

### Diagnosing Plant Problems and Identifying Mysterious Things



2017 EXTENSION MASTER GARDENER TRAINING  
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### What's wrong with my plant?



### What's wrong with my lawn?



### What is this?



### Diagnostics = Solving Plant Mysteries

Hand-out: Diagnosing Plant Problems  
Virginia Cooperative Extension  
Systematic approach



Be a keen observer/listener  
Ask many questions - know what to ask  
Use good tools

### Helpful Diagnostic Tools



## Knowledge is a Tool

Causes of plant problems

- Biotic and abiotic

Time of year diseases/insects occur

Symptoms and signs to look for; when they tend to appear

Recent weather patterns

Plant location & history

Growing requirements of plants

## Questions to ask about plant...

What is the plant?

How long has the plant been in location?

Plant age? Plant size?

Describe growing conditions of site

Describe care practices

What has been done to or near the plant recently or in the past?

What else?

## Questions to ask about problem

What are the signs?

Do you see any bugs, rots or spots?

Is there a pattern? How is the problem spreading?

Are different types of plants affected or only one type?

When were symptoms first noticed?

What else?

## Have an open mind

Many different causes for one symptom

i.e. Brown spots in lawns

Obvious suspect may not be guilty party

i.e. Wilt, tattered tree leaves

Not all problems are insects or diseases

i.e. Abiotic and biotic

Look-a-likes

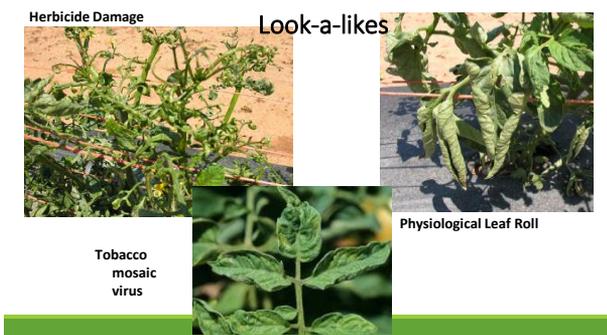
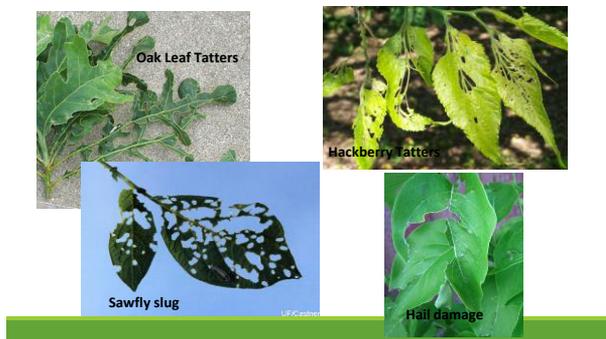
## Look-a-likes

Emerald Ash Borer



Honeysuckle Flatheaded Borer





### Positive Identification - Why?

Successful, cost effective control  
 Most organisms are not damaging "pests"  
 Many problems due to environment or incorrect management



### Let's role play .....



1. Break into small groups of 2 to 4 (or slightly larger if needed).
2. Select one person, could be two, to be the "client/s" who asks the question. Give this person the paper with the question and plant information on it. **(No one else should see this information).**
3. The "client/s" asks the EMGs (others in their group) the question at the top of the page, but **DO NOT** provide any of the other information. The other information can **ONLY be shared if the EMGs ask the RIGHT question** to be told the information.
4. After the client asks the questions, EMGs should first come up with what would be good questions to ask in this situation. (Feel free to refer to the Virginia "Diagnosing Plant Problems" handout).
5. Again, the "client" should only share the plant care/history information if the EMGs ask the right questions about it.

Break Time.....



Role Playing Questions:

“My maple tree seems to be dying. What do you think is wrong?”

“I heard about bagworms killing evergreens. Someone said they are brown and look like part of the tree. I think my evergreen has hundreds of them. There are brown things all over the entire tree. What do I need to spray to kill these bagworms? ”

“The leaves of my Hawthorn tree are covered with orange spots. Some of the leaves are turning yellow and dropping off. Is my tree dying? Can I spray something to save it? ”

The leaves of our bridal wreath Spirea are turning brown. We applied a fungicide, but it does not seem to be helping. What else can we do to save this hedge? It provides privacy and we don't want to lose it”.

“My tomatoes have hard white spots in them. Most of the spots are beneath the skin. Why are they doing this? Are they safe to eat?”

Answer: \_\_\_\_\_

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Let's solve some plant problems, identify a few mysteries.....

Plant samples/photos brought or e-mailed to Platte County Extension office in 2016



1. Why do my pine trees appear to have soap on them?



Answer:



2. What's wrong with my peony leaves?



Answer:



3. What is on my maple tree branch? The leaves are kind of sticky too.



Answer:



4. What's are these berries? Can I eat them?

Answer:

5. I'm a commercial grower and my onions are turning white and brown and drying up. What's wrong?



Answer:



6. This vine is growing on my shrub. Is it poison ivy? How do I control it?

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Answer:

7. Why are my maple leaves turning brown and some are falling off?

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Answer:

8. Something is eating my rose leaves. What can I spray?

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Answer:



9. What is this white stuff on my tree?

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Answer:

10. I found these growing in a ditch. What are the berries? Can I eat them?

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Answer:



11. What is this weed in my lawn? What can I use to kill it?

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Answer:



12. Why are my tomatoes leaves rolling up? Could they have been sprayed with something? Can I still eat them?

Answer:

13. Why are my tomato leaves curled and twisted?



Answer:

14. Why are some of my raspberry leaves dying?



Answer:



15. What's are these spots on my hollyhock leaves?

Answer:



16. Why are my apples rotting on the bottom?



Answer:



17. Why does my lawn have a dark green ring?

Answer:

18. My pine tree trunk is full of holes and the needles have this white stuff on them ?



Answer:

19. What's is this? Should I remove it and destroy it?



Answer:

Carolina Mantid on back of Chinese Mantid



20. Why are my tree leaves turning brown?



Answer:

