6m6zkbaft9576pb4>

- Ohio Agronomy Guide - https://stepupsoy.osu.edu/sites/hcs-soy/files/472%20Ohio%20Agronomy%20Guide%2015%20Ed%20red_0.pdf
- Illinois Agronomy Guide - <https://extension.illinois.edu/global/agronomy-handbook>
- NDSU Crop Production - <https://www.ndsu.edu/agriculture/ag-hub/ag-topics/crop-production>
- Georgia Crop Production Guide - <https://grains.caes.uga.edu/content/dam/caes-subsite/grains/docs/corn/2024-Corn-Production-Guide.pdf>

Weeds List

Conforming with the Weed Science Society of America's standardized name list.

ID #	Weed Name	Form	Latin Name
101	amaranth, Palmer	plant only	<i>Amaranthus palmeri</i>
102	barnyardgrass	plant or seed	<i>Echinochloa crus-galli</i>
103	bindweed, field	plant or seed	<i>Convolvulus arvensis</i>
104	brome, downy	plant only	<i>Bromus tectorum</i>
105	buckwheat, wild	plant or seed	<i>Fallopia convolvulus</i>
106	carrot, wild	plant or seed	<i>Daucus carota</i>
107	cheat	plant or seed	<i>Bromus secalinus</i>
108	chickweed, common	plant or seed	<i>Stellaria media</i>
109	cocklebur, common	plant or seed as bur	<i>Xanthium strumarium</i>
110	crabgrass, large	plant or seed	<i>Digitaria sanguinalis</i>
111	crownvetch, trailing	plant or seed	<i>Securigera varia</i>
112	dandelion	plant or seed	<i>Taraxacum officinale</i>
113	dock, curly	plant or seed	<i>Rumex crispus</i>
114	dodder	plant or seed	<i>Cuscuta</i> spp.
115	foxtail, giant	plant or seed	<i>Setaria faberi</i>
116	foxtail, green	plant or seed	<i>Setaria viridis</i>
117	foxtail, yellow	plant or seed	<i>Setaria pumila</i>
118	goatgrass, jointed	plant or seed	<i>Aegilops cylindrica</i>
119	groundcherry	plant or seed	<i>Physalis</i> spp.
120	groundsel, cressleaf	plant or seed	<i>Packera glabella</i>
121	hairy galinsoga *New 2025	plant only	<i>Galinsoga quadriradiata</i> Cav.
122	hemlock, poison *New 2025	plant only	<i>Conium maculatum</i> L.
123	horsenettle	plant or seed	<i>Solanum carolinense</i>
124	horseweed (maretail)	plant only	<i>Conyza canadensis</i>
125	jimsonweed	plant or seed	<i>Datura stramonium</i>
126	johnsongrass	plant or seed	<i>Sorghum halpense</i>
127	knapweed, Russian	plant only	<i>Rhaponticum repens</i>
128	knotweed, prostrate	plant or seed	<i>Polygonum aviculare</i>
129	kochia	plant or seed	<i>Bassia scoparia</i>
130	kudzu	plant only	<i>Pueraria montana</i> var <i>lobata</i>
131	lambsquarters, common	plant or seed	<i>Chenopodium album</i>
132	lettuce, prickly	plant or seed	<i>Lactuca serriola</i>
133	mallow, common	plant or seed	<i>Malva neglecta</i>
134	milkweed, common	plant or seed	<i>Asclepias syriaca</i>
135	morning glory	plant or seed	<i>Ipomoea</i> spp.
136	mustard, wild	plant or seed	<i>Sinapis arvensis</i>
137	nightshade, black	plant or seed	<i>Solanum nigrum</i>
138	nightshade, silverleaf	plant or seed	<i>Solanum elaeagnifolium</i> Cav.

Weeds List

Conforming with the Weed Science Society of America's standardized name list.

ID #	Weed Name	Form	Latin Name
139	nutsedge	plant or seed as nutlet	<i>Cyperus</i> spp.
140	oat, wild	plant or seed	<i>Avena fatua</i>
141	onion/garlic, wild	plant or seed	<i>Allium</i> spp.
142	pennycress, field	plant or seed	<i>Thlaspi arvense</i>
143	pigweed, redroot	plant or seed	<i>Amaranthus retroflexus</i>
144	plantain, broadleaf	plant or seed	<i>Plantago major</i>
145	plantain, buckhorn	plant or seed	<i>Plantago lanceolata</i>
146	puncturevine	plant or seed	<i>Tribulus terrestris</i>
147	purslane, common	plant or seed	<i>Portulaca oleracea</i>
148	quackgrass	plant or seed	<i>Elymus repens</i>
149	ragweed, common	plant or seed	<i>Ambrosia artemisiifolia</i>
150	ragweed, giant	plant or seed	<i>Ambrosia trifida</i>
151	sandbur, field	plant or seed	<i>Cenchrus spinifex</i> Cav.
152	shepherd's-purse	plant or seed	<i>Capsella bursa-pastoris</i>
153	sicklepod	plant or seed	<i>Senna obtusifolia</i>
154	smartweed	plant or seed	<i>Persicaria</i> spp.
155	sowthistle	plant or seed	<i>Sonchus</i> spp.
156	spurge, leafy	plant or seed	<i>Euphorbia esula</i>
157	spurge, prostrate	plant only	<i>Euphorbia prostrata</i>
158	sunflower, common	plant or seed	<i>Helianthus annuus</i>
159	tansymustard, pinnate	plant or seed	<i>Descurainia pinnata</i>
160	thistle, bull	plant or seed	<i>Cirsium vulgare</i>
161	thistle, Canada	plant or seed	<i>Cirsium arvense</i>
162	thistle, Russian	plant or seed	<i>Salsola tragus</i>
163	velvetleaf	plant or seed	<i>Abutilon theophrasti</i>
164	waterhemp	plant or seed	<i>Amaranthus tuberculatus</i>

Crops List

Conforming with the United States Department of Agriculture plant database.

ID #	Crop Name	Form	Scientific Name
201	alfalfa	plant or seed	<i>Medicago sativa</i>
202	barley	plant or seed	<i>Hordeum vulgare</i>
203	bermudagrass	plant or seed	<i>Cynodon dactylon</i>
204	black bean	seed only	<i>Phaseolus vulgaris</i>
205	broccoli	plant only	<i>Brassica oleracea</i> var. <i>italica</i>
206	buckwheat	plant or seed	<i>Fagopyrum sagittatum</i>
207	cabbage	plant only	<i>Brassica oleracea</i>
208	canola	plant or seed	<i>Brassica napus</i>
209	cantaloupe	plant or seed	<i>Cucumis melo</i> var. <i>cantalupensis</i>
210	carrot	root provided	<i>Daucus carota</i> L. var. <i>sativus</i>
211	cauliflower	plant only	<i>Brassica oleracea</i> var. <i>botrytis</i>
212	cereal rye	plant or seed	<i>Secale cereale</i>
213	chickpea	seed only	<i>Cicer arietinum</i>
214	chili pepper	plant or seed	<i>Capsicum annuum</i>
215	corn	plant only	<i>Zea mays</i>
216	cotton	plant or seed	<i>Gossypium hirsutum</i>
217	cranberry	plant only	<i>Vaccinium macrocarpon</i>
218	cucumber	plant or seed	<i>Cucumis sativus</i>
219	dent corn	seed only	<i>Zea mays</i> var. <i>indentata</i>
220	dry bean	plant only	<i>Phaseolus vulgaris</i>
221	durum wheat	seed only	<i>Triticum durum</i>
222	flax	plant or seed	<i>Linum usitatissimum</i>
223	hops	plant only	<i>Humulus lupulus</i>
224	Kentucky bluegrass	plant or seed	<i>Poa pratensis</i>
225	lentil	plant or seed	<i>Lens culinaris</i>
226	lettuce	plant or seed	<i>Lactuca sativa</i>
227	lima bean	seed only	<i>Phaseolus lunatus</i>
228	oat	plant or seed	<i>Avena sativa</i>
229	onion	plant or seed	<i>Allium cepa</i>
230	orchardgrass	plant or seed	<i>Dactylis glomerata</i>
231	pea	plant or seed	<i>Pisum Sativum</i>
232	peanut	plant or seed	<i>Arachis hypogaea</i>
233	pinto bean	seed only	<i>Phaseolus vulgaris</i>
234	popcorn	seed only	<i>Zea mays</i> var. <i>everta</i>
235	potato	plant only	<i>Solanum tuberosum</i>
236	red bean	seed only	<i>Phaseolus vulgaris</i>
237	red clover	plant or seed	<i>Trifolium pratense</i>
238	red wheat	seed only	<i>Triticum aestivum</i>

Crops List

Conforming with the United States Department of Agriculture plant database.

ID #	Crop Name	Form	Scientific Name
239	rice	plant or seed	<i>Oryza sativa</i>
240	safflower	plant or seed	<i>Carthamus tinctorius</i>
241	sorghum	plant or seed	<i>Sorghum bicolor</i>
242	soybean	plant or seed	<i>Glycine max</i>
243	spinach	plant or seed	<i>Spinacia oleracea</i>
244	squash	plant or seed	<i>Curcubita pepo</i>
245	strawberry	plant only	<i>Fragaria L.</i>
246	Sudangrass	seed only	<i>Sorghum bicolor</i>
247	sugar beet	plant or seed	<i>Beta vulgaris</i>
248	sugarcane	plant only	<i>Saccharum L.</i>
249	sunflower	plant or seed	<i>Helianthus annuus</i>
250	sweet corn	seed only	<i>Zea mays var. saccharata</i>
251	sweet potato	plant only	<i>Ipomoea batatas</i>
252	sweetclover	plant or seed	<i>Melilotus albus</i>
253	tall fescue	plant or seed	<i>Festuca arundinacea</i>
254	timothy	plant or seed	<i>Phleum pratense</i>
255	tobacco	plant or seed	<i>Nicotiana tabacum</i>
256	tomato	plant or seed	<i>Lycopersicon esculentum</i>
257	watermelon	plant or seed	<i>Citrullus lanatus</i>
258	wheat	plant only	<i>Triticum aestivum</i>
259	white bean	seed only	<i>Phaseolus vulgaris</i>
260	white clover	plant or seed	<i>Trifolium repens</i>
261	white wheat	seed only	<i>Triticum aestivum</i>

National Insect List Official Guide

ID #	Common Name	Latin Names, Order: Family for Possible Specimens	Mouth parts	Economic Impact
11	Alfalfa weevil, adult or larva	<i>Hyperica postica</i> , Coleoptera:Curculionidae	C	V
12	Aphid	various species, Homoptera:Aphididae	PS	R
13	Armyworm adult	<i>Pseudaletia unipuncta</i> , Lepidoptera:Noctuidae (true armyworm)	S	IS
		<i>Spodoptera frugiperda</i> , Lepidoptera:Noctuidae (fall armyworm)		
		<i>Spodoptera exigua</i> , Lepidoptera:Noctuidae (beet armyworm)		
14	Armyworm larva	<i>Pseudaletia unipuncta</i> , Lepidoptera:Noctuidae (true armyworm)	C	V
		<i>Spodoptera frugiperda</i> , Lepidoptera:Noctuidae (fall armyworm)		
		<i>Spodoptera exigua</i> , Lepidoptera:Noctuidae (beet armyworm)		
15	Bean leaf beetle	<i>Cerotoma trifurcata</i> , Coleoptera:Chrysomelidae	C	FV
16	Blister beetle	<i>Epicauta pennsylvanica</i> , Coleoptera:Meloidae (black blister beetle)	C	V
		<i>Epicauta pestifera</i> , Coleoptera:Meloidae (margined blister beetle)		
		<i>Epicauta vittata</i> , Coleoptera:Meloidae (striped blister beetle)		
17	Boll weevil	<i>Anthonomus grandis grandis</i> , Coleoptera:Curculionidae	C	F
18	Chinch bug	<i>Blissus leucoptera</i> , Hemiptera:Lygaeidae	PS	R
19	Colorado potato beetle, adult, or larva	<i>Leptinotarsa decemlineata</i> , Coleoptera:Chrysomelidae	C	V
20	Corn Earworm adult	<i>Helicoverpa zea</i> , Lepidoptera:Noctuidae	S	IS
21	Corn Earworm larva	<i>Helicoverpa zea</i> , Lepidoptera:Noctuidae	C	FV
22	Corn rootworm adult	<i>Diabrotica barberi</i> , Coleoptera:Chrysomelidae (northern)	C	FV
		<i>Diabrotica undecimpunctata howardii</i> , Coleoptera:Chrysomelidae (southern)		
		<i>Diabrotica virgifera</i> , Coleoptera:Chrysomelidae (western)		
23	Corn rootworm larva	<i>Diabrotica</i> sp., Coleoptera:Chrysomelidae	C	V
24	Cutworm adult	<i>Agrotis epsilon</i> , Lepidoptera:Noctuidae (black cutworm)	S	IS
		<i>Peridroma saucia</i> , Lepidoptera:Noctuidae (variegated cutworm)		
		<i>Striacosta albicosta</i> , Lepidoptera:Noctuidae (western bean cutworm)		
25	Cutworm larva	<i>Agrotis epsilon</i> , Lepidoptera:Noctuidae (black cutworm)	C	V
		<i>Peridroma saucia</i> , Lepidoptera:Noctuidae (variegated cutworm)		
		<i>Striacosta albicosta</i> , Lepidoptera:Noctuidae (western bean cutworm)		
26	European corn borer adult	<i>Ostrinia nubilalis</i> , Lepidoptera:Pyralidae	S	IS
27	European corn borer larva	<i>Ostrinia nubilalis</i> , Lepidoptera:Pyralidae	C	FV

ID #	Common Name	Latin Names, Order: Family for Possible Specimens	Mouth parts	Economic Impact
28	Field cricket	<i>Gryllus sp.</i> , Orthoptera:Gryllidae	C	F
29	Flea beetle	<i>Chaetocnema pulicaria</i> , Coleoptera:Chrysomelidae (corn flea beetle)	C	V
		<i>Systema blanda</i> , Coleoptera:Chrysomelidae (palestriped flea beetle)		
		<i>Phyllotreta striolata</i> , Coleoptera:Chrysomelidae (striped flea beetle)		
30	Grain weevil	<i>Sitophilus granarius</i> , Coleoptera:Curculionidae (granary weevil)	C	F
		<i>Sitophilus oryzae</i> , Coleoptera:Curculionidae (rice weevil)		
31	Grasshopper	various species, Orthoptera:Acrididae	C	V
32	Green lacewing	<i>Chrysopa sp.</i> , Neuroptera:Chrysopidae	C	B
33	Honeybee	<i>Apis mellifera</i> , Hymenoptera:Apidae	CL	B
34	Imported cabbageworm	<i>Pieris rapae</i> , Lepidoptera:Pieridae	C	FV
35	Japanese beetle	<i>Popilla japonica</i> , Coleoptera:Scarabaeidae	C	FV
36	Lady beetle adult or larva	various species, Coleoptera:Coccinellidae	C	B
37	Leafhopper	<i>Empoasca fabae</i> , Homoptera:Cicadellidae (potato leafhopper)	PS	R
38	Mexican bean beetle, adult or larva	<i>Epilachna varivestis</i> , Coleoptera:Coccinellidae	C	FV
39	Saltmarsh caterpillar	<i>Estigmene acrea</i> , Lepidoptera:Arctiidae	C	V
40	Spider mite	various species, Trombidiformes:Tetranychidae	PS	R
41	Spittlebug	various species, Hemiptera:Cercopidae	PS	R
42	Squash bug	<i>Anasa tristis</i> , Hemiptera:Coreidae	PS	R
43	Stink bug	various species, Hemiptera:Pentatomidae	PS	R
44	Striped cucumber beetle	<i>Acalymma vittatum</i> , Coleoptera:Chrysomelidae	C	FV
45	Tarnished plant bug	<i>Lygus lineolaris</i> , Hemiptera:Miridae	PS	R
46	Thrips	various species, Thysanoptera:Thripidae	PS	R
47	Tomato or tobacco hornworm	<i>Manduca sp.</i> , Lepidoptera:Sphingidae	C	FV
48	whitefly	various species, Homoptera:Aleryodidae	RS	V
49	wireworm	various species, Coleoptera:Elateridae	C	V

Mouth parts key:

C (chewing)
CL (chewing-lapping)
PS (piercing sucking)
RS (Rasping Sucking)
S (siphoning)

Economic impact key:

Must indicate all options in response

B (Beneficial)
F (fruit/flower destruction)
V (vegetative part destruction)
FV (Fruit/Flower AND Vegetative part destruction)
IS (indicator species)
R (removal of plant fluids)

Agronomic Disorders Practicum Scorecard

Name		Member Number		
Chapter	State	Team Number		
	Member Answer	Possible Points	Member Score	Causal Category
1.	Causal Category:		3	Biological (B) Cultural (C) Environmental (E)
	Agent:		4	
	Part of Plant Damaged:		3	
2.	Causal Category:		3	Agents
	Agent:		4	
	Part of Plant Damaged:		3	
3.	Causal Category:		3	Bacteria (B) Chemical (Ch) Compaction (Co) Drought (D) Frost damage (Fr) Fungus (Fn) Hail (Ha) Heat (Ht) Insect (I) Lightning (L) Mechanical (Me) Moisture (Mo) Nematodes (Ne) Nutritional (Nu) Pollution (P) Sun scald (S) Virus (V) Wind damage (W)
	Agent:		4	
	Part of Plant Damaged:		3	
4.	Causal Category:		3	Parts of Plant Damaged
	Agent:		4	
	Part of Plant Damaged:		3	
5.	Causal Category:		3	Reproductive parts (R) Vegetative parts (Ve) Value Added Agricultural Commodity (Va) More than one (M)
	Agent:		4	
	Part of Plant Damaged:		3	
6.	Causal Category:		3	
	Agent:		4	
	Part of Plant Damaged:		3	
7.	Causal Category:		3	
	Agent:		4	
	Part of Plant Damaged:		3	
8.	Causal Category:		3	
	Agent:		4	
	Part of Plant Damaged:		3	
9.	Causal Category:		3	
	Agent:		4	
	Part of Plant Damaged:		3	
10.	Causal Category:		3	
	Agent:		4	
	Part of Plant Damaged:		3	
TOTAL POINTS EARNED OUT OF 100 POSSIBLE				

Agronomic Disorders Definitions

Answer Definitions – Causal Category

Causal Category	Definition	Examples
Biological	Caused by a living organism	Insects, fungus, virus, bacteria, animals, parasitic plants, etc.
Cultural	Caused by a change or shift in routine agricultural traditions, behaviors, or mannerisms	Crop rotation, equipment, farming practices, etc.
Environmental	Caused by a force of nature	Wind, water, temperature, atmospheric conditions, etc.

Answer Definitions – Agents:

Agents	Definition – *seed, vegetative parts, reproductive parts, or end-product
Bacteria (B)	Caused by a bacterial agent. Bacteria are microscopic living organisms that have only one cell
Chemical (Ch)	Damage caused when a plant comes in contact with a natural or manufactured pesticide product
Compaction (Co)	Caused when soil is compacted by some means
Drought (D)	Caused when there is a lack of irrigation or rainfall
Frost damage (Fr)	Caused when temperatures rapidly drop or fall below freezing
Fungus (Fn)	Caused when a crop is affected by a member of any of a kingdom (Fungi) of saprophytic and parasitic spore-producing eukaryotic typically filamentous organisms formerly classified as plants that lack chlorophyll and include molds, rusts, mildews, smuts, mushrooms, and yeasts
Hail (Ha)	Caused by hail damage
Heat (Ht)	Caused by excessive heat
Insect (I)	Caused by damage from an insect. Insects injure plants by chewing leaves, stems, and roots, sucking juices, egg laying or transmitting diseases.
Lightning (L)	Caused by damage from lightning
Mechanical (Me)	Caused by mechanical damage. Mechanical damage occurs when plant parts are crushed, cut, punctured, rubbed, or struck, or otherwise damaged due to accidental or deliberate physical actions due to machine malfunction or improper machine operation
Moisture (Mo)	Caused by overwatering or flooded conditions
Nematodes (Ne)	When a plant is damaged by soil nematodes
Nutritional (Nu)	Symptoms caused by deficiency or toxicity of plant nutrient or the application of a natural or manufactured fertilizer or nutrient .
Pollution (P)	Caused by a form of pollution. Major forms of pollution include air pollution, light pollution, litter, noise pollution, plastic pollution, soil contamination, radioactive contamination, thermal pollution, visual pollution, and water pollution
Sun scald (S)	Damage to plant tissue, especially bark or fruit, caused by exposure to excessive sunlight
Virus (V)	Caused by a viral infection. Viruses multiply only in living cells. They are too small to be seen with a light microscope and are therefore considered to be submicroscopic. Viruses are composed of a nucleic acid (most plant viruses contain ribonucleic acid [RNA]) and are enclosed in a protein coat.
Wind damage(W)	Caused by damage from excessive wind

Answer Definitions and Examples – Plant Part Damaged:

Parts of Plants Displayed	Definition	Examples
Vegetative (Ve)	When the disease or disorder appears on the vegetative part of the plant. Parts of a plant which do not participate in sexual reproduction process are called vegetative parts.	Roots, stems, and leaves, tubers, slips, and bulbs used for planting,
Reproductive (R)	When the disease or disorder appears on the reproductive part of the plant. Parts of a plant which participate in the sexual reproduction process are called reproductive parts.	Flowers, fruits, and seeds and in the field
^{Updated term} Value Added Agricultural Commodity (VA)	When the disease or disorder appears on the marketable part of a plant	What will be harvested or sold - Ear of corn, cotton lint, potato tuber, onion, tomato, peanut
More than One (M)	When the disease or disorder appears on more than one (1) part of a plant	Must display the disease or disorder on at least two (2) of the examples above

Further Definitions –

- Damage to the reproductive part of the plant can directly impact the market value of the final product thus leading to damage of the marketed Value Added Agricultural Commodity. If both the reproductive part of the plant and the post-harvest Value Added Agricultural Commodity are displayed as damaged, then the answer is “more than one”.
- If the damage is to the reproductive part of the plant, but the post-harvest end-product / ag commodity is not displayed or displayed as sound, the answer is “reproductive”.
- If only the post-harvest end-product / ag commodity is shown as damaged, the answer is “Value Added Agricultural Commodity”.
- A Value-Added Agricultural Commodity may be displayed separately from the plant in post-harvest form.
- If more than one picture or specimen is used to constitute a given sample. Answer disorder as a complete sample.

Insect Identification Rubric

Name			Member Number		
Chapter			State		Team Number
		Member Answer	Possible Points	Member Score	Possible Answers Identification
1.	Identification:		4		11. Alfalfa weevil, adult or larva
	Economic Impact:		3		12. Aphid
	Mouth Part:		3		13. Armyworm adult
2.	Identification:		4		14. Armyworm larva
	Economic Impact:		3		15. Bean leaf beetle
	Mouth Part:		3		16. Blister beetle
3.	Identification:		4		17. Boll weevil
	Economic Impact:		3		18. Chinch bug
	Mouth Part:		3		19. Colorado potato beetle, adult or larva
4.	Identification:		4		20. Corn Earworm adult
	Economic Impact:		3		21. Corn Earworm larva
	Mouth Part:		3		22. Corn rootworm adult
5.	Identification:		4		23. Corn rootworm larva
	Economic Impact:		3		24. Cutworm adult
	Mouth Part:		3		25. Cutworm larva
6.	Identification:		4		26. European corn borer adult
	Economic Impact:		3		27. European corn borer larva
	Mouth Part:		3		28. Field cricket
7.	Identification:		4		29. Flea beetle
	Economic Impact:		3		30. Grain weevil
	Mouth Part:		3		31. Grasshopper
8.	Identification:		4		32. Green lacewing
	Economic Impact:		3		33. Honeybee
	Mouth Part:		3		34. Imported cabbageworm
9.	Identification:		4		35. Japanese beetle
	Economic Impact:		3		36. Lady beetle adult or larva
	Mouth Part:		3		37. Leafhopper
10.	Identification:		4		38. Mexican bean beetle, adult or larva
	Economic Impact:		3		39. Saltmarsh caterpillar
	Mouth Part:		3		40. Spider mite
TOTAL POINTS EARNED OUT OF 100 POSSIBLE					41. Spittlebug
					42. Squash bug
					43. Stink bug
					44. Striped cucumber beetle
					45. Tarnished plant bug
					46. Thrips
					47. Tomato or tobacco hornworm
					48. Whitefly
					49. Wireworm
					Economic Impact
					Must include all options in response
					B (Beneficial)
					F (fruit/flower destruction)
					IS (indicator species)
					R (removal of plant fluids)
					V (vegetative part destruction)
					Mouth parts
					C (chewing)
					CL (chewing-lapping)
					PS (piercing sucking)
					RS (Rasping Sucking)
					S (siphoning)

Oral Summary

Note: Some descriptors may be edited to provide greater clarity

100 POINTS

Chapter	State			Team Number
Indicator	Very strong evidence of skill	Moderate evidence of skill	Weak evidence of skill	Score
	10-9-8	7-6-5-4	3-2-1-0	
Problem Identification	Identifies a plausible producer problem tied to scenario cues; states what/why at a high level.	Recognizes a likely problem but lacks clarity or misses a key cue.	Problem unclear, irrelevant, or not attempted.	
Use of Evidence	Requests/references appropriate data (history, tests, scouting, weather, maps).	Some relevant evidence used; gaps remain.	Little to no evidence referenced.	
Recommendation Quality & Feasibility	Actionable steps that fit the operation's resources & timing.	Direction is sound but vague or partial fit.	Vague, impractical, or misaligned.	
Stewardship, Safety & Compliance	Aligns to label, 4R's, safe handling, and environmental safeguards.	Generally safe; minor gaps.	Recommends unsafe/illegal practice or ignores stewardship.	
Active Listening	Consistently listens, reflects, and adjusts to producer cues.	Mostly listens; occasionally missed cues.	Interrupts or responses disconnected from the producer.	
Handling Questions	Direct, accurate, concise; acknowledges uncertainty; next steps.	Generally accurate; minor detours.	Evasive, inaccurate, or guesses without guardrails.	
Role Clarity & Contributions	Clear roles; appropriate contributions; smooth handoffs.	Most contribute; minor overlap/gaps.	One person carries; roles unclear.	
Team Support & Professionalism	Team prompts/clarifies respectfully; unified.	Team offers some support; a few awkward moments.	Undercutting, confusion, or lack of cohesion.	
Structure & Time Management	Logical open → consult → close; efficient use of time.	Mostly organized; minor timing issues.	Disorganized or significant timing issues.	
Producer-Appropriate Presence	Professional, conversational consultation (not a speech).	Generally appropriate; occasional "speech mode".	Performative or distracted posture/tone.	
Total Points				
Judge directions: One judge serves as the producer (primary); observing judges may ask brief follow-ups. Score based on observable behaviors and accuracy. If any recommendation is unsafe/illegal, cap Stewardship (1E) ≤ 3 and reflect errors elsewhere as applicable.				

Note: There may be additional edits in the future for clarity

Practice Checklist *(Not a complete list of items for Oral Summary)*

Component	Practice Checklist
Problem Identification	• Summarize concern and identify plausible problems; state what/why concisely in under 60 seconds. • Verify and validate the evaluation of all competency areas as to impact on the concern presented (nutrient management, pest management, soil and water management, crop management). Did the competency areas have an impact on the concern?
Use of Evidence	• Use of field history, tests, scouting counts, weather windows, imagery/yield maps, etc., from the scenario to aid the producer's understanding of the team's conclusion. • Use of reference materials to present findings to the grower.
Recommendation Quality & Feasibility	• Convert reasoning to actionable solution (practice/action, rate, timing, product). • Check the fit of the actionable solution within the constraints of the farming operation and/or identify any additional resources needed to enact the solution • Inform the grower of any additional observed opportunities for improved agronomic management of the crop identified that are not directly associated with the primary concern.
Stewardship, Safety & Compliance	• Verify pesticide label safety and use requirements are followed • Apply 4R nutrient stewardship and basic environmental safeguards. • Verify proper handling of all soil and water conservation concerns • Identify any observed safety concerns
Active Listening	• Use reflective phrases; confirm understanding before advising. • Avoid interrupting; adapt plan to producer's goals/constraints. • Adapt conversation to producer communication style/cues
Handling Questions	• Answer directly and concisely in <30 sec; if unknown, state uncertainty + next step. • Separate fact vs. hypothesis clearly. • Have the team member handling a given category answer competency areas related to questions on nutrient management, soil and water management, pest management, and crop management.
Role Clarity & Contributions	• Identify team member competency areas, roles at introductions (nutrient management, soil and water management, pest management, crop management). • Rehearse handoffs and "key handoff or baton" phrases.
Team Support & Professionalism	• Prompt and backstop teammates; correct gracefully. • Maintain respectful, unified tone.
Structure & Time Management	• Plan 1–2 min open, 6–8 min consult, 1–2 min close (adjust per scenario). • Hit checkpoints: diagnosis → plan → confirm next steps.
Producer-Appropriate Presence	• Conversational consult posture; eye contact with the producer-judge. • Keep visuals minimal and helpful; reduce filler words. • Pay attention to verbal and nonverbal cues of the producer to ascertain understanding and interest in the information presented.

Note: There may be additional edits in the future for clarity

Evidence Prompts *(Possible areas for questions in the Oral Summary)*

Scenario Type	Prompts (Ask/Gather/Show)
General (use in all scenarios)	• Field history (crop/variety, rotation, tillage, planting date/population, fertility). • Weather around key timings (planting, emergence, apps, stress events). • Soil data (pH, OM, P, K, CEC, texture, drainage, compaction). • Scouting pattern & severity; growth stage; distribution (edge/zone/whole field). • Imagery/yield maps (zones; temporal patterns). • Equipment/app records (rates, calibration, nozzle/pressure/speed, tank mixes).
Nutrient Program Change	• 4R details (source, rate, timing, placement). • Soil/tissue test recency & sampling method; deficiency ranges. • Weather at/after application; loss pathways (volatilization, leach, runoff).
Pest Management Change	• Pest ID & life stage; action thresholds; beneficials present. • Resistance history; rotate MOA; refuge compliance. • Coverage (canopy, water volume, droplet size); PHI/REI; sensitive areas.
Irrigation/Water Management	• System type/capacity; scheduling (ET, sensors). • Soil infiltration/holding; salinity/alkalinity; uniformity checks.
Tillage/Soil Conservation	• Slope, residue cover, erosion risk; infiltration/compaction layers. • Traffic patterns; cover crop fit. • Cropping systems and related impact on soil and water conservation. • Cover crops (implementation, impact, benefit, disadvantages) • Practices that may positively or negatively impact soil structure/health
Variety/Hybrid/Trait	• Maturity & trait package; disease/pest tolerance. • Population/spacing; zone suitability; seed treatment; emergence conditions.
Precision/Technology	• Data layers (zones, yield, imagery); controller/sensor calibration. • Satellite Imagery • VRS logic; ground-truth plan.