



## Lesson 8: Introduction to Plant Science

### Lesson Plan

Estimated lesson time: 120 minutes

Learning objectives:

- Be able to identify basic plant parts on monocot and dicot plants
- Understand how we divide plants into families
- Understand the functions of different plant organs
- Understand basic plant genetics
- Be able to design a simple experiment to compare two plant varieties or two methods for growing plants

Key concepts:

- Basic plant physiology
- Basic plant genetics
- Basic statistics and experimental design
- Hypothesis development and testing
- Using data and observations to make informed decisions

Lesson components:

- I. Background (for instructors) 5-10 min
- II. Introduction to Plant Genetics and Plant Breeding (lecture and activity) – 30 minutes
- III. Experimentation on the Farm: Farming via the Scientific Method (activity) – 45 minutes
- IV. Debriefing – 15 minutes