

Instructional Scenario

What's Bugging You?



Course/Duty Area: Agriscience & Technology/Exploring the Plant Systems Pathway

Scenario:

Jan's family owns a large nursery business. Her parents have entrusted her with the production of the poinsettia crop for the holiday season. Shortly after planting, Jan notices a sticky film and black coating on the surface of the lower leaves. Plants on some benches have mottled leaf patches and are stunted with obvious lack of vigor. Upon further inspection, Jan notices numerous small, white insects flying around the plants.

Before the problem becomes widespread, Jan decides that she needs a plan to handle the infestation and prevent the problem from happening again.

Big Question:

How can Jan correct the issue and prevent it from happening again?

Focused Questions:

- What symptoms are the plants exhibiting?
- How are these symptoms affecting growth?
- How can Jan identify the problem in the greenhouse?
- What cultural, chemical, biological, and mechanical controls could be used for this problem?
- What can Jan do to prevent this problem in the future?

Student Project or Outcome:

Research and develop a pest management plan for poinsettia production.

Project-Based Assessment:

Pest management plan should include

- the cause of problem/life cycle of causal organism
- cultural solution options
- chemical solution options
- biological solution options
- mechanical solution options
- prevention techniques.

Teacher Resources:

- [Integrated Pest Management](#), Iowa State University Extension and Outreach
- [Greenhouse Insect Pest Management](#), Michigan State University Extension

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