The logical steps in evaluating plant problems.

**EVALUATE INQUIRY or PROBLEM**

Is the problem(s) described or observed on the plant due to normal plant development for that particular time of the year?

\[ \text{NO} \quad \rightarrow \text{INSECT PROBLEM} \]

There is a likelihood of NO DISEASE PROBLEM

\[ \text{YES} \quad \rightarrow \text{PROBABLY Biotic Agent} \]

Is damage observed consistent with probable insect attack?

\[ \text{YES} \quad \rightarrow \text{IDENTIFY type of pathogen} \]

(fungi, bacteria, nematode)

Is damage observed consistent with probable insect attack?

\[ \text{NO} \quad \rightarrow \text{UNKNOWN MALADY} \]

Consult Plant Disease Handbook and/or other resources for possible remedies or solutions.

\[ \text{YES} \quad \rightarrow \text{Plant is exhibiting ABNORMAL symptoms.} \]

Are there insects observed on the plant? Is the damage consistent with probable insect attack?

\[ \text{NOTE: Presence of insects does not always mean that insects are the root cause of a plant problem} \]

\[ \text{NO} \quad \rightarrow \text{Plant is exhibiting ABNORMAL symptoms.} \]

Are there signs of the pathogen(s) on damaged areas?

\[ \text{NO} \quad \rightarrow \text{Plant is exhibiting ABNORMAL symptoms.} \]

Pathogen(s) not observed.

Is the damage scattered and is not uniformly distributed throughout tree and stand?

\[ \text{NO} \quad \rightarrow \text{Plant is exhibiting ABNORMAL symptoms.} \]

Protein Not observed.

Can problem be identified?

\[ \text{PROBABLY ABIOTIC AGENT} \]

Abiotic problems are difficult to diagnose. Observed for obvious problems such as soil compaction, inadaptability of host, root disturbance. Obtain clues by understanding local environment conditions and query homeowner on tree management practices.

\[ \text{PROBLEM IDENTIFIED!} \]

Consult Plant Disease Handbook and/or other resources for possible remedies or solutions.

\[ \text{UNKNOWN MALADY} \]

Prescribe general care to maintain health of plant.