

Part 3:
Disease Diagnoses and Control

Disease Diagnosis

“When disease occurs, the causal agent must be identified first, and then effective management strategies can be implemented.”

(pg. 140, CA MG Handbook)

HOW DO WE IDENTIFY DISEASES?

Disease Diagnosis

Dave's 5 Step Process:

1. Put your hand lens back into your pocket, but pullout your Plant ID book to ID the plant.
2. Take a step back and breathe deep.
3. View occurrence of disease, placement of disease, and field observations.
4. Walk up to the patient, and look for anything that previously wasn't visible from afar.
5. Examine the plant starting with the top, soil, and then scaffold.

Disease diagnosis requires more common sense than anything else! (i.e. PCR, Diagnostic labs)

Disease Diagnosis

Look for the forest among
the trees:

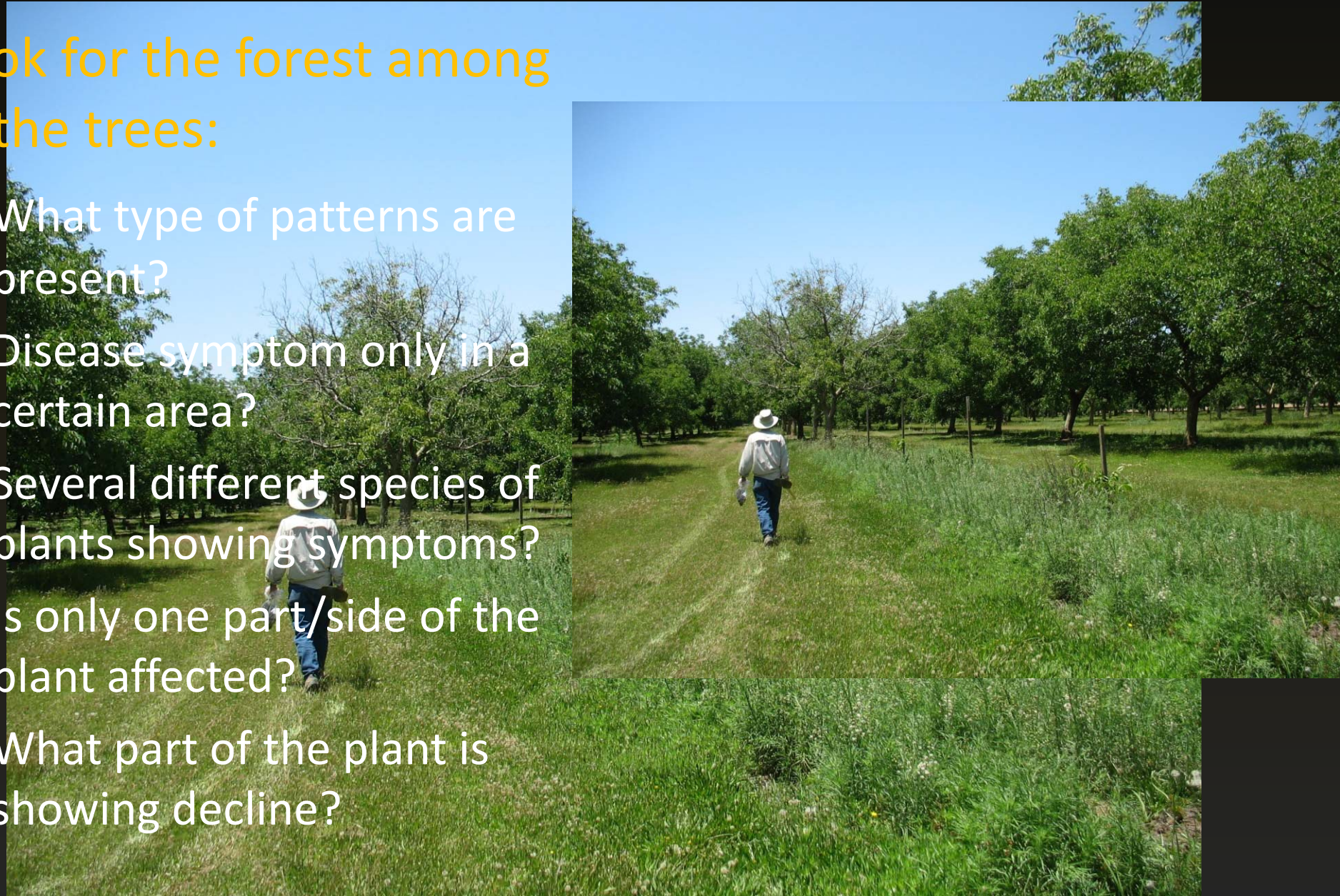
What type of patterns are
present?

Disease symptom only in a
certain area?

Several different species of
plants showing symptoms?

Is only one part/side of the
plant affected?

What part of the plant is
showing decline?



Disease Diagnosis

Taking a step closer:

Entire Canopy – Root problem

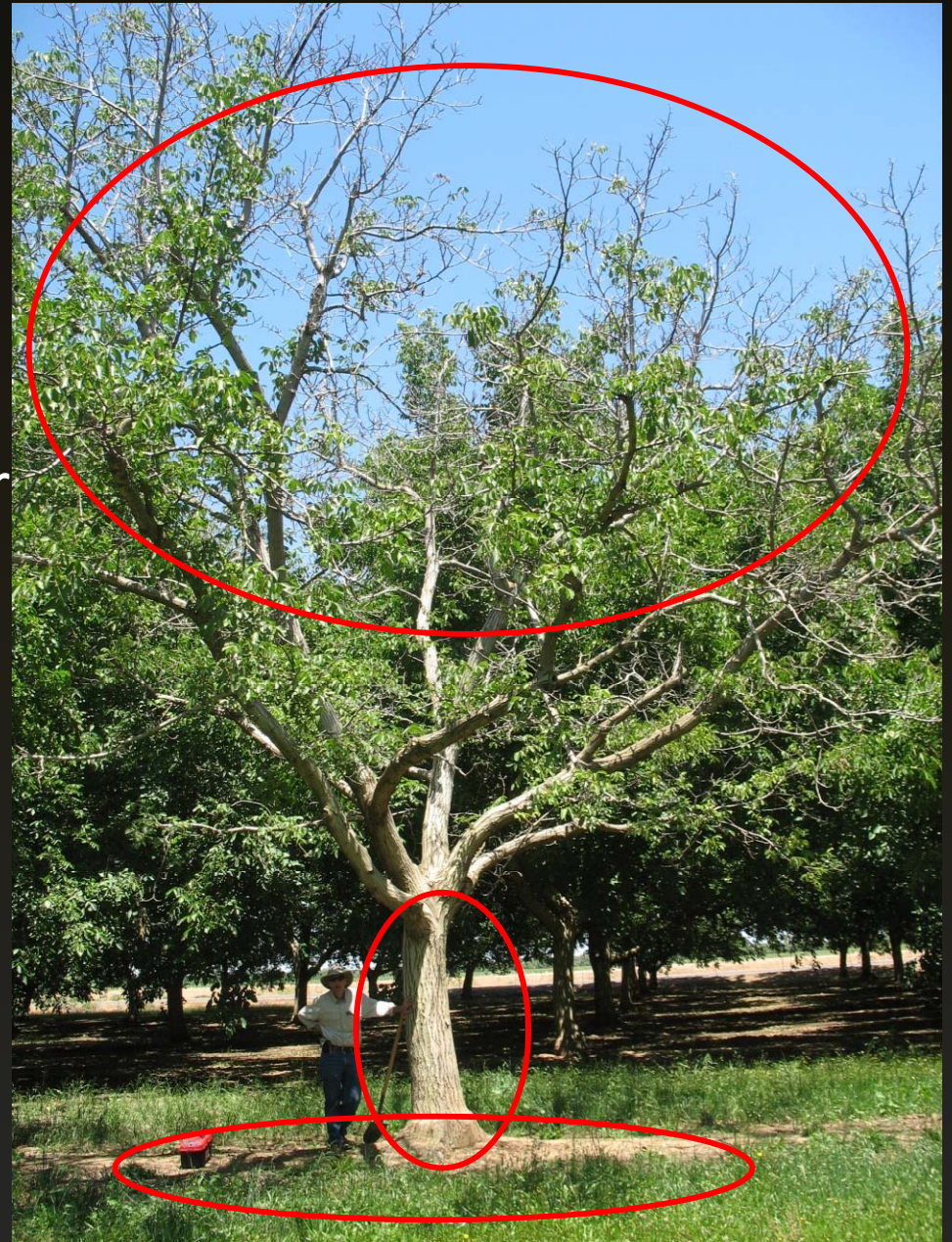
Sudden Collapse – Root Problem

Bleeding or branch loss – Trunk Problem

Inner canopy losing leaves – foliar problem

Honeydew/sooty mold – insect problem

Tree defoliation – possibly one or all of the above!



Disease Diagnosis

Taking a step closer:



Symptoms: The external/internal reactions or alterations of a plant as a result of disease

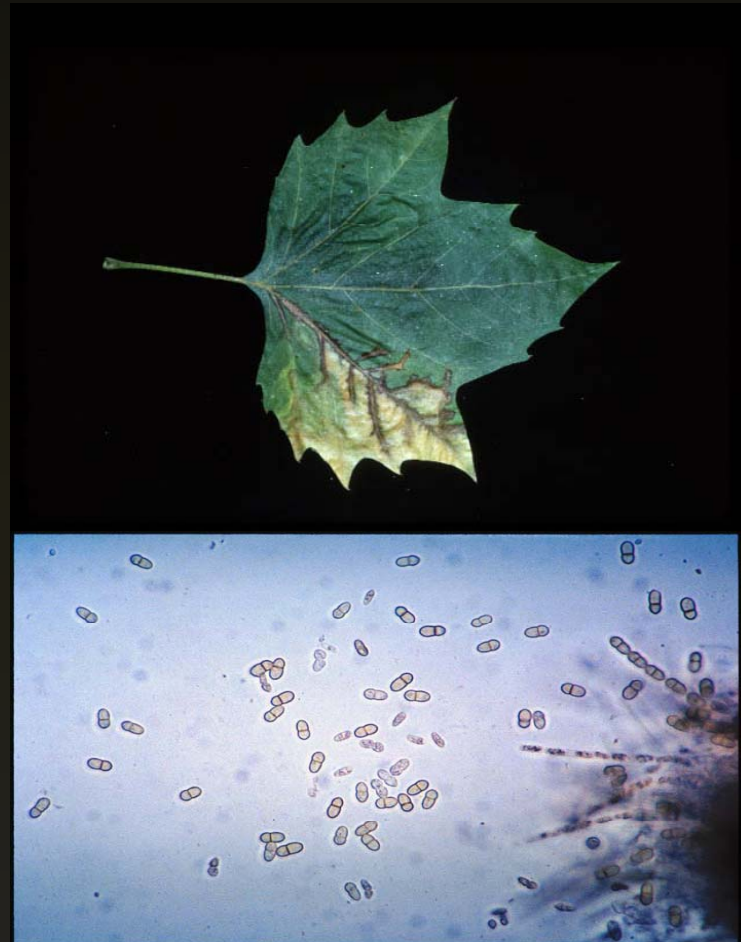
Signs: The pathogen or its parts or products seen on a host plant

Disease Diagnosis

Symptoms



Signs



Symptoms: The external/internal reactions or alterations of a plant as a result of disease

Signs: The pathogen or its parts or products seen on a host plant