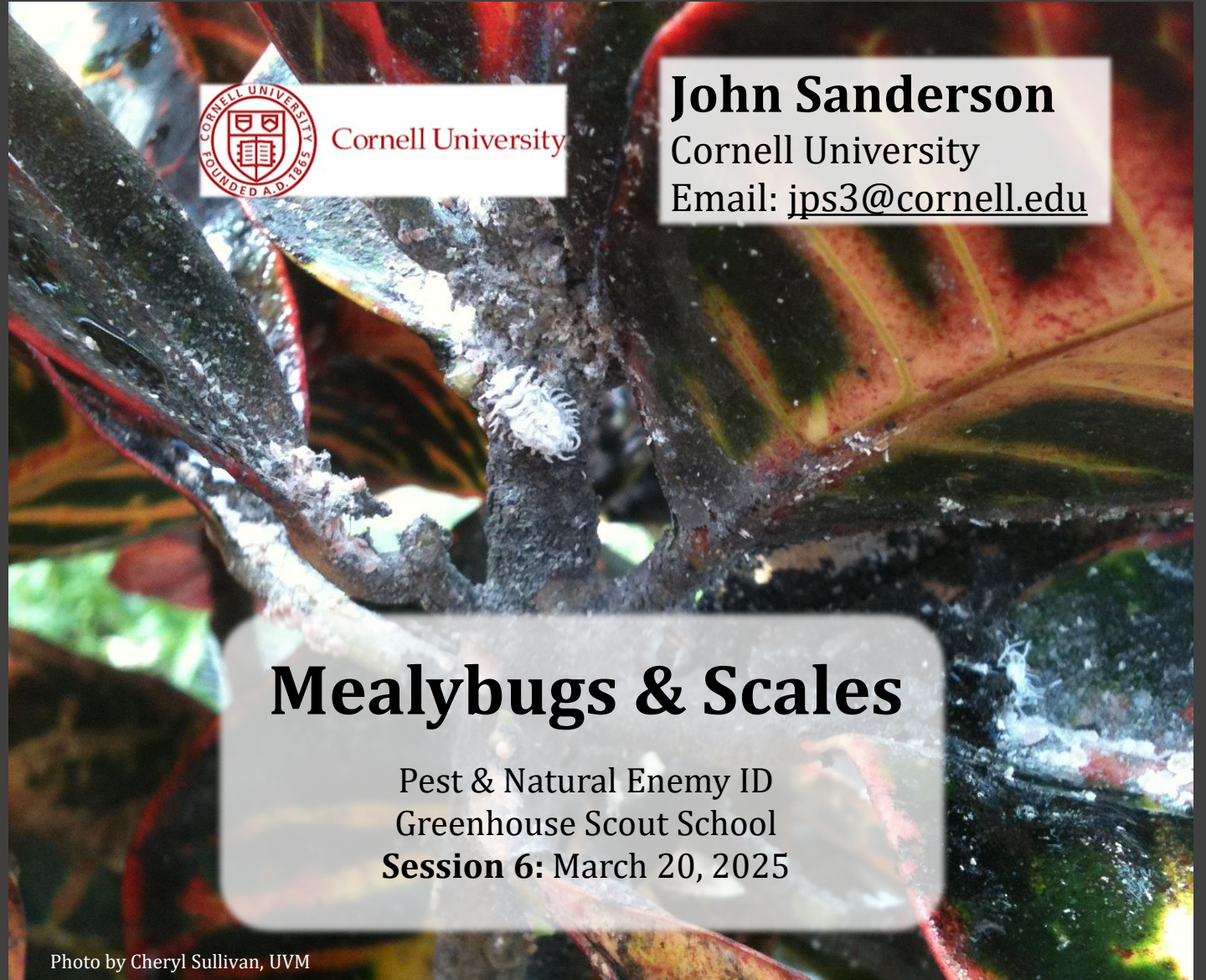




Photo by Cheryl Sullivan, UVM



Photo by Elise Lobdell



 Cornell University

John Sanderson
Cornell University
Email: jps3@cornell.edu

Mealybugs & Scales

Pest & Natural Enemy ID
Greenhouse Scout School
Session 6: March 20, 2025

Photo by Cheryl Sullivan, UVM

Mealybugs in Interiorscape

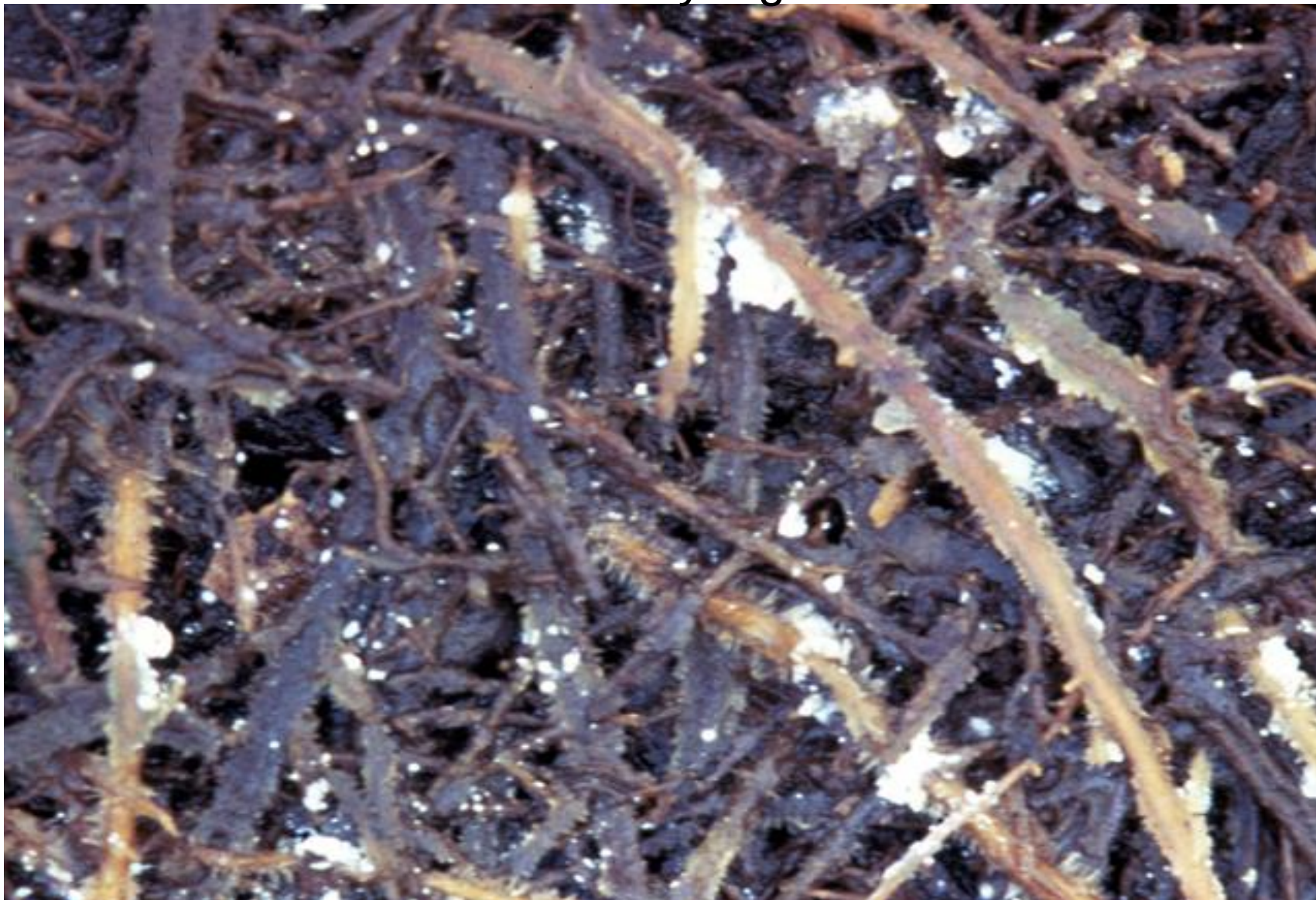


Elise Lobdell

Mealybug Damage



Root Mealybugs



L. Osborne

A few mealybug species



Phenacoccus solenopsis



Dysmicoccus brevipes



Planococcus citri



Ferrisia malvastra



Planococcus ficus



Nipaecoccus viridis



Paracoccus marginatus



Phenacoccus purvus



Planococcus vovae



Pseudococcus longispinus



Citrus mealybug, *Planococcus citri*

- 1 stripe in middle of back
- Fringe short, slightly curved filaments around body
- Body fluid clear
- Ovisac irregular and under body of female
- Anal filaments less than one-eighth the length of the body

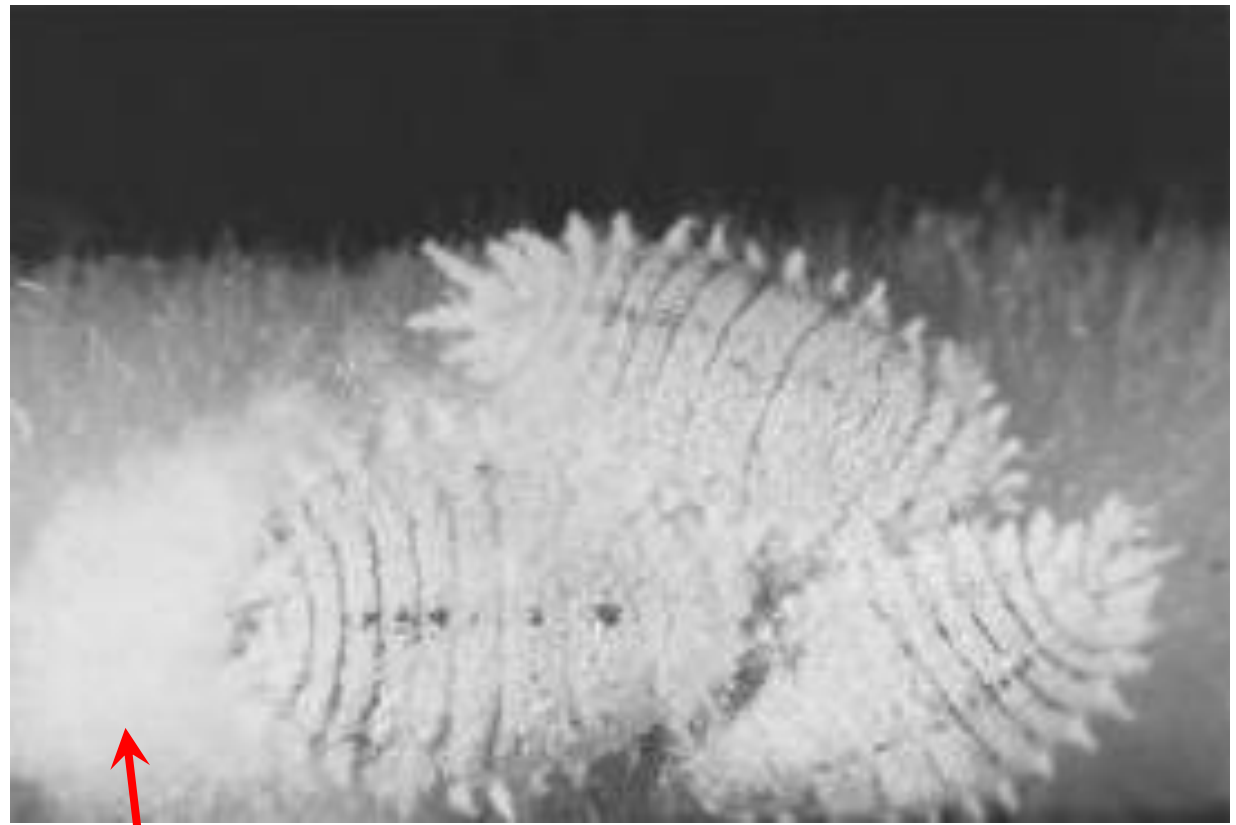


Longtailed mealybug,
Pseudococcus longispinus

L. Osborne

- 1 stripe in middle of back
- Fringe present with thin filaments around body
- Body fluid light clear
- No egg sac
- Anal filaments with one pair longer than the body and a second pair that are long but not as long as the first pair

Females with Egg Sacs



Egg sacs

Mealybug Crawlers Hatching from Egg Sacs

Mealybug crawlers

- Often pinkish
- Size similar to whitefly pupa
- Very mobile – easily disperse unnoticed
- All mealybug lifestages are mobile



L. Osborne

Scouting Tips for Mealybugs

- Not captured on sticky traps
- Must inspect foliage
(and sometimes soil, pots, bench)
- Check plant crevices, in between leaves
- Magnifier/handlens can be helpful
- Know which plants are common hosts



Mealybugs may hide
between pot and soil



Mealybugs on Pots



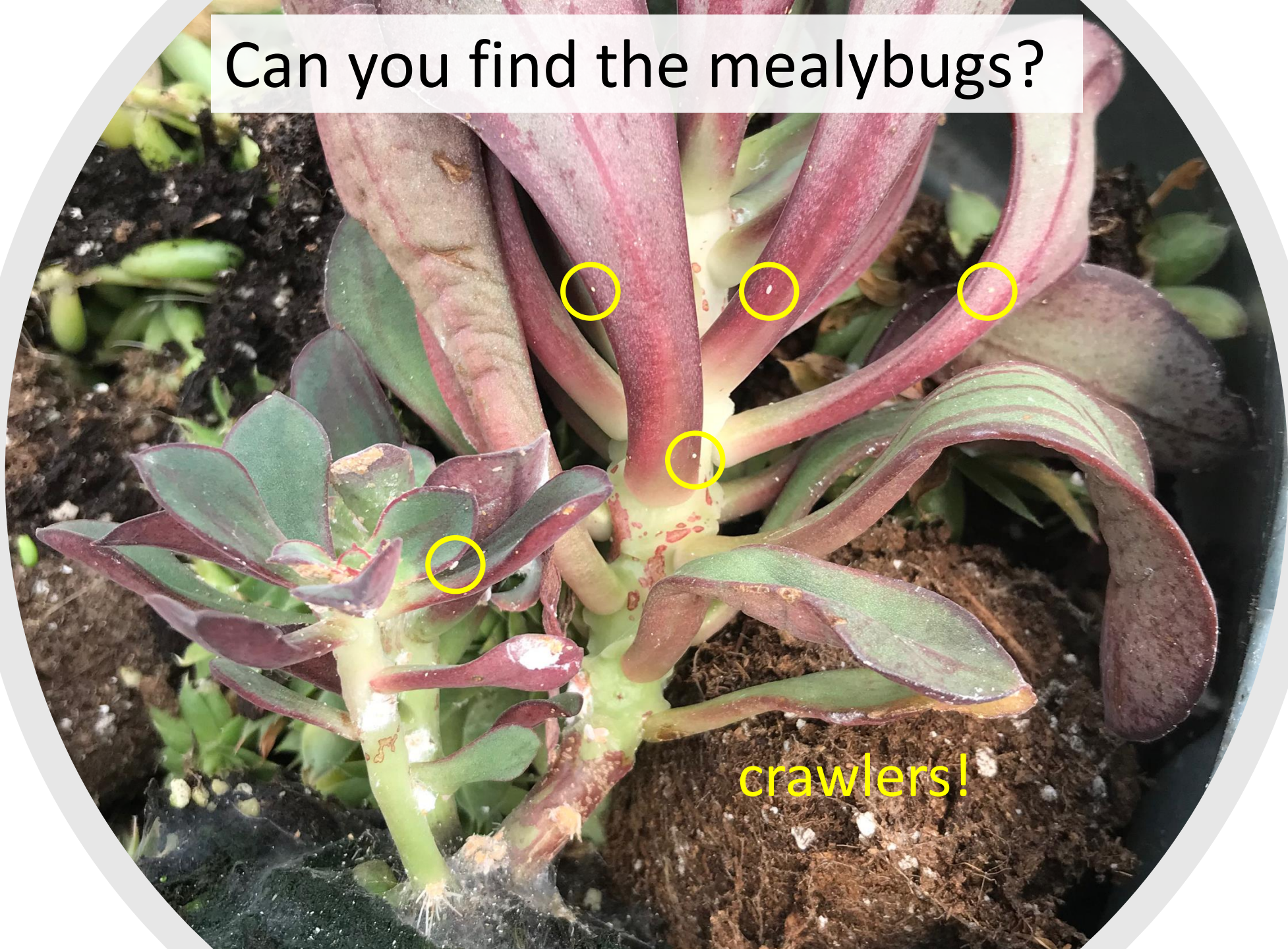
Photos: Elise Lobdell

Can you find the mealybugs?



Elise Lobdell

Can you find the mealybugs?



crawlers!

Plant hosts for mealybugs

- Succulents & sedums, especially Jades & Echeverias
- Foliage plants
- Coleus
- Tropicals
- Can show up on poinsettia, rarely



Some Biological Mealybug Management Options

- Mealybug destroyer (*Cryptolaemus montrouzieri*) = “Crypts”
- *Leptomastix dactylopii* parasitic wasp
- *Chrysoperla* lacewing larvae



Mealybug destroyer (*Cryptolaemus montrouzieri*) = “Crypts”



Longtailed
mealybug vs.
mealybug
destroyer
larva



UGA5186087



Don't mistake a
Cryptolaemus larva
for a mealybug

Leptomastix dactylopii parasitic wasp

Adult



Parasitized
mealybugs



Adult and mealybug



Anagyrus pseudococci
parasitoid wasp

Wasp exit hole from dead mealybug



Photo: Biobee

Lacewing larvae (for longtailed mealybug)



M. Raupp

Cost-effective management option for mealybugs?

- If possible, toss the infested plant(s), plus a few nearby plants
- May be cheaper than trying to win the battle!





Scale Insects – Soft Scales

Soft scales can
produce a lot of
honeydew



Ants love the honeydew



Many species of scale

- Wax Scale
- Globose Scale





Cheryl Sullivan



Brown Soft Scale, *Coccus hesperidum*

Eggs laid under female cover



Scouting Tips for Soft Scales

- Not captured on sticky traps
- Must inspect foliage – stems and leaves
- Honeydew; any sticky leaves or stems
- Ants
- Most common on the woodier foliage plants
Especially Ficus & Scheffleras
Citrus

Effective biocontrol agents are not commonly available
for soft scale on indoor crops



Parasitized and unparasitized soft scale



Parasitoid Exit Holes



J. Dombroski





Parasitoid laying egg in soft scale

Scale with 3 Parasitoids

