

Lesson Plan (LP) Author: Hannah McTier

Course: General Horticulture & Plant Science (01.46100)

LP Title: Nutrient Deficiencies in Squash Plants

Estimated Time: 45 minutes

Grade Level: 9th – 12th Grade

Materials, Supplies, Equipment, References, and Other Resources:

Materials: whiteboard with dry erase markers, Smartboard with projector, access to library or computers for research purposes, paper, colored pencils, markers, crayons, tape References: https://www.georgiaffa.org/curriculum2/topic.aspx?ID=6&TID=4,

Standards:

AG-GHPS-8 Identify macro, secondary and micro plant nutrients.

- 8.1 List and discuss the nutrients needed for plant growth.
- 8.2 Categorize common nutrient deficiency symptoms.

Essential Questions/Objectives:

The student will be able to...

- 1. List and discuss the nutrients needed for plant growth by participating in an interest approach/class discussion and completing a nutrient deficiency drawing activity.
- 2. Categorize common nutrient deficiency symptoms by completing a nutrient deficiency drawing activity.



farmtoschool.georgiaorganics.org GA Standards



farmtoschool.georgiaorganics.org

#ohmysquash

Accommodations

For students with disabilities, the instructor should refer to the individual student's IEP to insure the accommodations specified in the IEP are being provided within the classroom setting. Instructors should familiarize themselves with the provisions of Behavior Intervention Plans that may be part of a student's IEP. Frequent consultation with a student's special education instructor will be beneficial in providing appropriate differentiation within any given instructional activity or requirement.

Interest Approach Estimated Time: 5 minutes

Ask students to name as many of the nutrients necessary for plant growth as possible. List their answers on the board and fill in any blanks. Ask the students to describe what plants look like when they lack any of these nutrients. If they don't know, then explain that they will find out today!

Learning Activity 1	Estimated Time: 30 minutes
Instructor Directions/Materials/ Teaching Procedure	Brief Content Outline
Nutrient Deficiency Drawing Activity Have all supplies prepped Plan to have computers	Assign each student one of the 16 essential nutrients. They then must research what a squash plant would look like if it were deficient of said nutrient and draw/color a picture of the plant to display in the classroom. They should have the drawing on one side of the paper and the name of the nutrient deficiency plus other symptoms of the same deficiency written
in the classroom for students to use or a scheduled visit to the library for research	on the other side of the paper, along with their name. *This lesson plan would pair well with the What Nutrients Does a Squash Plant Need? lesson plan that was released alongside this lesson plan.

Summary (Reflection) Estimated Time: 10 minutes

Once everyone's drawings are complete, have the students hang up their pictures around the room. Go to each drawing and poll the class on what type of nutrient deficiency the squash plant is experiencing. Once the answers are in, read the back of the drawing to see who was right. Be sure to go over the correct answer and other symptoms that could represent the same nutrient deficiency.

Assessment

Formative: Assess students understanding of nutrient deficiencies by keeping track of their correct/incorrect answers during the summary activity.

Summative: N/A



farmtoschool.georgiaorganics.org

GA Standards



farmtoschool.georgiaorganics.org

#ohmysquash