Module 4: Plant Growth, Management & Pest Control
Lesson C Quiz

Lesson C Quiz– How can early detection of plant diseases improve sustainability and reduce crop losses in modern farming systems?

QUIZ LINKS:

Module 4 Lesson C Quiz - Responder Link

Multiple choice

Why do fast diagnostics matter for plants?

A. Late detection helps the plant build natural resistance over time.
B. Late detection often requires more aggressive treatments (more pesticides, labor, fuel).
C. Late detection allows pests to complete their life cycle without interference.
D. Late detection increases the need for artificial ripening and packaging adjustments.

Agar plating relies on growing pathogens in _____.

A. Nutrient gel petri dishes
B. Sterile sand trays
C. Liquid fertilizer tanks
D. Dried plant leaf samples

Which of the following are NOT benefits of the paper microfluidic chip?

A. Low cost
B. Portable
C. User friendly
D. Electricity generation

Which of the following are the newer methods for pathogen detection and identification?

A. Soil drying and visual inspection
B. Microscope leaf rubbing technique
C. ELISA and PCR
D. Manual pest counting over time

What kinds of tools are necessary for fast detection of pathogens in plants?

A. Sensors, smart hardware, mobile tools
B. Heavy-duty irrigation systems
C. High-powered grow lights
D. Manual pruning shears

Short Answer

Briefly explain Dr. Hill's automated system he developed, as well as the benefits it provides for citrus budwood.

Answer should:

- Describe what Dr. Hill developed for the citrus budwood
- Explain at least one benefit (e.g., faster pathogen identification, improved accuracy, early disease management)
- Be 2–3 sentences long

Design Prompt (Content from Lesson B)

Think about some ways for pest management, such as sticky traps, predators, and some cultural practices like crop rotation. If you were going to create the ultimate way to manage pests, what would you do/add to your creation? Get creative, think outside the box! (Does not have to be realistic necessarily)

Answer Should Include:

- At least a couple of current pest management strategies that already exist OR create another potential pest management strategy.
- Should be a creative design (i.e. floating row covers soaked in beer)
- Be 3-5 sentences long