

Mistaken Identities

Leanne Pundt

UConn Extension

leanne.pundt@uconn.edu



An equal opportunity program provider

Scouting Techniques

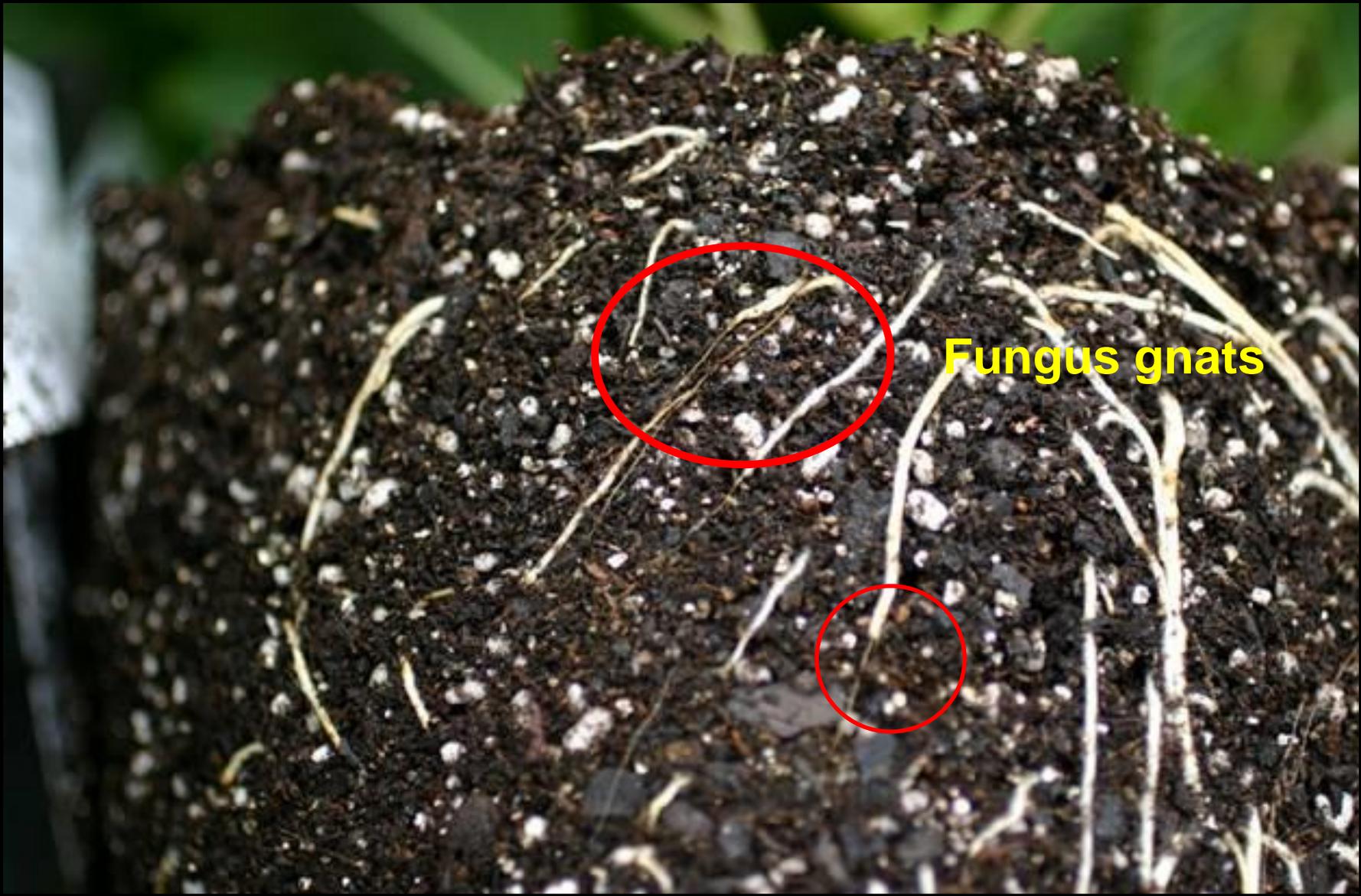


Random plant inspections

Use of Sticky Cards



Impaired Roots & Stems



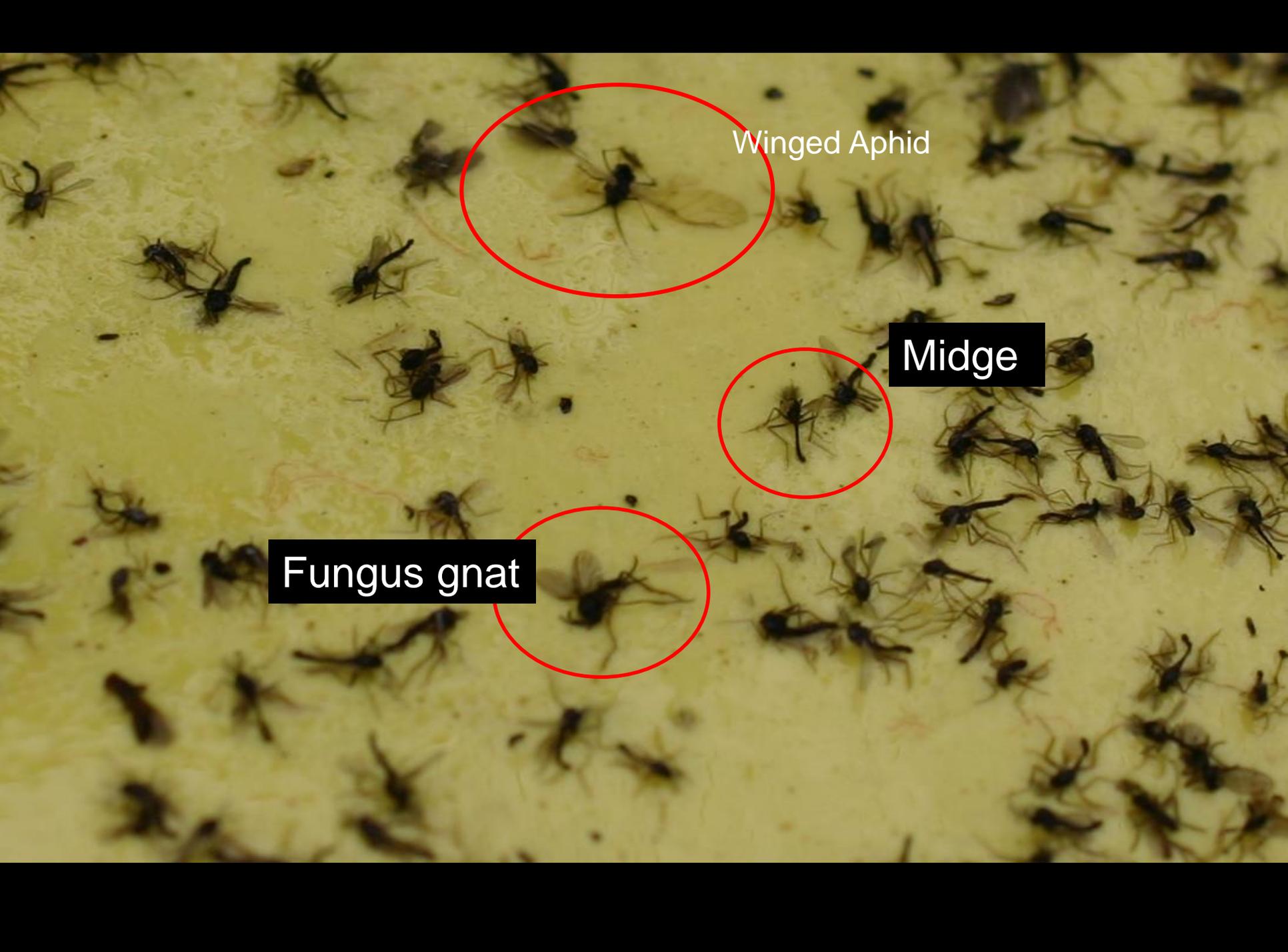
Fungus gnats



1/4 inch long, opaque to white, black headed legless larva that feeds on young roots.



Adult Fungus Gnats



Winged Aphid

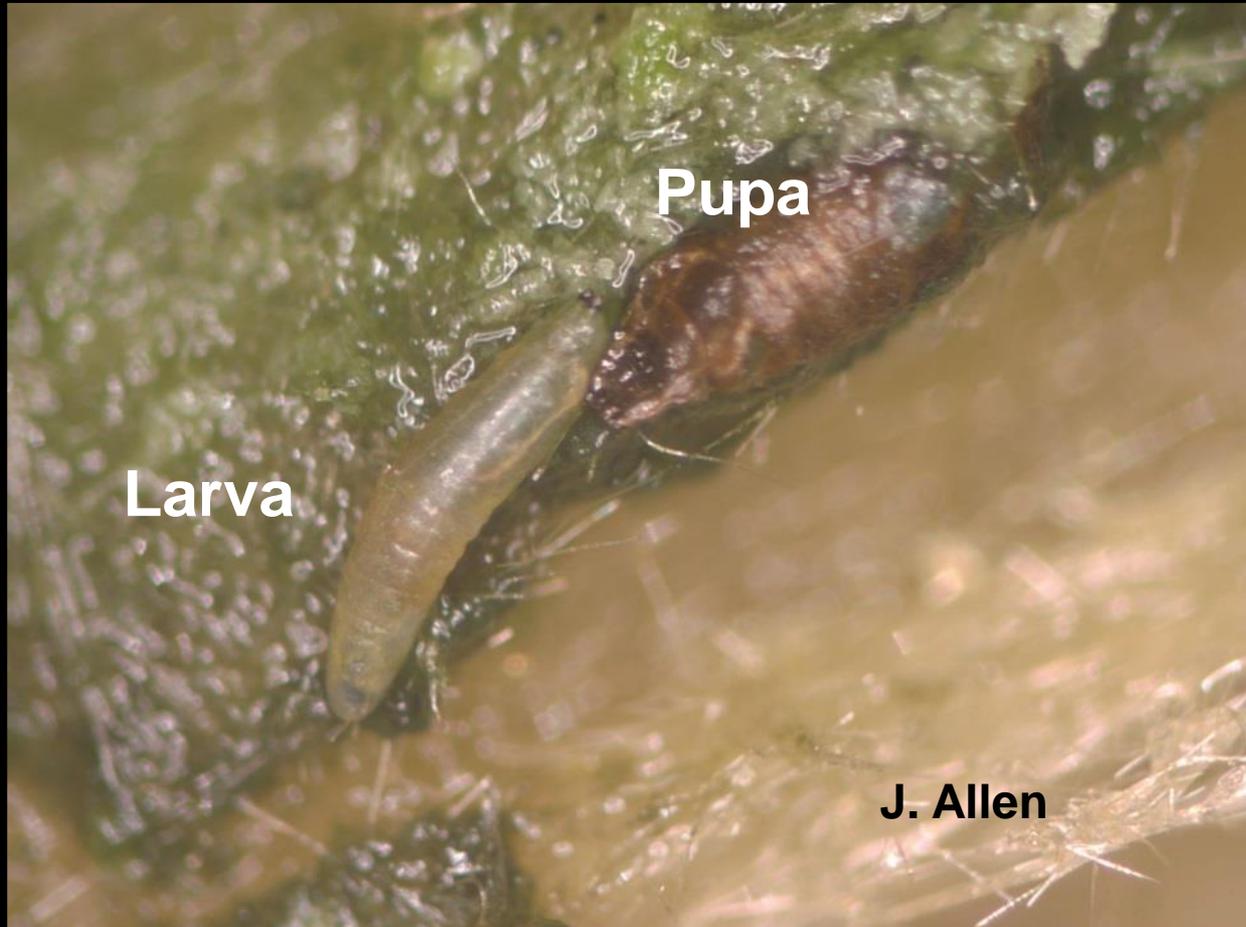
Midge

Fungus gnat

Shore Flies



Shore Flies



Hunter Fly





Hunter flies have clear wings with no spots and are about twice the size of shore flies.

Drain or Moth Flies





Random Pattern: Disease?



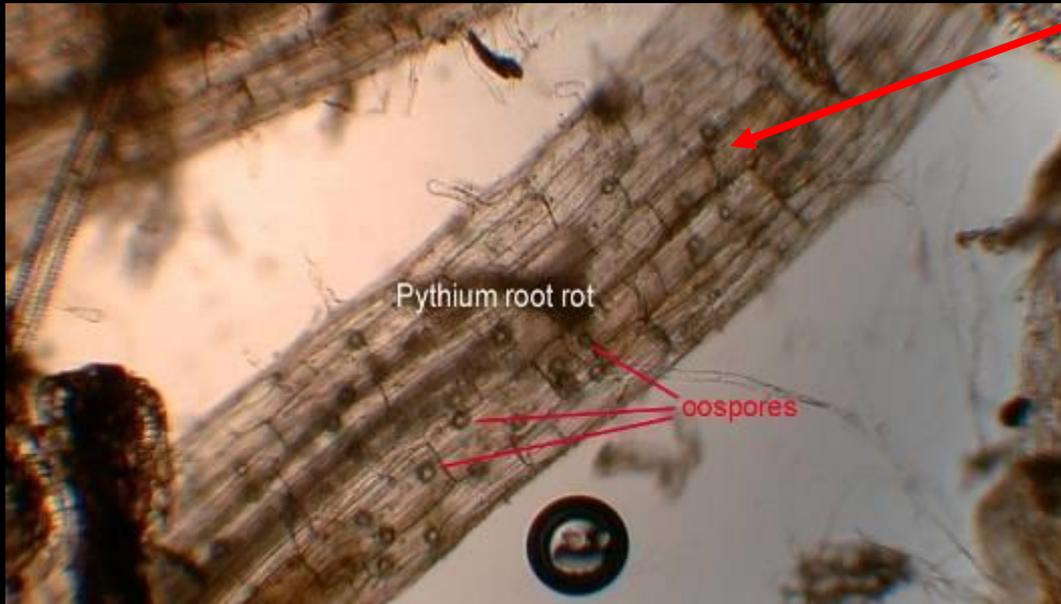
Pythium Root Rot- Poinsettia



Rat-tails

S. Douglas

Diagnostic Characteristics of *Pythium*



Root infected with *Pythium*



Oospores





Black Root Rot

Pythium



J. Allen

J. Allen photos



Pythium





**Anthracnose
(*Colletotrichum*)**

Fruiting Structures





Black Root Rot

**Wash off roots
to see black streaks**



Black Root Rot



J. Allen, UConn

Thick walled overwintering spores (chlamydospores) resemble “tootsie-rolls” when viewed under the microscope.



High salts



INSV

Impatiens Necrotic Spot Virus



J. Allen photos



Agdia Immuno Strip Test

Control line= test working

Line = positive test



Tests can be completed in your office in as little as 20 minutes.

www.agdia.com

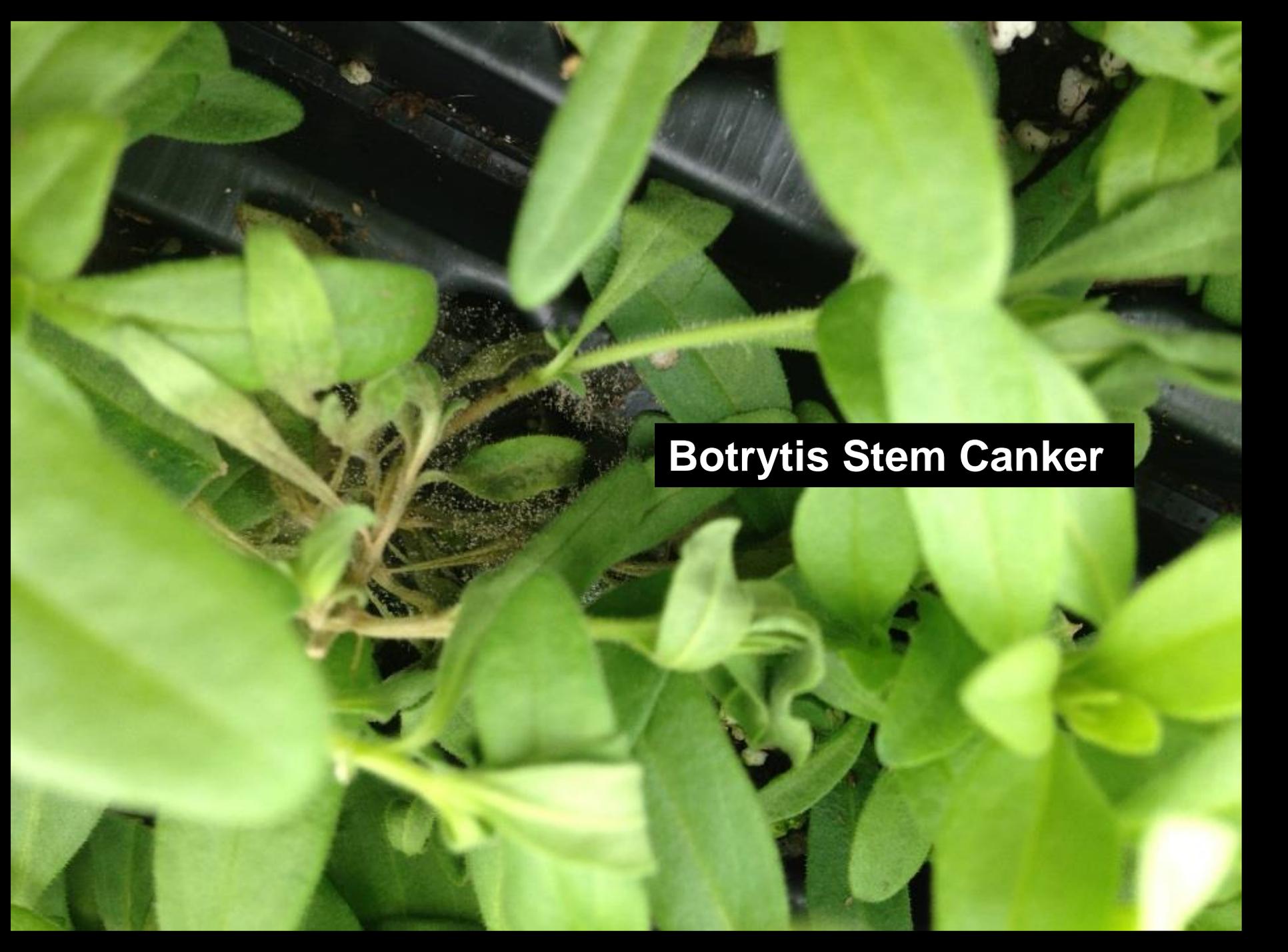
Web Blights



Rhizoctonia web blight

Sclerotium Crown Rot



A close-up photograph of a plant stem showing signs of Botrytis Stem Canker. The stem is brown and necrotic, with a dark, fuzzy growth (Botrytis) visible at the base of the stem. The surrounding leaves are green and healthy. The plant is growing in a black plastic tray.

Botrytis Stem Canker



Rhizoctonia



Diagnostic right angled branching of *Rhizoctonia* viewed under the microscope.



Sclerotium Crown Rot

Sclerotia



Douglas

Spots on Leaves



**Four Lined Plant Bug
Damage**

**Red headed Flea Beetle
Damage**





Four Lined Plant Bug Adults



Nymph

Fungal Leaf Spots



Ascochyta Leaf Spot on Clematis



Septoria



Didymellina Leaf Spot



Bacterial Leaf Spot

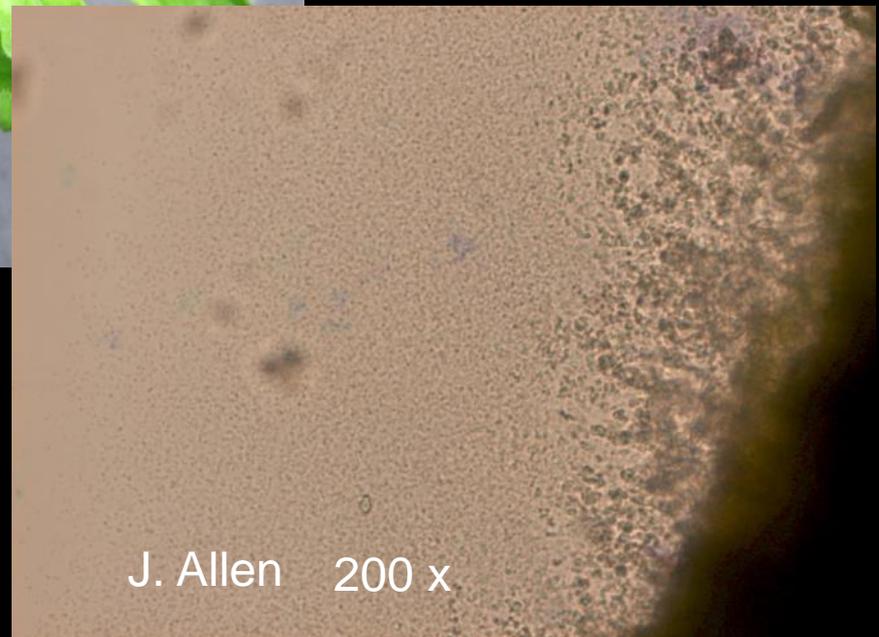


Leaf Scorch





Bacterial Leaf Spot
Note: Bacterial
Streaming



J. Allen 200 x



**Bacterial Leaf
Spot on
*Heuchera***

**Foliar Nematode Injury
On *Heuchera***



Mildews



Downy Mildew



Powdery Mildew



Rob Wick images

Downy Mildew



Argyranthemum

Downy Mildew





Botrytis



Downy Mildew
on *Lamium*

Foliar Nematodes



LaMondia



Downy Mildew





Powdery Mildew



Chasmothecia – found outdoors that help powdery mildew overwinter





Powdery Mildew



Spray Damage

Distorted Leaves

Aphids





Foxglove Aphid

Shiny light yellowish green aphid with dark green patches at the base of the cornicles, and black markings on legs & antennae.



Aphids feeding on the underside of basil leaves.

Green Peach Aphid



L. Pundt, UConn

Look for a pronounced indentation between the base of the antennae, with protusions that aim toward each other.

Melon Aphids



Light green, dark green to yellow to dark olive melon aphids have short, entirely black cornicles.

White shed skins are evidence of aphids



Thrips





Thrips

Thrips Damage





Broad Mites

**No Broad Mites
found**





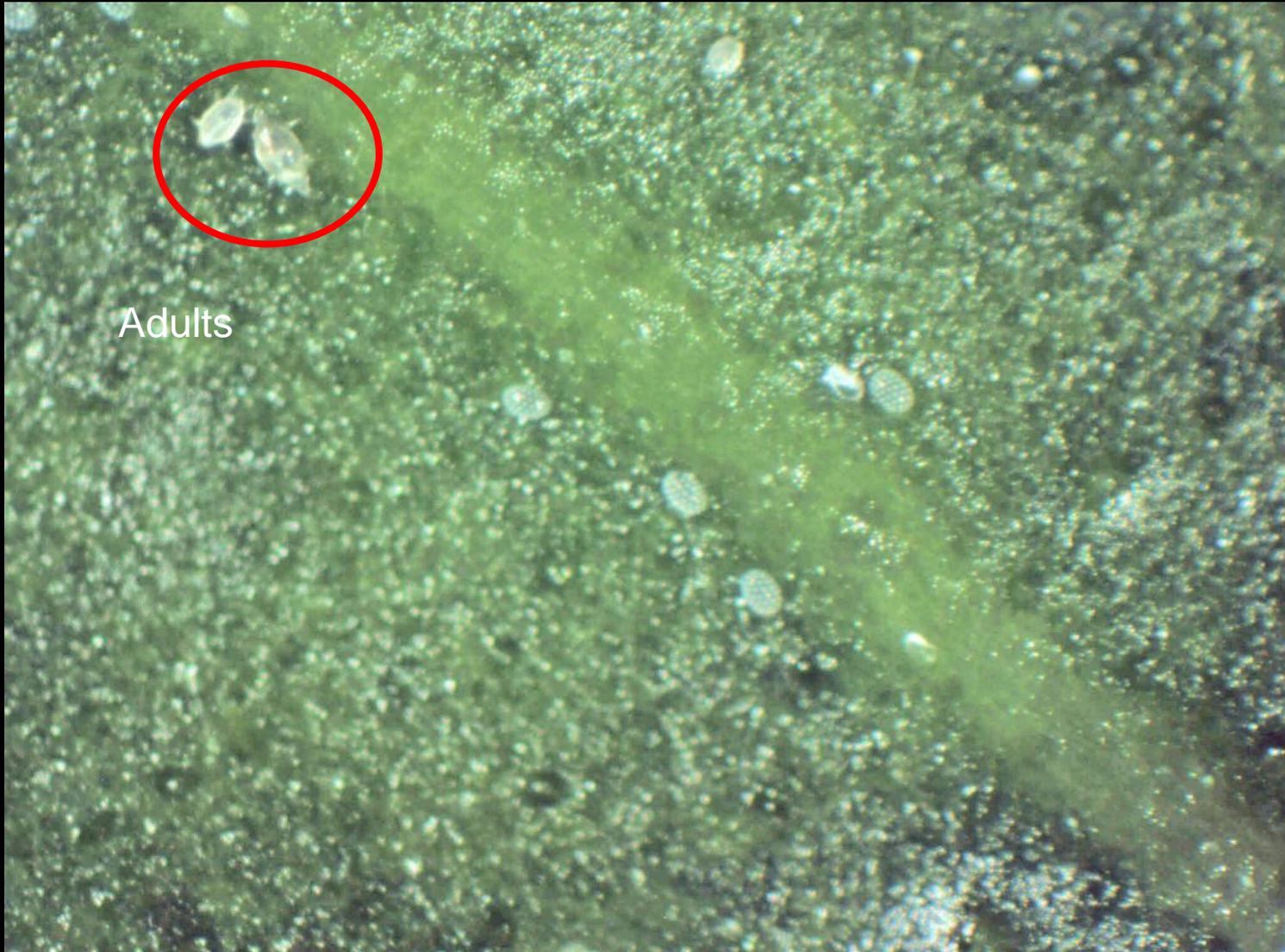
Broad Mites

Boron Deficiency





Outer leaf edges turn downward. Broad mite's toxic saliva causes twisted, hardened, distorted tip growth.



Adults

**Use a dissecting microscope to look for the very small, broad mites.
Note: the elliptical, translucent, colorless eggs are covered with whitish bumps**

Speckled Leaves



T. Smith, UMass

Iron Manganese Toxicity

Spider Mites





Spider Mites

T. Smith



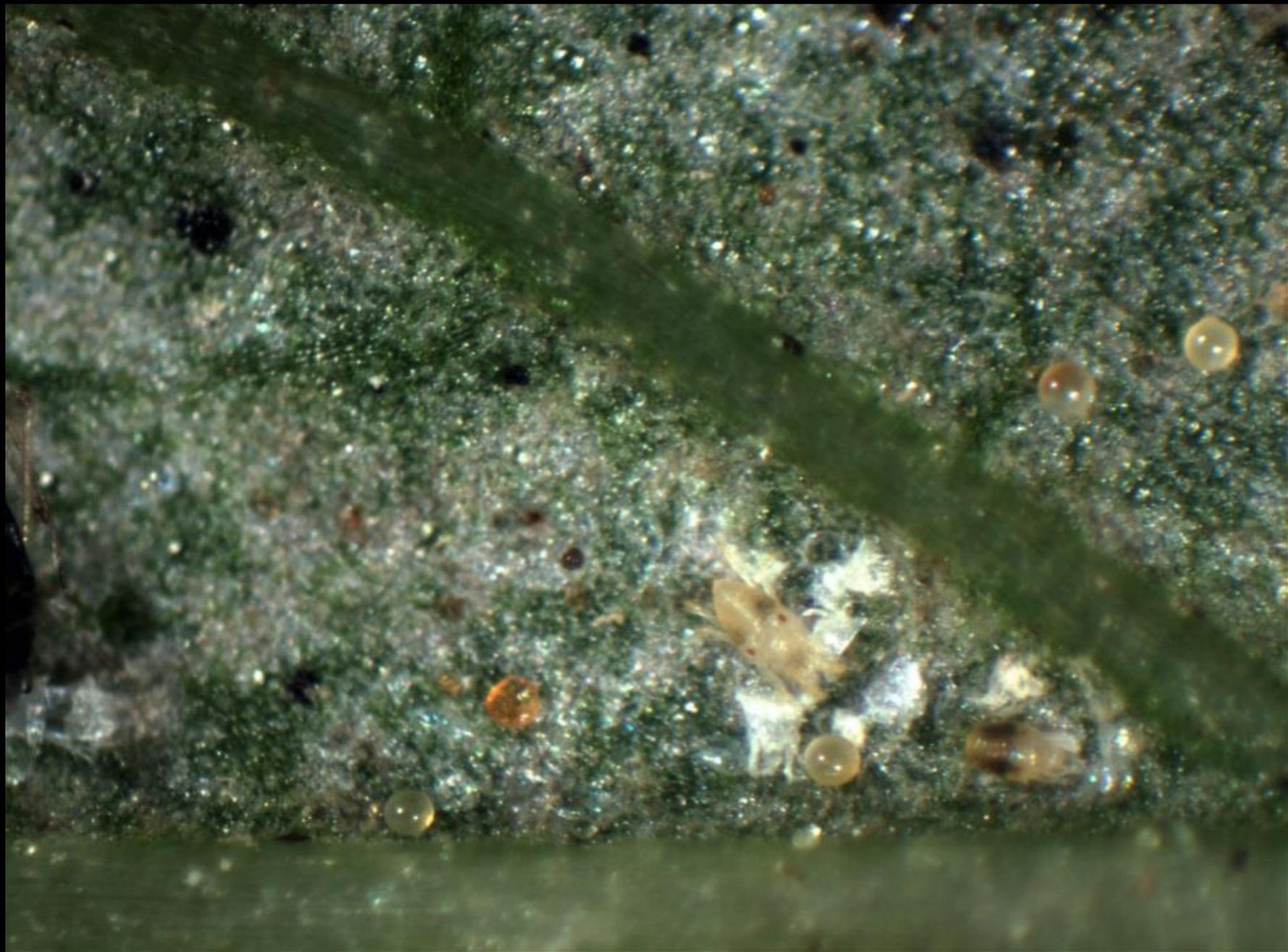
Oedema





APS







**Webbing develops with
High populations of spider mites**

Diagnostic Laboratories in CT

- CT Ag Experiment Station
- <http://www.ct.gov/caes/site/default.asp>
- New Haven: 203-974-8601
- Windsor: 860-683-4977
- UConn Plant Diagnostic Laboratory, Storrs, CT
- <http://plant.lab.uconn.edu/>
- 860-486-6740

What's Working?

- Rutgers IR 4 program – searchable database for reports
- <http://ir4.rutgers.edu/>
- Chase Agricultural Consulting
- <http://chaseagri.com/>
- E-Gro Alerts: <http://e-gro.org/index.php>
- 2016 Guide to Ornamental Fungicides (Syngenta)

In Summary

- Look closely
- Don't jump to conclusions
- Obtain proper diagnosis
- Mistakes cost time and money!

