

Cornell University

John Sanderson
Cornell University
Email: jps3@cornell.edu



Entomology
Research
Laboratory

Cheryl Frank Sullivan
University of Vermont
Email: cfrank@uvm.edu

Fungus Gnats & Shore Flies



Pest & Natural Enemy ID
Greenhouse Scout School
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John Sanderson

Cornell University

Email: jps3@cornell.edu



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Part 1: Pest ID

Fungus Gnat



Shore Fly



Drain/Moth Fly



Fungus Gnat, *Bradysia impatiens*

Damage

- Nuisance when in high numbers
- Larvae can chew and damage roots
- Larvae and adults can transmit some root disease pathogens



Fungus Gnat, *Bradysia impatiens*

Adult

- 4-6 mm
- “Y” vein on the wings
- Long, slender legs
- Thin body
- Antenna longer than head but not longer than thorax





FG larvae have a black headcapsule

Larva

- Up to 8 mm when grown
- Clear to white with black head capsule
- Legless
- Lives in soil, usually within top 2 inches of soil profile
- 4 larval stages



Fungus gnat larval damage to roots



Photo: M. Daughtrey



Note the FG larva feeding on the stem at soil level

Monitor fungus gnats with yellow sticky traps



Yellow sticky traps will be the most common way that you'll monitor for fungus gnats

Y-shaped wing vein is diagnostic



- Position yellow sticky traps vertically or horizontally.
- Horizontal will catch more FG
- Vertical will catch more of many other kinds of pests



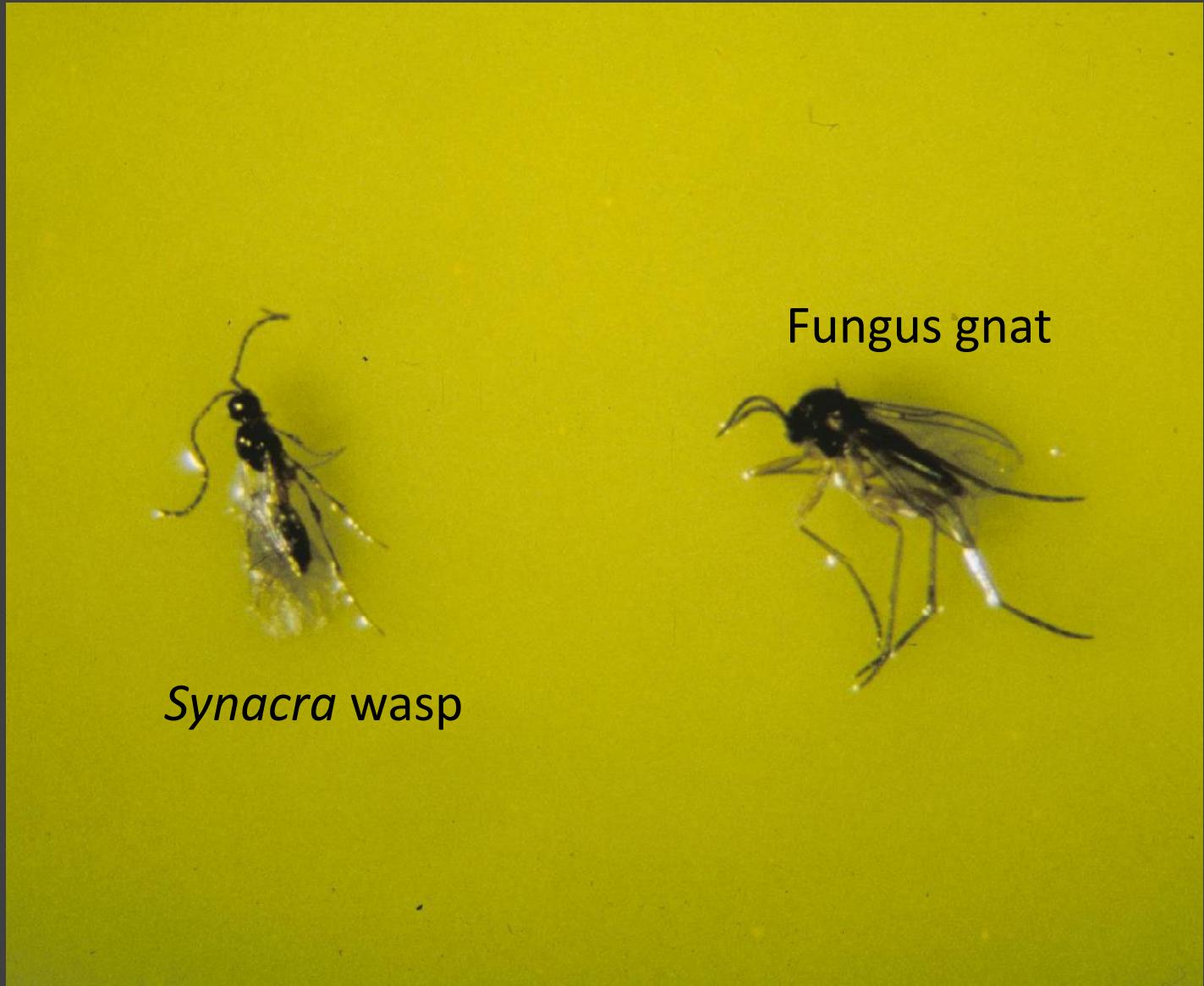
Insects that can be confused with fungus gnats



Synacra paupera wasps



Hexacola sp. wasp



Synacra wasp

Fungus gnat

Note the long antennae of the wasps

Midges can be confused with fungus gnats

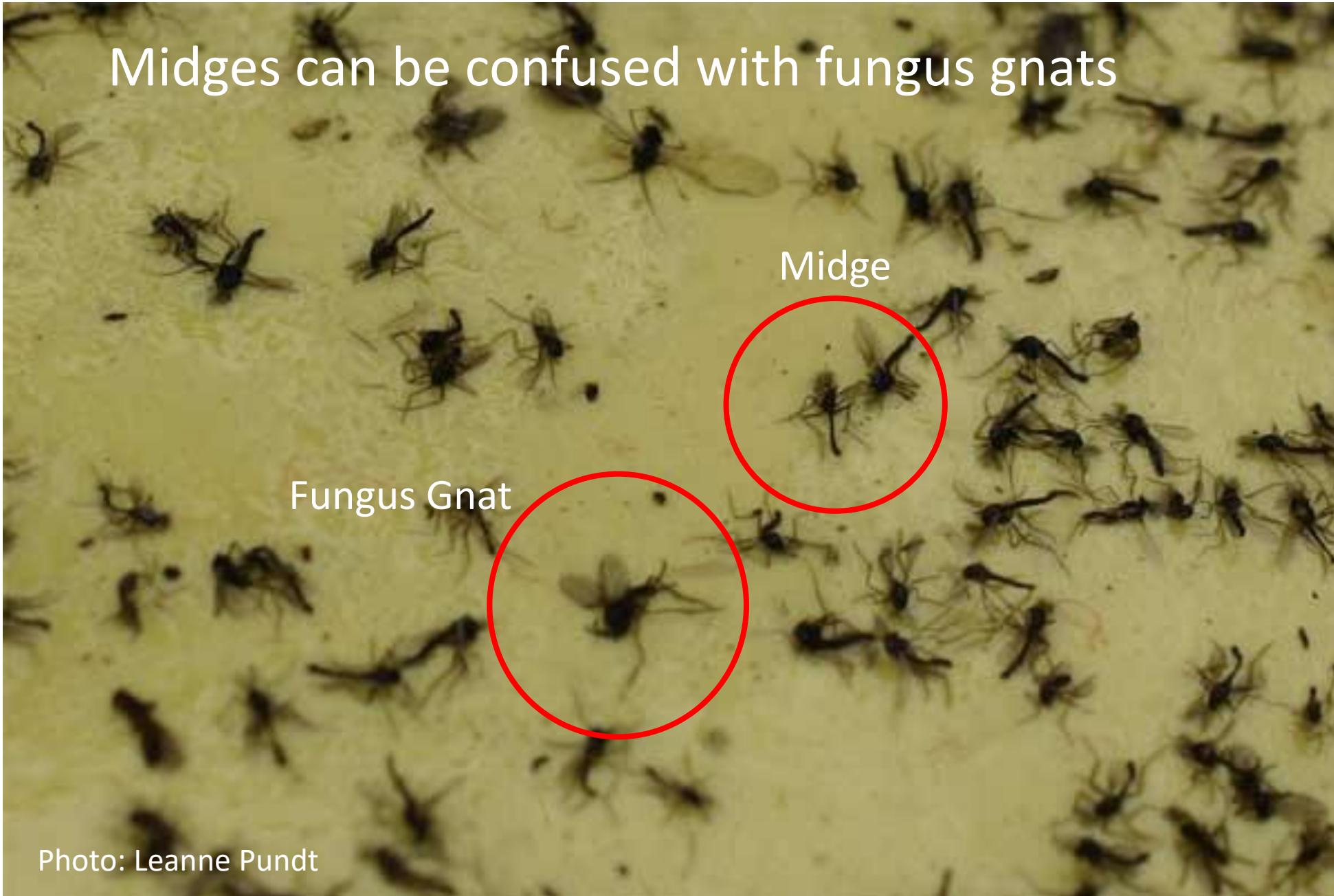


Photo: Leanne Pundt

Monitoring FG Larvae with Raw Potato

Use to detect FG presence or if control tactic is working

Potato Wedge with FG Larvae



Shore Fly, *Scatella tenuicosta*

Damage

- Nuisance in high numbers
- Can transmit root rot pathogens
- Can leave fecal specks on foliage

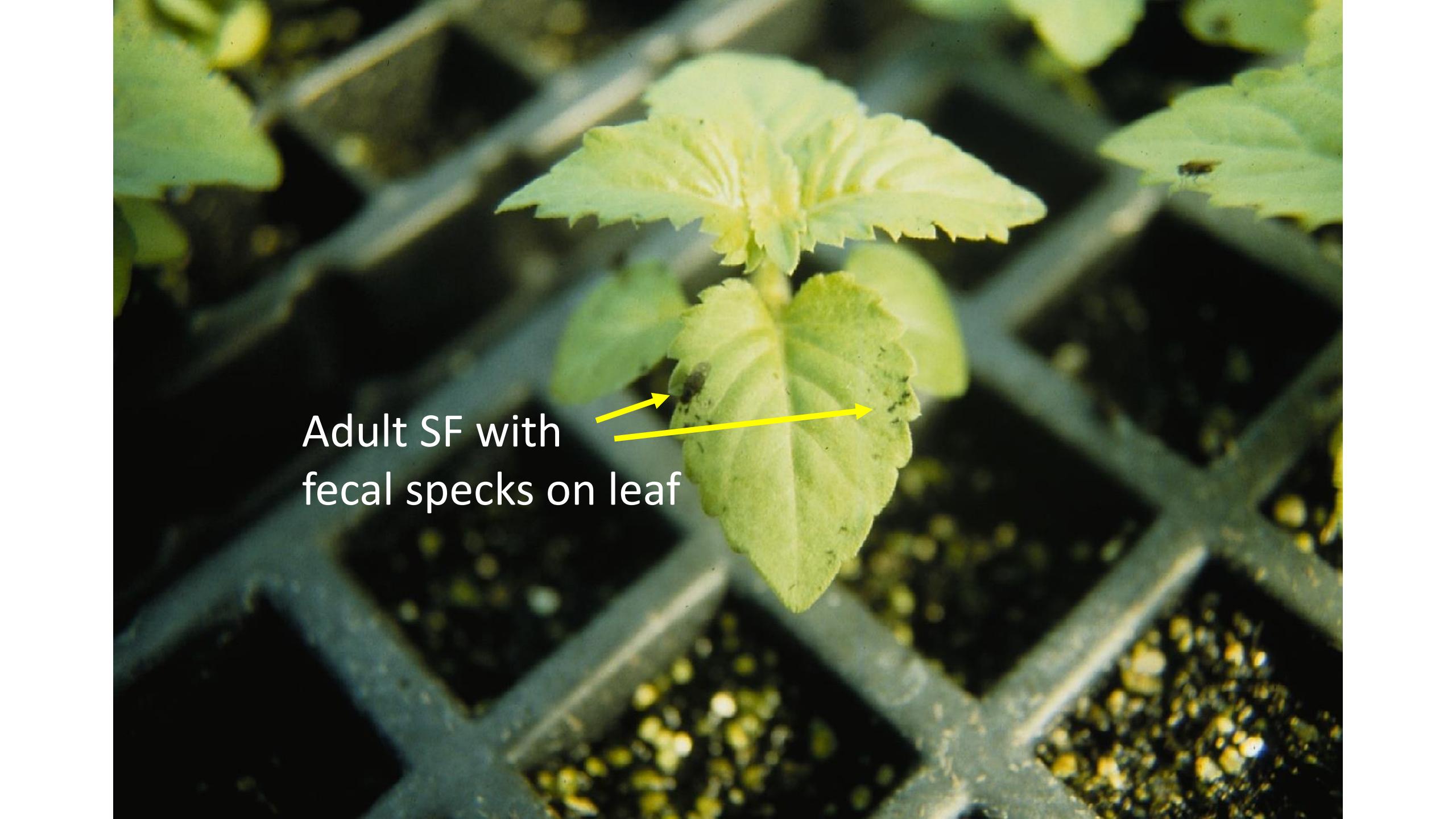


Shore Fly, *Scatella tenuicosta*

Adult

- 4-6 mm
- More robust body than fungus gnat, somewhat resembles housefly
- Gray wings with clear (white) spots
- Short bristle-like antennae
- Found on or near algae on various surfaces





Adult SF with
fecal specks on leaf

Shore fly larvae feeding on algae

Larvae

- No head capsule, just a pair of mouthhooks
- Two long projections at the rear
- 6 mm when grown
- Legless

Photo: Ian Greene

Fungus Gnat Larvae

Shore Fly Larvae



Pupae

- 3-4 mm
- Dark brown
- Tapered on ends
- Two prominent projections (spiracles)
- Found just above water line



Shore flies may occur anywhere where there is algae



Position yellow sticky traps vertically or horizontally for shore flies



Use yellow sticky traps to monitor shore flies



Drain/Moth Fly, Psychodidae

- Damage
 - No serious damage



Drain/Moth Fly, Psychodidae

Adult

- 4-6 mm
- Wings and body covered with hairs, looking moth-like
- Wings broad and pointed at tip, held roof-like over abdomen
- Long hairy antennae, obvious segments
- Found near drains, areas with poor drainage



Drain/Moth Fly, Psychodidae

- Can be captured on yellow sticky traps
- Usually smear the trap with their scales, making a tiny “mess”
- Can be used to reveal greenhouse areas with poor drainage





QUESTIONS?

