



Lesson Plan (LP)	Author: Hannah McTier
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Course: General Horticulture & Plant Science (01.46100)
LP Title: A Squash Plants' Worst Enemy: Insects
Estimated Time: 45 minutes (can be extended to two class periods)
Grade Level: 9 th – 12 th Grade

Materials, Supplies, Equipment, References, and Other Resources:
<p><u>Materials:</u> whiteboard with dry erase markers, Smartboard with projector, student access to internet or library, paper, colored pencils, rulers, markers, scissors, Wanted Pest Flyer rubric</p> <p><u>References:</u> https://www.georgiaffa.org/curriculum2/topic.aspx?ID=6&TID=4 , Squash Pests: https://hgic.clemson.edu/factsheet/cucumber-squash-melon-other-cucurbit-insect-pests/</p>
Standards:
<p>AG-GHPS-10 Evaluate the damage caused to plants by insects, weeds, diseases, and physiological disorders.</p> <ul style="list-style-type: none"> 10.1 Identify common insects, weeds, diseases and physiological disorders. 10.2 Diagram the external structure of an insect. 10.3 Illustrate the complete and incomplete life cycles of insects. 10.4 Describe the damage inflicted by insects and weeds. 10.6 Identify the proper methods of controlling pests.



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Essential Questions/Objectives:

The student will be able to...

1. Identify common insects after creating a Wanted poster on an assigned pest describing the details of its' existence and viewing other students' posters.
2. Diagram the external structure of an insect after creating a Wanted poster on an assigned pest describing the details of its' existence.
3. Illustrate the complete and incomplete life cycles of insects after creating a Wanted poster on an assigned pest describing the details of its' existence.
4. Describe the damage inflicted by insects to squash plants after creating a Wanted poster on an assigned pest describing the details of its' existence.
5. Identify proper methods of controlling squash pests after creating a Wanted poster on an assigned pest describing the details of its' existence.

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:** 10 minutes

Pull up the following kahoot link:

<https://create.kahoot.it/details/d64f69f3-01db-481c-996f-c254c3a5138f>

It will take you to a pre-made kahoot showing students pictures of various insects asking them to determine what the insect is and whether it is beneficial or a pest. Allow the class to vote on each answer and then see how you all did as a group at the end! Explain to the students you will be learning more about the true pests that attack squash plants today!

Learning Activity 1	Estimated Time: 30 minutes
Instructor Directions/Materials/ Teaching Procedure	Brief Content Outline
<p><i>Creation of a WANTED Squash Pest Poster</i></p> <p>Have all supplies ready Assign a pest to individuals or small groups Monitor computer usage Walk around the room and answer questions</p> <p>Hang up posters around room when students are done</p>	<p>Assign individuals or small groups of students an insect deemed a pest of squash plants. The following are suitable insects: Cucumber Beetle, Spider Mite, Melon Aphid, Squash Bug, Squash Vine Borer, Pickleworm, Squash Beetle</p> <p>Instruct them to create a Wanted poster containing all relevant information about the pest. Relevant information includes, but is not limited to, common and scientific name, life cycle, anatomy, diet, enemies, habitat, range, how farmers can get rid of it, etc. They may do this by hand or on the computer, but they will need access to the computers or a library to research their information first.</p>



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Summary (Reflection)**Estimated Time:** 5 minutes

Verbally quiz students on the various types of insects that were showcased in the Kahoot game at the beginning of the class and be sure to include some of the squash-specific pests mentioned in the lesson. Test them to see if they can tell the difference between insects that are beneficial versus pests.

Assessment

Formative: Students will be informally assessed based on their creation of a Wanted poster.

Summative: N/A

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Name _____

Date _____

Pest _____

Wanted Pest Poster Rubric

	Below Average	Average	Above Average
Coverage of the Topic (40 points)	Flyer includes little to no information about the chosen topic, the student failed to gain any true understanding of the material	Flyer includes information about the chosen topic, but may be too general or not as well researched as the above average category displaying only a surface level understanding of the material	Flyer includes the pests' common and scientific names, anatomy, life cycle, diet, enemies, habitat, range, and any other interesting facts the student would like to include showcasing why this insect is a pest
Design (30 points)	Missing relevant images, no title, colors are hard to read	Flyer includes various colors that are easy to read, good title, may be missing relevant images	Flyer includes various colors that are easy to read, great title, as well as relevant images
Mechanics (10 points)	Text is illegible, major spelling and grammatical errors, no sources cited	Text should be mostly legible, minor spelling and grammatical errors, only some of the sources are cited	Text is legible, no spelling or grammatical errors, all sources cited
Overall Effort (20 points)	Little to no effort was put into activity	Student completed the activity, but not to the best of their ability	Student was enthusiastic, engaged, and tried to complete the activity to the best of their ability
Score:			
Comments:			



Name _____

Date _____

Pest _____

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