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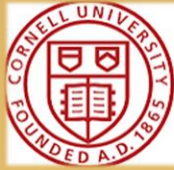
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Fungus Gnats & Shore Flies



Pest & Natural Enemy ID
Greenhouse Scout School
Session 1: Feb. 13, 2025

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Part 1: Pest ID

Fungus Gnat



Shore Fly



Drain/Moth Fly



R. Lindquist

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



Y-shaped wing vein is diagnostic

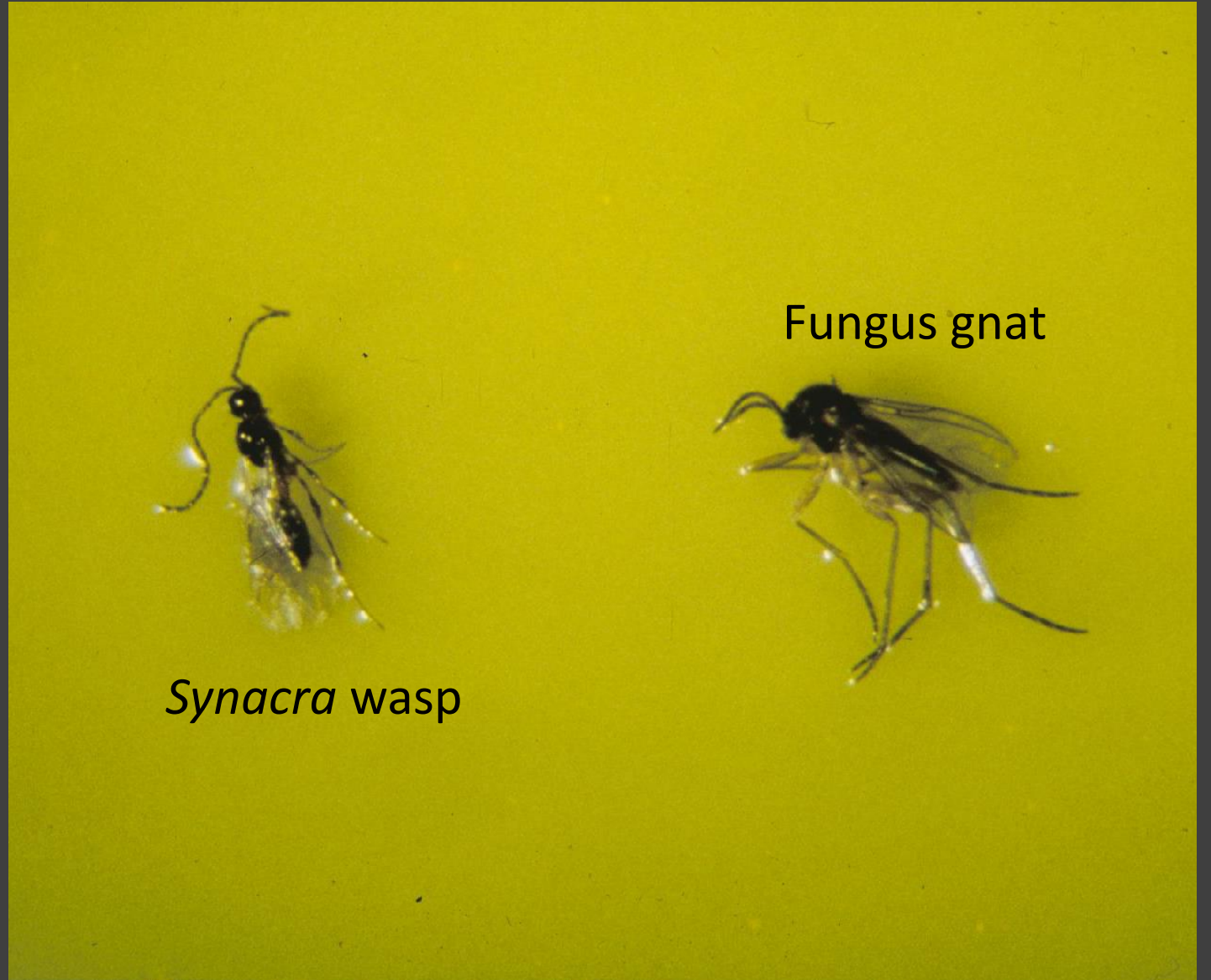


Yellow sticky traps will be the most
common way that you'll monitor for
fungus gnats

- 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



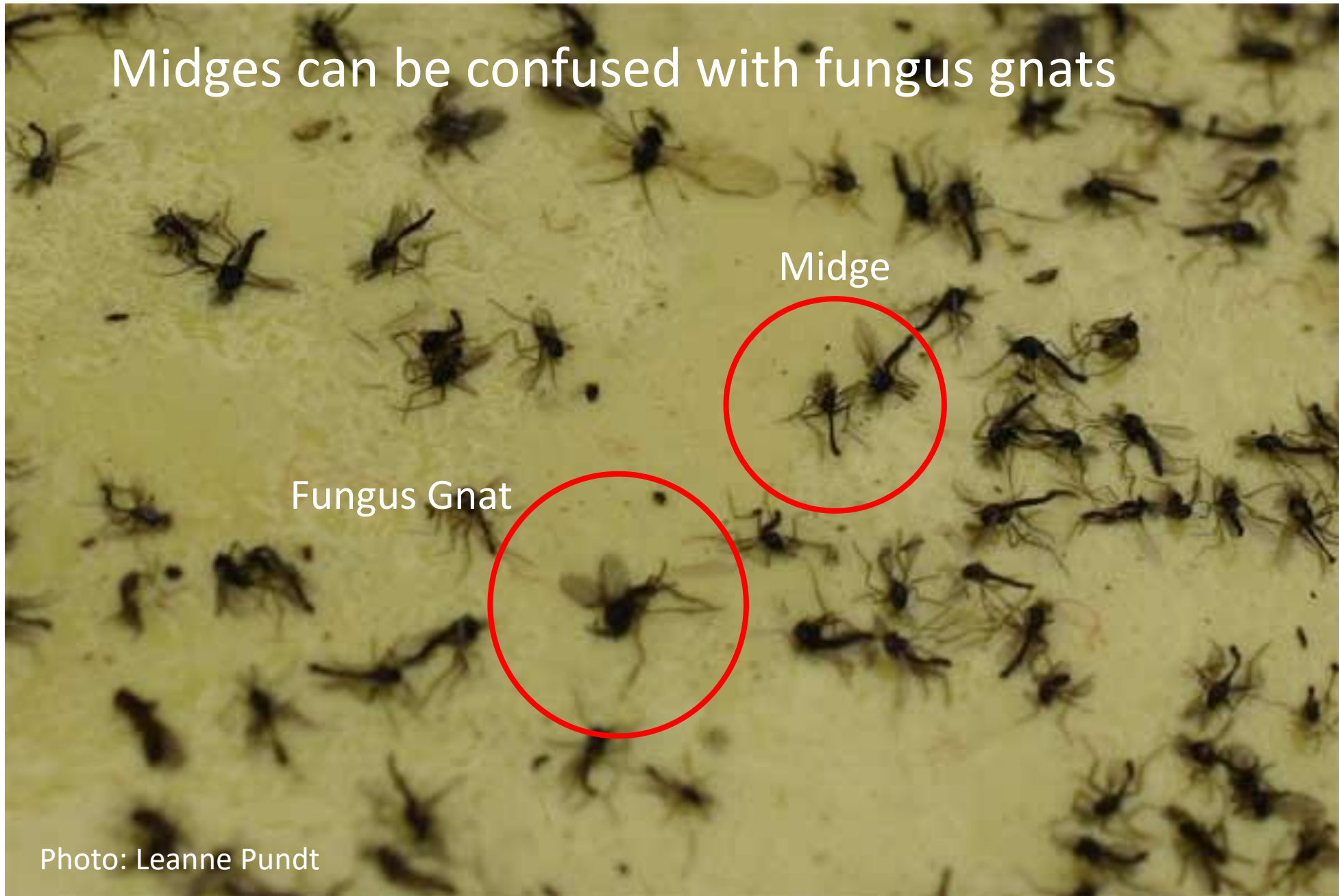
Note the long antennae of the wasps

Midges can be confused with fungus gnats

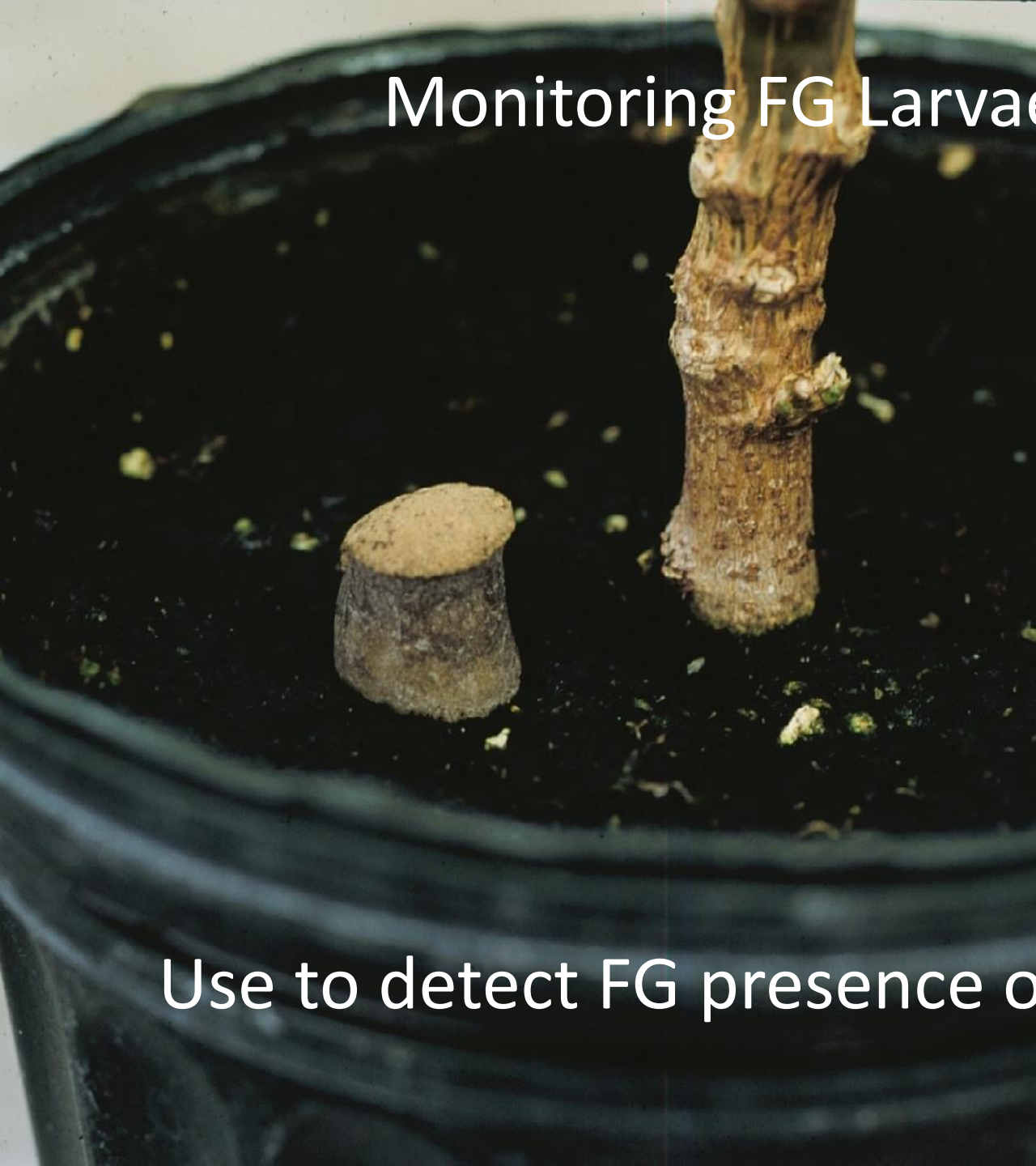
Midge

Fungus Gnat

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



A photograph of a young plant with light green, serrated leaves growing in a black plastic seedling tray. The tray contains dark soil with some yellowish granules. A text overlay in white font reads "Adult SF with fecal specks on leaf". Two yellow arrows originate from the text: one points to a small, dark, oval speck on the lower leaf, and the other points to a cluster of similar specks on the same leaf. The background is blurred, showing other plants in the tray.

Adult SF with
fecal specks on leaf

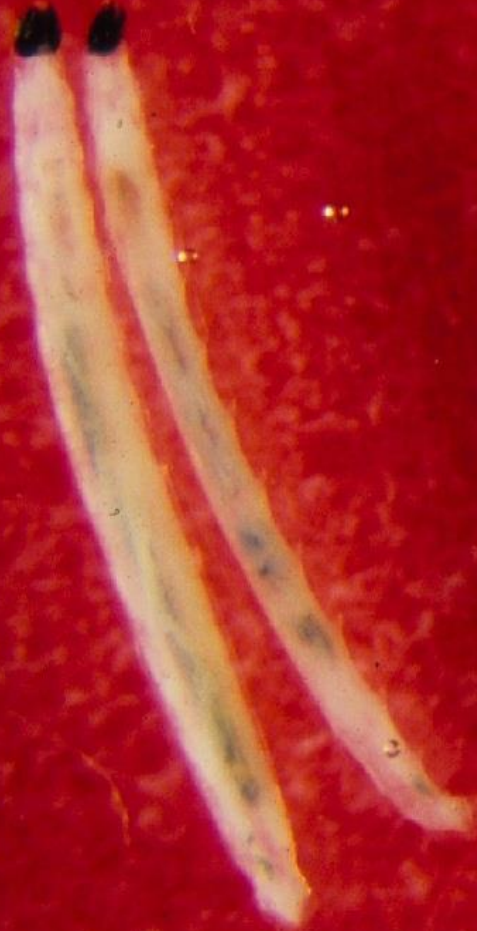
Shore fly larvae feeding on algae

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



Use yellow sticky traps
to monitor shore flies



Position yellow sticky
traps vertically or
horizontally for 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?

