Diagnosing Petunia Disorders

Wednesday morning 9:00 am

Where: River Overlook (upper level) Room A & B

Learn how to recognize and correct insect, disease, nutritional, and physiological disorders of petunias grown in greenhouses.

MI Recertification credits: 1 (COMM CORE, PRIV CORE)
OH Recertification credits: 0.5 (presentations as marked)
Moderator: Scott Stiles, Arborquest Greenhouse, Hudsonville, MI

9:00 am	Diagnosing Petunia Disorders (OH: 6D, 0.5 hr) • Brian Whipker, Horticultural Science Dept., North Carolina State Univ.
9:50 am	Session Ends

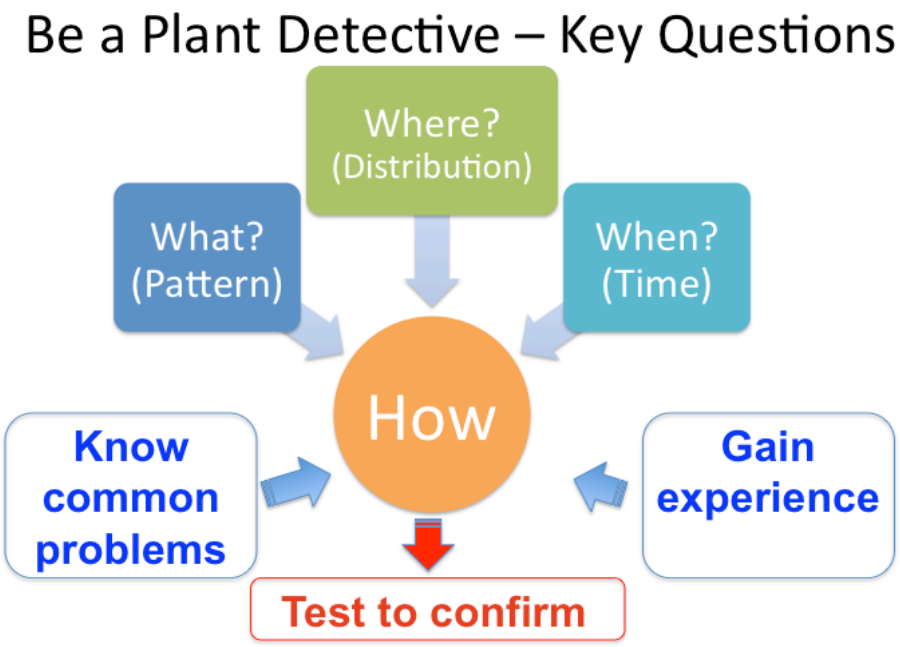
Sponsored by Dummen Orange

NC STATE UNIVERSITY
Floriculture Research

December 2016

Reading the Leaves: Petunia Diagnostics

Brian E. Whipker, Horticultural Science



WHAT?
1.What do the symptoms look like? (ie: necrosis, chlorosis, wilt, etc)

2.What is the pattern on the leaf?
Fold Test: fold the leaf over in half, are symptoms similar?
No, then suggests Biotic
YES, then suggest Abiotic

3.What is the pattern on the plant?
Symptoms on the: Flowers/Stems/Roots/Leaves.
Be more specific on Leaf part: Young/Overall/Old

4.What problems occur with this plant?
a. Make a list from experience or use tech guides, books, etc
(Floriculture Principles and Species, Dole &Wilkins)
b. Make a decision tree
c. Make a characterization chart to assign probabilities

WHERE?
1.Where are the symptoms (distribution on the bench)?
a. Non-Uniform: suggests a living factor (pathogen or insect)
b. Uniform: suggests a non-living factor (mechanical, physical, or chemical)

Definitions
Biotic – a living organism
Abiotic – a non-living factor

WHEN?
1.When did the symptoms appear?
a. Quickly: within 1 to 4 days
b. Gradually: over 1 to 4 weeks

Symptom Development

Quickly
Chemical phytotoxicity
Herbicide drift
Air pollution
Environmental stress
Temperature extremes
Nutritional toxicities (overdoses)

Moderate
Environmentally induced Ca deficiency
Botrytis

Gradual
Diseases
Insects
Nutritional

Print-on-demand guide: lulu.com