



4-H Thrive!

Positive Youth Development



Agronomy is the study of plant and soil sciences from an integrated, holistic perspective. Agronomists look at things like soil properties, how plants and soil interact, how much fertilizer the plant needs, and how climate, weeds, insects, and diseases affect a crop. Major crops in Mississippi are corn, soybean, cotton, rice, wheat, and forages. Plants are critical to civilization because they provide humans and animals with food, plus they supply fiber like cotton and lumber. Agronomy uses advanced technology such as unmanned aerial vehicles, GPS, and biotechnology. Intelligent young people should consider Agronomy if they like science, plants, and/or advancing technology.

Starting Out Beginner

Talk with your Extension Agent about forming a team.

Focus on questions in the Starter Guide.

Start reviewing the Penn State Agronomy Guide.

Learning More Intermediate

Continue studying the guides to become proficient in agronomic practices and terminology.

Consider participating in other 4-H Agronomy projects.

Understand how this new knowledge can prepare you for numerous careers in agriculture.

Exploring Depth Advanced

Learn of numerous career options available in agronomy and related fields.

Enroll in related Agronomy projects:

- *Science Experiments*
Conduct your own research project.
- *Day Camps*
Introduction to agronomy practices and learn about agriculture careers.
- *Seed ID contest*
Open to Junior & Senior 4-H youth.

Developing Competence

Adults create environments where youth can develop competence in their chosen project area.

Building Confidence

Youth build confidence as they learn to think for themselves, build mastery, and are recognized for their efforts.

Nurturing Caring

Adults nurture a caring environment where mutual trust between youth and adults is established. Caring relationships with adults are key to resilient youth.

Finding Connection

Youth build solid connections which are critical to their well-being.

Forming Character

Create a community where youth play an active role in developing their character.

Determining Contribution

Youth actively contribute to their clubs and communities.

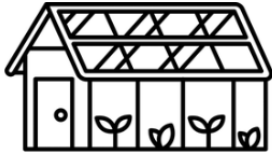


Expand your experiences!

Career areas that utilize agronomic principles:



Agronomy



Horticulture



Botany



Biology



Biochemistry



STEM



General Agriculture

Resources

4-H Agronomy Bowl:
Contest Rules and
Regulations. P3596.
Mississippi State University
Extension Service,
Mississippi State, MS.
Retrieved from:
<https://extension.msstate.edu/publications/4-h-agronomy-bowl-contest-rules-and-regulations>.

The Penn State Agronomy
Guide. (2023). The
Pennsylvania State
University. University Park,
PA. Retrieved from:
<http://extension.psu.edu/the-penn-state-agronomy-guide>.

Connections & Events

The Agronomy Bowl is only available to Senior 4-H'ers and is held during 4-H Club Congress.

Participate in 4-H Career Camp and job shadow with experts in the field.

Take tours of local farms, co-ops, seed companies, etc. to see how agronomy plays a role at the local level.

Curriculum

4-H Agronomy Bowl: Contest Rules and Regulations.

The Penn State Agronomy Guide.

Question Starter Pack (available through your local county Extension Agent)

4-H Record Book

Youth who participate in the Agronomy Bowl and other related projects may choose to submit a 4-H Record Book in several different categories depending on their interest, these include:

- Agriculture
- Garden & Horticulture
- Plant and Soil Sciences



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