Don’t be caught with your plants down!

A primer to early detection of plant disease problems.

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General session announcement

• Link to session SLIDE SET and helpful HANDOUTS will be given at end of this session.

• This is a participatory session. You may be called upon for an answer!
What can make a plant go down?
Why would a plant go down?

Because

– It can!
– It fussy
– There is something or someone that is making it sick
– Something is just not right.
When, why and how diseases happen?

PATHOGENIC AGENT
(disease causing agent)

HOST PLANT

ENVIRONMENT

DISEASE
What can make plants sick?


2012TMGA - Primer to early detection
Best approach to not being caught with plants down

Prevention is better than cure!

• What preventative measure can be used?

• Is this measure reasonable?
Second best thing that you can do to not be caught with your plants down

Monitor

Have a detection and action threshold

Be prepared to take action

• How to accomplish this?
Pesticides

12. Precautionary statements
13. Hazards to humans and domestic animals
11. Note to physician
9. Signal word
8. Keep out of reach of children
7. EPA registration number
6. Signal word
5. Name and address
4. Net contents
3. Ingredient statement
2. Type of pesticide
1. Product name

EzD-Pest Insecticide and Fungicide

- Controls Diseases and Insects on Flowers and Ornamentals

- Active ingredients: 11.7% azoxystrobin, 3.5% thiamethoxam, 11.6% cyfluthrin, 5.1% bifenthrin

- Keep out of reach of children

- Danger: Do not use on non-target plants

- Net contents: 5/4 gallons

- EPA registration number

- Signal word: Toxic

- Name and address

- Physical or chemical hazards
- Environmental hazards
- Storage and disposal

- Statement of practical treatment
- Note to physician
- Directions for use

- Shake well before using

- Use in accordance with label instructions

- Keep out of reach of children

- Do not apply to non-target plants

- Do not contaminate

- Store properly

- Disposal

- Read the label first
Steps in Field Diagnostics

1. Identify the plant
2. Assess the nature of the problem
3. Come up with a list of suspects
4. Narrow list of suspects
   Compare and contrast collected information to published information
5. Get help as needed!
   Utilize available knowledge from others
Spring
Live oaks on Texas A&M campus…
Simple field diagnostics

- Identify the plant
- Assess the nature of the problem
- Have a list of suspects
- Compare and contrast to narrow suspect list
- Get help if necessary
Denton County 2012
60% of foliage on affected limb looks like this. Tree is believed to be >20yrs.
Collin Co. 2012
Mutabilis rose. Homeowner suspects rose rosette.
Southcentral Texas 2012
Seem like damage is progressing quickly. Damage on >30% of nursery.
Fall 2011. Nursery owner notices boxwood defoliating. It destroyed >75% of his plants. Wondered what happen?
Summer 2007
Butternut squash leaves showing mottling symptoms.
Quiz Time

How can you kill a plant?

How does a plant get sick?

How do you know if a plant is sick?

What can you do to keep a plant healthy?
Texas Plant Disease Diagnostic Lab

Where are the resources?

The Texas Plant Disease Diagnostic Laboratory, located in College Station, Texas, is a service lab of the Department of Plant Pathology and Microbiology at Texas A&M University in conjunction with Texas AgriLife Extension Service.

Sending Samples?
Please check calendar or call 979.845.8032 for diagnostician availability prior to sending samples. Sample Submission Form

TX Plant Clinic

Blog
Fireblight...it's back!
Fellow pathologist in the news
Additional option for Golf Course managers to deal

About TPDDL
HOT TOPICS
TPDDL BLOG
Services
Fees
Submission Forms and Instructions
Clinic Calendar
Factsheets
Resource Links

AgriLife Personnel & Master Gardener Resources

Videos
People
Contact Us / Directions
Texas Plant Disease Diagnostic Lab

Master Gardener Training Resources

NPDN FIRST DETECTOR link

Click here to go to Online NPDN First Detector training site login page
(http://firstdetector.org/)

- You will need to fill out New Account request from to get a password to access the
  NPDN training website.

HANDOUTS

RESOURCE for participants of the "Don’t be caught with your plants down!”
session at the 2012 Texas State Master Gardener Convention in San Antonio.

2012 TMGA SLIDE SET

FIVE things to remember for diagnostics