**Agriculture in Society**

**Unit 3:** Plant Science in Agriculture

**Lesson 1:** Major Agricultural Crops in Oklahoma

**Lesson 1.9:** Plant-Based Protein

State Orientation to Agriculture in Society Standards:

**OAS 4.04** Compare and contrast plant-based and animal-based proteins

National AFNR Standards:

**FPP.04** Explain the scope of the food industry and the historical and current developments of food products and processing

Student Learning Objectives:

1. Students will compare and contrast animal-based and plant-based proteins.

Outside Resources

1. Ag in the Classroom
   1. [A Tale of Two Burgers](https://agclassroom.org/matrix/lesson/722/)
      1. **Lesson Plan and Activity -** Students compare the components of beef and plant-based burgers by determining the production and processing methods of each product; evaluate the ingredients and nutritional differences between beef and plant-based products; and discuss different points of view in the agricultural industry concerning plant-based proteins and traditional beef. This lesson covers a socioscientific issue and aims to provide students with tools to evaluate science within the context of social and economic points of view.
2. Teachers Pay Teachers
   1. [Plant-Based Protein Research](https://www.teacherspayteachers.com/Product/Plant-Based-Protein-Research-3608989)
      1. **Activity and Worksheet –** Students will look up common plants used as plant protein and determine the grams of protein per serving. Then students will create a recipe with one of the plants from the worksheet.