Agriscience Fair

Purpose
The Agriscience Fair recognizes students studying the application of scientific principles and emerging technologies in agricultural enterprises.

Sponsor
BASF currently sponsors this event.

State Event Superintendent
The superintendent for this event is Dr. Jason Davis, State FFA Coordinator, Department of Agriculture and Human Sciences, NCSU, Campus Box 7654, Raleigh, NC 27695-7654. Phone: 919.515.4206, Fax: 919.513.3201. Email: jason_davis@ncsu.edu

Eligibility
This event is open to all FFA chapters and FFA members in good standing. FFA Members may not participate in the North Carolina Agriscience fair after July 1, following the high school/early college graduation. The event will be open only to students who are active FFA members and who are currently enrolled in agricultural education. *Student(s) may only compete in one category or division of the North Carolina Agriscience Fair each year. Agriscience Fair projects should be the results of a student(s) own efforts during the 2017-2018 school year. Student(s) that finish in the top three in the National FFA Agriscience Fair are ineligible for further competition in that division or category. Chapters may submit only one Agriscience Fair project each year from each division within each category. (Total of 12 for middle school, grades7-8, and 24 for high school, grades 9-12) This event will be held during the North Carolina State FFA Convention.*

ELECTRONIC COPIES OF Part I: COMPLETE APPLICATION and Part II: PROJECT REPORT are due to the state office by 5pm on June 12, 2018 (one week prior to the State Convention Start Date) Part I and Part II should be emailed to Jason Davis at jason_davis@ncsu.edu. (Applications include: North Carolina FFA Agriscience Fair Participation Form, On-Line Application through AET, Registration Form, Research Plan Approval Form, Adult Sponsor Checklist, Hazardous Materials Wavier Form, Human Vertebrate Form, Non-Human Vertebrate Form, Research Funding, Project Extension Form (if applicable), and Previous Year Abstract (if applicable). **Failure to turn in project reports by the deadline will result in a disqualification.** These reports will not be returned to the participants. **Participants should bring an additional copy of the Part I Complete Application attached to Part II Project Report for display at judging. Participants must be present at judging.**

Any member found cheating in any state-level career development event will result in total team disqualification for that event.

The North Carolina FFA Association, in keeping with the FFA mission and purposes, does not permit the use of tobacco products at any FFA facility or at any FFA activity.

At the North Carolina FFA State Convention, participation in the Agriscience Fair and a CDE event is permitted as long as events are not being held concurrently and no special previsions are required to facilitate participation.

Dress Code

Participants are required to follow the North Carolina FFA Career Development Event Dress Code. Participants in this event must wear official dress as described in the FFA manual. Official dress for an FFA member includes: an official FFA jacket zipped to the top, black slacks and black socks/nylons or black skirt and black nylons, white collared blouse or white collared shirt, official FFA tie or official FFA scarf, black dress shoes with closed heel and toe.

Event Format

Areas of participation closely mirror the National Agriculture, Food and Natural Resources Career Cluster Content Standards.

Categories

Students can compete in one of the six categories:
- Animal Systems
- Environmental Services/Natural Resource Systems
- Food Products and Processing Systems
- Plant Systems
- Power/Structural & Technical Systems
- Social Science

Divisions

Students can compete in one of the following divisions.
- Division 1- Individuals grades 7-8
- Division 2- Team of two members grades 7-8.
- Division 3- Individual member grades 9-10
- Division 4- Team of two members grades 9-10.
- Division 5- Individual member grades 11-12.
- Division 6- Team of two members grades 11-12.

State Winners in all categories and divisions who choose to make changes to project components must submit the full written report, application form and all event waivers to the State FFA Coordinator by **July 1.** Otherwise the Parts I and II turned in at the state convention will be submitted to National FFA for national judging.

Scoring

Maximum Score	*280*
Project Written Report	100
Interview	180

Procedure for Determining the State Event Winner When Scores are Tied

Ties will be broken based on score from the written report, the project with the higher score will be declared the winner. If a tie still exists, then the event superintendent will compare the scores of the participants in the interview process.

PROJECT COMPONENTS

ELECTRONIC COPIES OF Part I: COMPLETE APPLICATION and Part II: PROJECT REPORT are due to the state office by 5pm on June 12, 2018 (one week prior to the State Convention Start Date) Part I and Part II should be emailed to Jason Davis at Jason_davis@ncsu.edu. (Refer to the National Agriscience Fair Handbook for additional details)

Part I - APPLICATION

Agriscience Fair applications can be found on the National FFA Website or through AET. The Agriscience Fair Application Form includes: Application, Research Plan Approval Form, Adult Sponsor Checklist, Hazardous Materials Wavier Form, Human Vertebrate Form, Non-Human Vertebrate Form, Research Funding, Project Extension Form (if applicable) and Previous Year Abstract (if applicable). All forms must be signed by the appropriate person and all data complete.

Part I: COMPLETE APPLICATION (Applications include: North Carolina FFA Agriscience Fair Participation Form, On-Line Application through AET**,** Registration Form, Research Plan Approval Form, Adult Sponsor Checklist, Hazardous Materials Wavier Form, Human Vertebrate Form, Non-Human Vertebrate Form, Research Funding, Project Extension Form (if applicable), Previous Year Abstract (if applicable).

Part II – PROJECT REPORT

Part II: PROJECT REPORTS Failure to turn in project reports by the deadline of June 12, 2018 will result in a disqualification. Participants should bring an additional a stapled copy of the Part I Complete Application with all signatures attached to Part II Project Report with the project display at judging.
(Participants should review the requirements for the Project Report in the National Agriscience Fair Handbook. Requirements for Divisions 1 and 2 are different from the requirements printed below)

Logbook
Your logbook is one of the most important pieces of your project. It will contain accurate and detailed notes of a well-planned, implemented project. Your notes should be a consistent and thorough record of your project. These notes will be your greatest aid when writing your paper.

Written Report:

Abstract
A brief summary of your paper, which concisely describes your purpose, methods, results and conclusion. The abstract may include potential research applications or future research. The abstract should not contain cited references. Because this is the first page of your project report, it will be where the reader forms an opinion on

the study. In your abstract, arrange your points as 1) Purpose, 2) Procedure, 3) Results, and 4) Conclusions. This sections would include methods, primary results/effects of major treatments and main conclusions. Do not include discussion, citations and footnotes, or references to tables and figures or methods. Length is dependent upon the division.

Introduction
The introduction answers the question "Why was the work done?" It provides background on your subject in several paragraphs. The introduction should clearly state the problem that justifies conducting the research, the purpose of the research, its impact on agriculture, the findings of earlier work and the general approach and objectives. You must cite sources for statements that are not common knowledge. The last paragraph of the introduction includes the objectives of the study.

Literature Review
The literature review should detail to the reader what information currently exists concerning your research project. Information in the review should be written in APA style and should include publications used for the research. Publications cited could include articles about similar studies, similar research methods, history of the research area and any other items that support the current knowledge base for the research topic and how your project might complement existing information.

Materials and Methods
A well-written materials and methods section will enable others to reproduce your results by replicating your study. Write in past tense, third person, encompassing all of the materials required, state the hypothesis and explain the study design by sharing the technical and experimental procedures employed. With fieldwork, describe the study site. Include any statistical procedures employed.

Results
This section should be a summary of the results even if they were not what was hypothesized. Do not include discussion or conclusions about the data. Tell the reader exactly what you discovered and what patterns, trends or relationships were observed. Decide on the most meaningful way to present your data (tables, figures) and refer to them in your text. Data should be able to stand alone in the form of tables and /or figures. Data should not be added after the state level selection as it may alter the discussion and conclusions.

Discussion and Conclusion
In this section draw conclusions from the results of your study and relate them to the original hypothesis. It is helpful to briefly recap the results and use them as a foundation for your conclusions. If your results were not what you expected, take this opportunity to explain why. Give details about your results and observations by elaborating on the mechanisms behind what happened. Tie your study in with the literature, but do not hesitate to offer sound reasoning of your own. Discussion should refer to recommendations for practice and future research. Discussion and conclusions should also address the impact the research has on the agriculture industry.

References
Only significant, published and relevant sources accessible through a library or an information system should be included. All citations in the text must be included in the reference section. When you use information or facts that are not common knowledge give credit to the source of that information by citing a reference. You should use the APA style recognized citation system throughout your report.

Acknowledgements
Acknowledge anyone who helped in any aspect of the project in this section.

Skill Development
The student researcher(s) select five appropriate competencies based on the study conducted. Three competencies must be from the study's primary pathway and the other two can be from any pathway. The student researcher(s) demonstrate skills that are appropriate for the scope of the project. The project demonstrates application of skill attainment with measurable impact on the overall study.

APA Style/Spelling
The student researcher(s) should use correct spelling, complete sentences, proper grammar and appropriate APA style writing throughout the report.

Format of Report
The report should be printed on 8 1/2" x 11" white bond paper. The report will have 1" margins. Font size must be 12 using Arial, Courier or Times New Roman font. The project report template is required and is available on www.FFA.org/agrisciencefair by division.

Part III - DISPLAY

Each exhibit should include information relevant to the study. All projects must have the following information attached to the exhibit:
- Name of person(s) responsible for developing the project
- Chapter name, state
- Title of category entered
- Division entered (1, 2, 3, 4, 5, or 6)
-

Agriscience fair participant(s)' display shows the results of the study utilizing a display board not to exceed the dimensions of:
- 36 inches high (from top of the table to the top of display
- 48 inches (width)
- 30 inches deep (the distance from front to back)
- Preferred Display Requirements

Standard Display Requirements
The display must consist of a stable, free standing display board on the provided table top not to exceed the sizes outlined above. The student researcher(s) may also have the log book and up to five copies of the written report as part of the display. The log book and copies of the written report are optional. No additional props, handouts, or electronics are permitted. No tablets, iPads, cell phones or other electronic devices will be permitted. Internet access will not be provided. Posters can be created utilizing Microsoft PowerPoint slide format, however this is not required. Participants are responsible for providing backing for the poster if needed.

Part IV - INTERVIEW

All participants are required to meet with the judges to explain their projects. Explanation and questioning may not exceed 15 minutes. The interview is an opportunity for judges to ask you questions about the project. Interview and questions for agriscience fair participants will normally be 5-10 minutes. A team project must be presented by a team of two. If only one team member is present the team cannot rank higher than 4th overall. Judges will ask questions to determine the extent of knowledge gained, your understanding of your project, how it relates to your SAE and possibly how your project related to other FFA activities. The following is a list of example questions that may be asked.

1. How and why was the project selected?
2. What was your goal? What did you plan to accomplish in your project?
3. Were there any surprises in your project? How did you deal with them?
4. What did you learn from the experience?
5. How much time did you devote to your project?
6. What kept you from being discouraged?
7. How did you manage time for this project in relation to your other activities?
8. What would you advise others doing a project? What is the value of completing an agriscience fair project?
9. How can your findings and conclusions be applied in the agriculture, food and natural resources industry?

State Awards
The following awards will be presented annually at the state FFA convention provided sponsorship is available:

Division Winner
Ribbons & Medallions

Second Place
Ribbons & Medallions

Third Place
Ribbons & Medallions

National qualifiers will receive a travel award for the National FFA Convention

National Career Development Event Participation
The State winner advancing to the national career development event will be automatically registered for the national event. It is the responsibility of the FFA Chapter Advisor to complete all necessary national certification and waiver forms and return them to the state FFA Coordinator by the assigned due date.

State Agriscience Fair winners that are chosen to be national finalist and choose not to participate at the national level should contact the state office by Sept. 1 prior to national convention. National finalist that choose to not attend and compete at the national level will forfeit their travel award and must return the money to the State FFA Association.

Bibliography
Official FFA Manual
National Agriscience Fair Handbook

North Carolina FFA Association Agriscience Fair
Participation Form

The North Carolina FFA Association conduct its Agriscience Fair competition during the annual State FFA Convention. Members must be present to participate. Projects in divisions 2, 4 and 6 are team events of two students and both students must be present for the presentation and interview. Teams with only one member present can finish no higher than 4th place. Research, results and project display must be the results of student(s) efforts conducted during the preceding school year.

Participant's Name(s):_____FFA Member ID_____

_____FFA Member ID_____

FFA Chapter Name: _____

Project Title: _____

Category (Check One)

	Animal Systems
	Environmental Services/natural Resources Systems
	Food Products and Processing Systems
	Plant Systems
	Power/Structural & Technical Systems
	Social Science

Division (Check One)

	Division 1 – Individuals grades 7-8
	Division 2 – Team of two members grades 7-8
	Division 3 – Individual member grades 9-10
	Division 4 – Team of two members grades 9-10
	Division 5 – Individual member grades 11-12
	Division 6 – Team of two members grades 11-12

ELECTRONIC COPIES OF Part I: COMPLETE APPLICATION and Part II: PROJECT REPORT are due to the state office by 5pm on June 12, 2018 (one week prior to the State Convention Start Date) Part I and Part II should be emailed to Jason Davis at jason_davis@ncsu.edu.   State winners in each division and category must have revised project application and reports to the State FFA Coordinator by July 1.

I (We), _____, verify that my/our Agriscience Fair
          (student(s) name)
project is the result of my/our own efforts and the research, data, and presentation are from the 2016-17 school year.

_____
Student(s) Signature

_____
Parent/Guardian(s) Signature(s)

_____
FFA Advisor's Signature