



Plant and Soil Sciences

Georgia 4-H Project Achievement empowers young people with skills for a lifetime. Through a competitive process, students explore their interests, unleash their creativity, share their work, and celebrate their achievements! This guide provides 9th—12th graders with examples for getting started with their project exploration.

Description of Project:

4-H'ers may explore physical, chemical, biological, and fertile properties of plants and soils, their properties, and the relation to use and management. Through this project 4-H'ers may:

- acquire knowledge of modern farming and overall agricultural practices
- develop an understanding of plants, including their growth and use
- acquire knowledge of soils, how they are formed, and their different properties and classifications
- understand basic biological facts about plants and soils, including growth factors, reproduction, characteristics, and utilization of plants
- apply knowledge gained about plants and soils through experiments in a laboratory or field setting
- determine appropriate conservation practices relative to soil and plant management
- explore career opportunities related to plants, soils, and agronomy

Overview:

- ⇒ Choose project
- ⇒ Develop skills in:
 - Project
 - Leadership
 - Service
- ⇒ Prepare portfolio for work completed from January 1—December 31
- ⇒ Prepare presentation
- ⇒ Practice
- ⇒ Compete
- ⇒ Reflect

Examples of Project Development Experiences:

- Plant and care for house plants, raised-bed gardens, or traditional garden plots
- Learn about Georgia soils by joining a 4-H Land Judging team
- Visit a local farm that utilizes soil conservation best management practices
- Tour an agricultural museum such as the Georgia Museum of Agriculture and Historic Village
- Correspond with your local County Extension Agent and/or visit a Soil Conservationist to learn about career opportunities in plants, soils, and agronomy
- Interview a soil conservationist, farmer, and/or horticulturalist to learn about their work

Project Sharing and Helping Examples:

- Lead a club to plant community gardens
- Serve as a teen leader and recruit youth for the local 4-H Land Judging team
- Share what you have learned in the Plant and Soil Sciences project with 4-H club members, school classes, and civic clubs
- Enter a Plant and Soil Sciences-related mini-booth at a fair
- Contact your local Extension Agent to discuss beginning a corn club or other project-related club for younger 4-H'ers
- Collaborate with schools to describe values associated with best soil conservation practices (i.e., agricultural productivity, air/water quality, economic impact, etc.)
- Share Plant and Soil Sciences-related materials with schools and the community
- Mentor a younger 4-H'er in the Plant and Soil Science project
- Help neighbors collect soil samples for testing with your local Extension office
- Volunteer to become a member of the Natural Resource Conservation Service (NRCS) Earth Team
- Start a community composting program

Recommended Resources:

- Georgia4h.org/ProjectAchievement
- Georgia4h.org/LandJudging
- caes.uga.edu/commodities
- extension.uga.edu
- agr.georgia.gov
- farmtoschool.org
- Georgiagrown.com
- ifdc.org
- nrcs.usda.gov
- websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx

Special Considerations:

- Please use best safety practices when handling tools and equipment.
- Be sure to gain land owner permission prior to entering someone else's property.
- Give plenty of notice for any mentoring requests.
- Ask permission before photographing, taping, or quoting someone.
- Remember that safety for you, other staff, and animals is of the utmost importance. Be respectful when shadowing professionals and always follow instructions.

At Competition:

Plant and Soil Sciences 4-H projects may use posters, artifacts, biofacts, and/or technology to support their presentation. The time limit for these presentations is 12 minutes.

Computers, projectors, screens, and other technological devices may be used.

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Sources:

The University of Georgia CAES. 2016. Project Achievement. <http://www.georgia4h.org/projectachievement/>

