



Cornell University

**John Sanderson**

Cornell University

Email: [jps3@cornell.edu](mailto:jps3@cornell.edu)

# Whiteflies

Pest & Natural Enemy ID

Greenhouse Scout School

**Session 5:** February 19, 2026

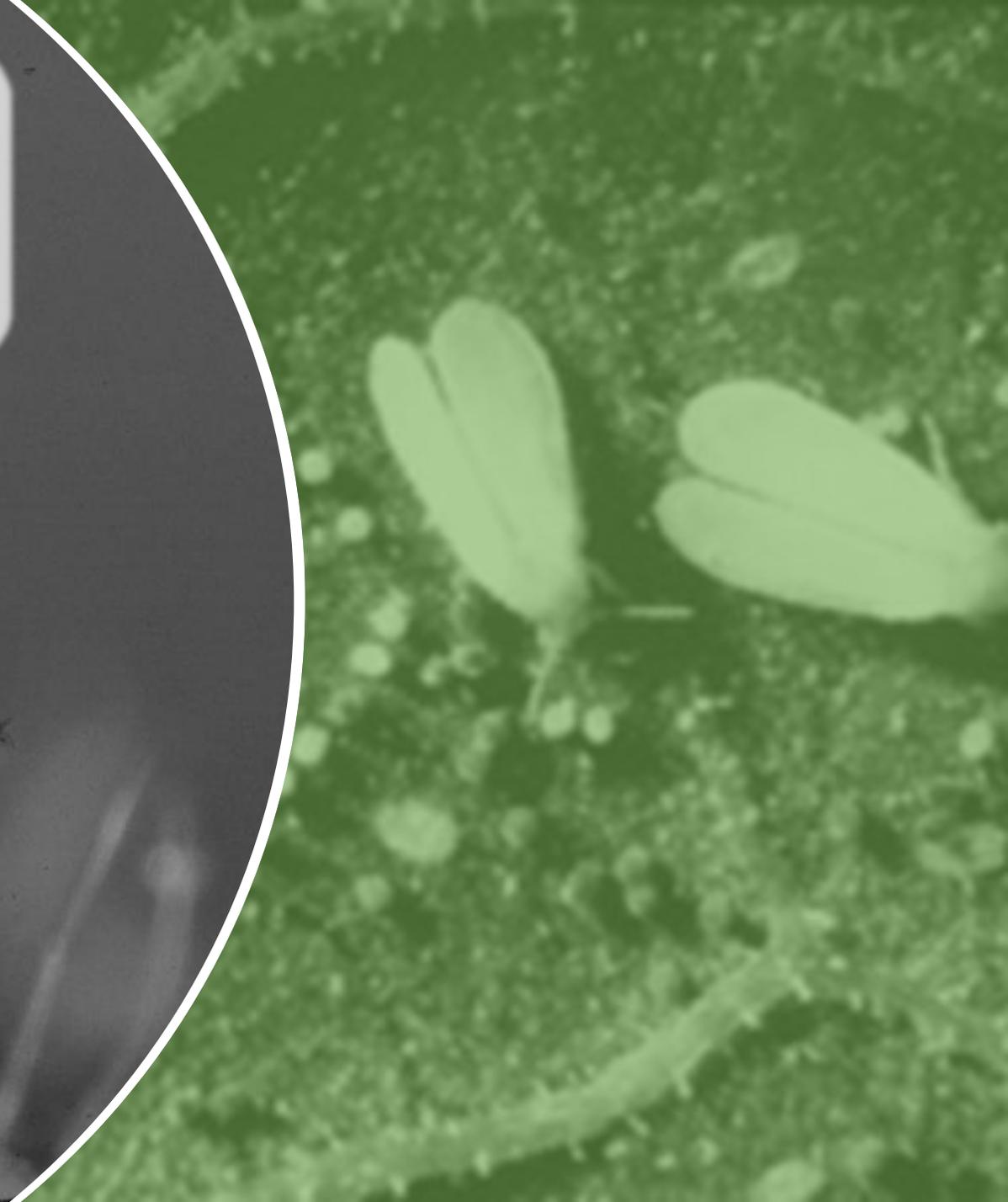
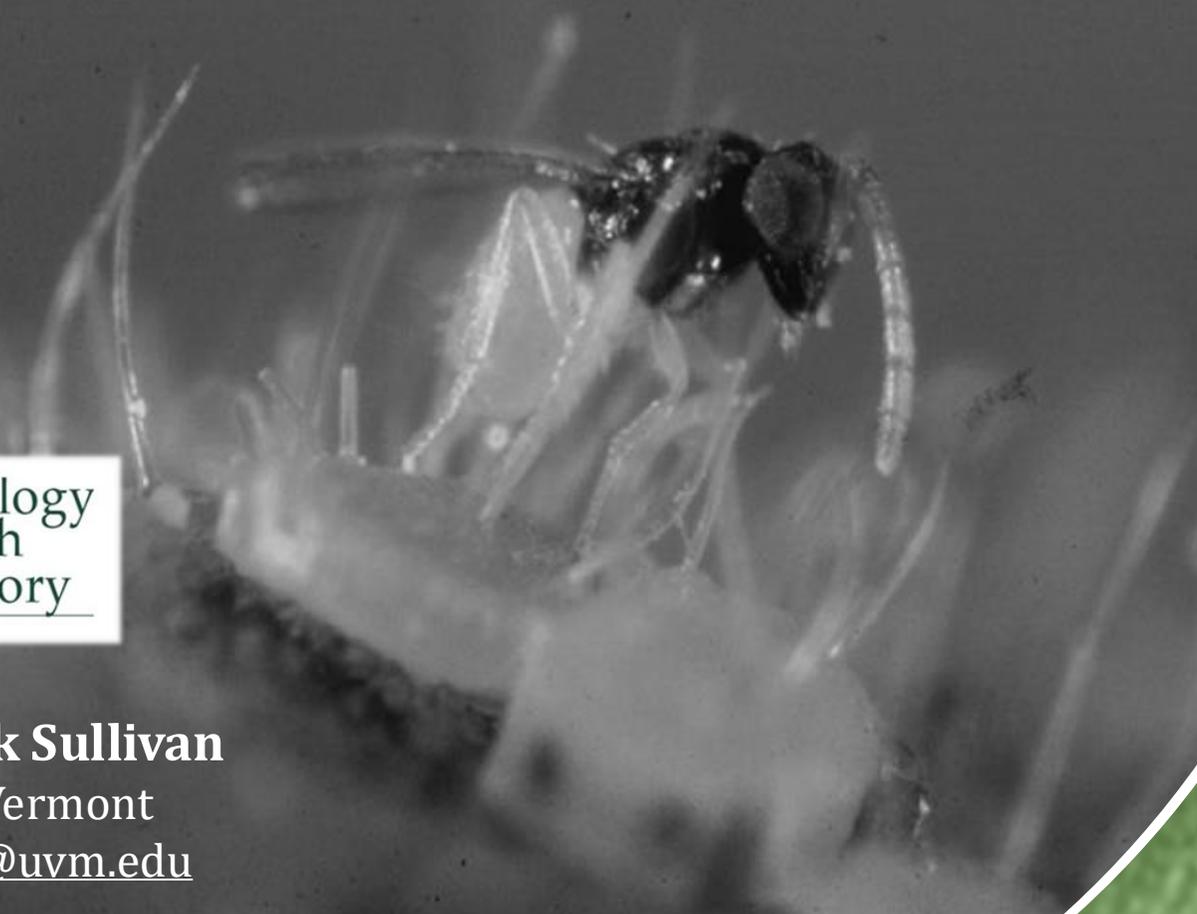


Entomology  
Research  
Laboratory

**Cheryl Frank Sullivan**

University of Vermont

Email: [cfrank@uvm.edu](mailto:cfrank@uvm.edu)





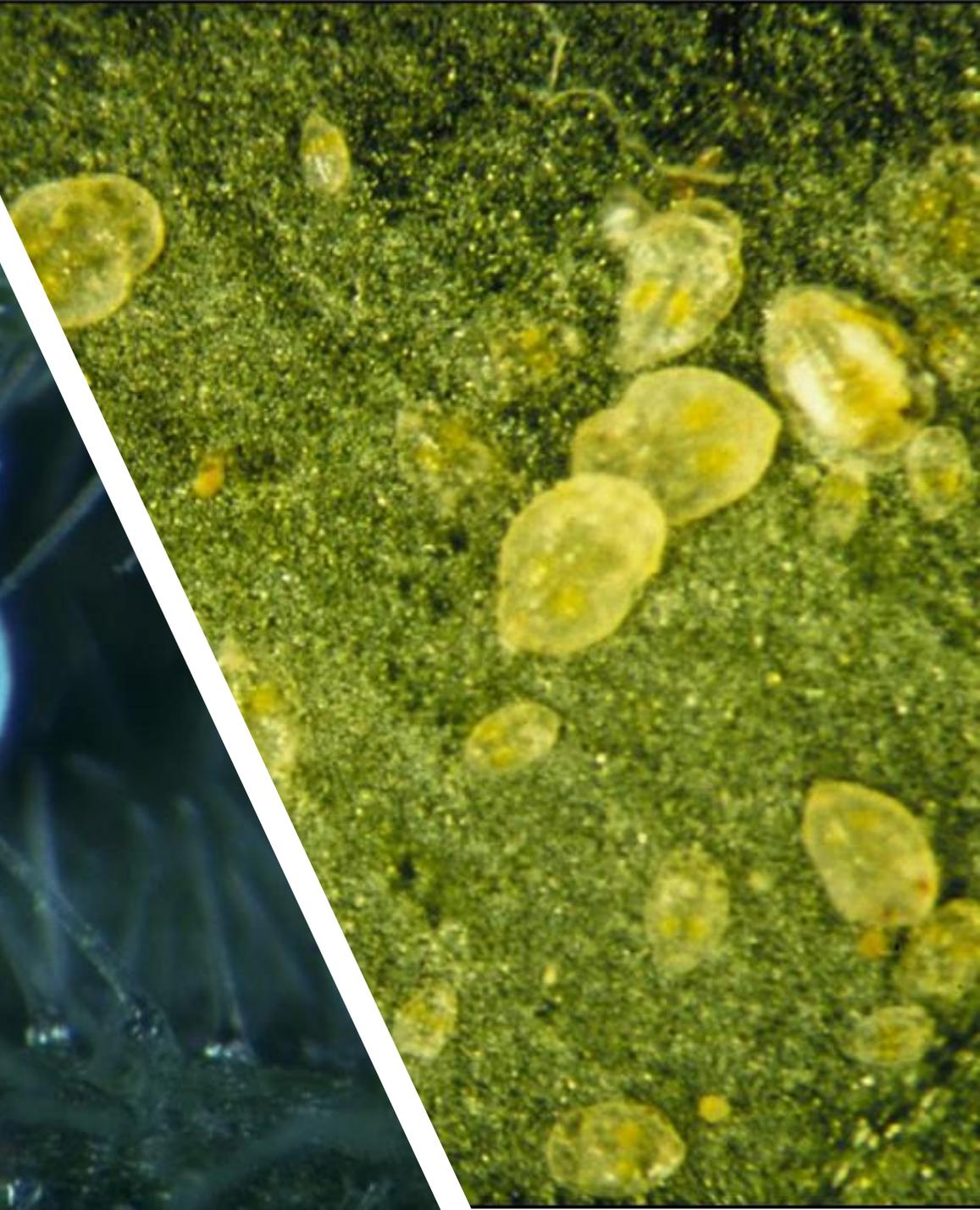
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# Part 1: Whiteflies



What are whiteflies?



## Whitefly Damage

- Sticky honeydew
- Sooty mold
- People don't want to see bugs on their plants!



Sooty mold growing on honeydew



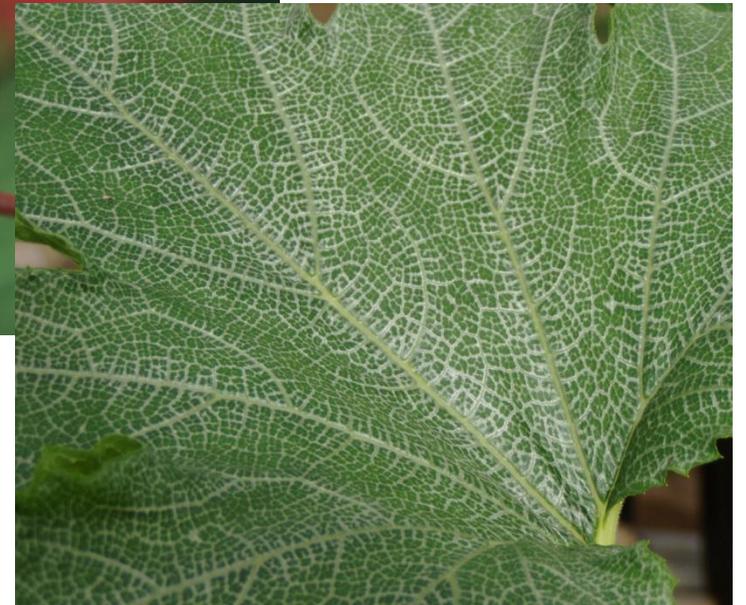
# Silverleaf whitefly injury



Bract/stem whitening



Squash silver leaf

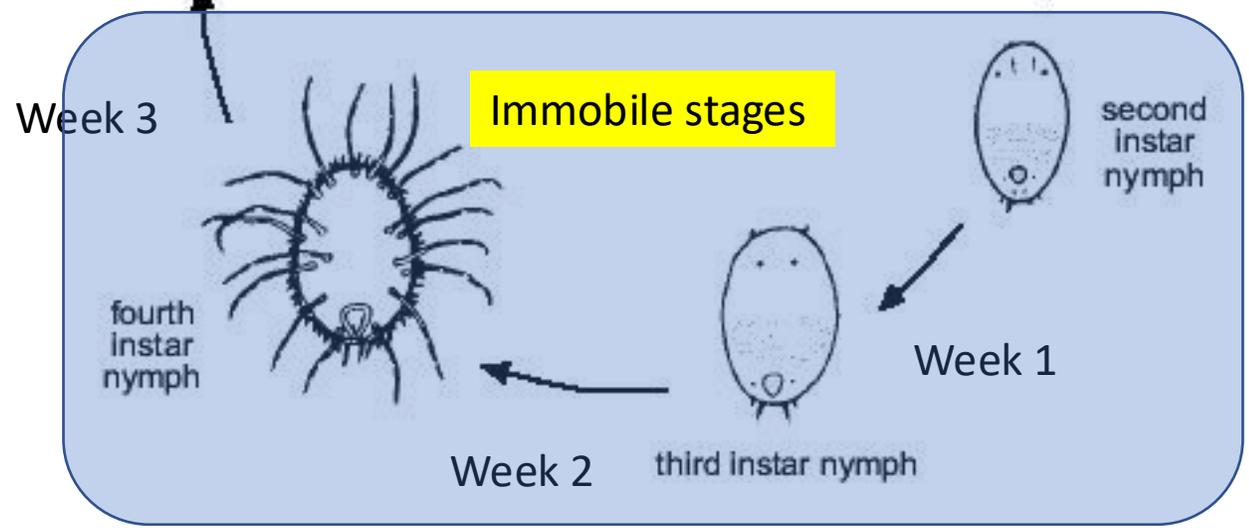
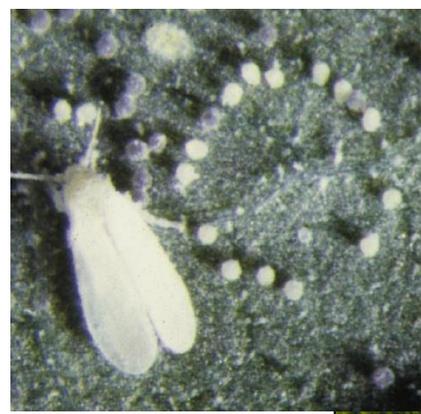
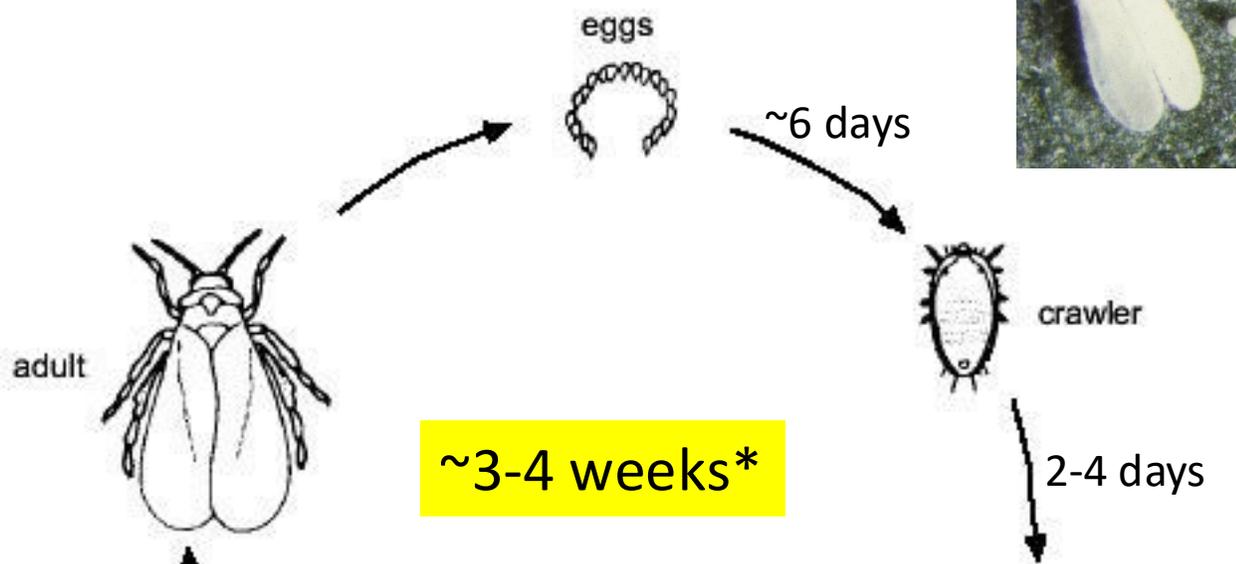




How do whiteflies  
feed?

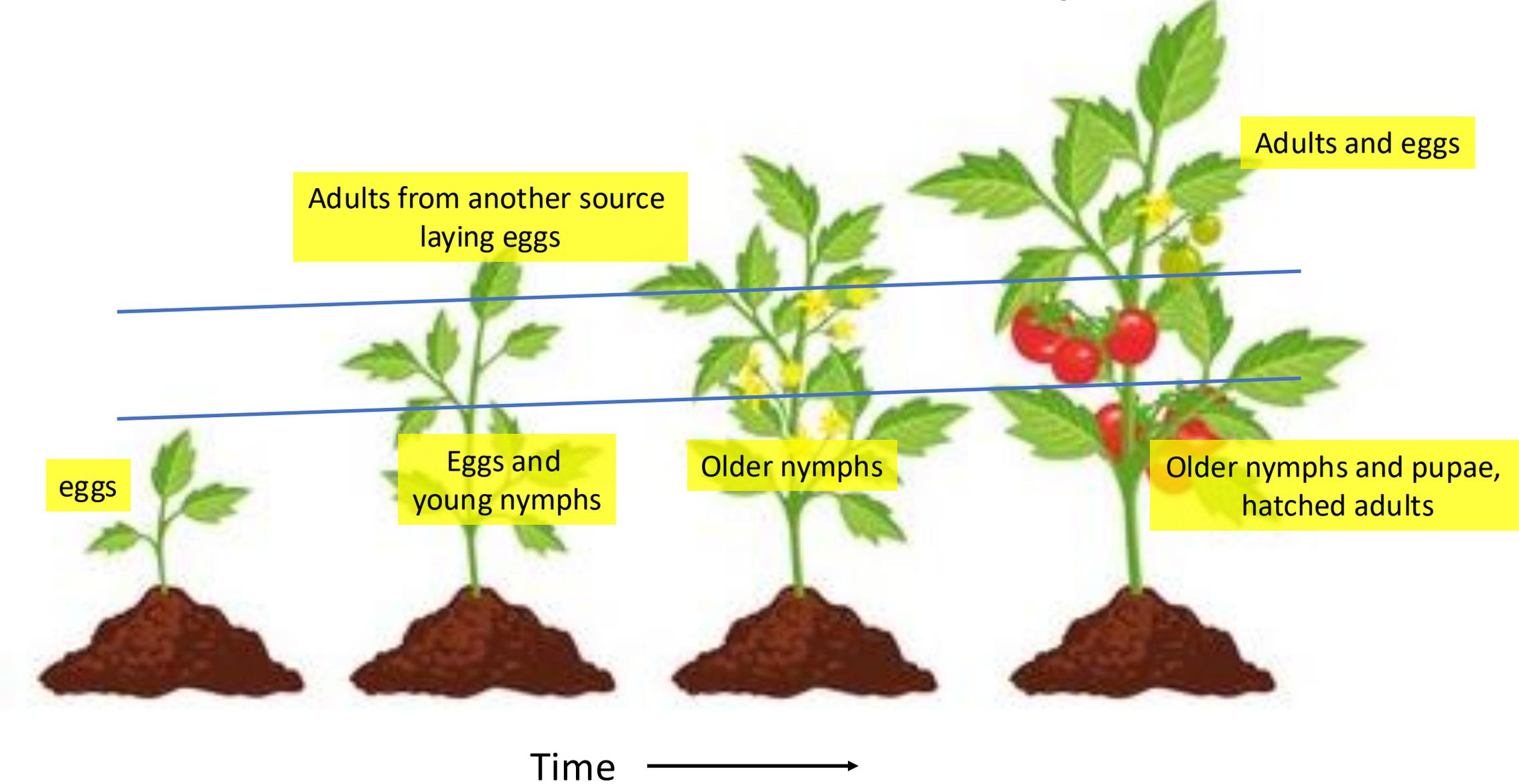
Where do whiteflies  
feed on a plant?

# Whitefly life cycle



\*faster at warmer temperatures

# Where to look for whiteflies on a plant?





# Common Whitefly Pests in Greenhouses

## Silverleaf (=Sweetpotato) Whitefly

*Bemisia argentifolii* / *B. tabaci*



## Greenhouse Whitefly

*Trialeurodes vaporariorum*



# Eggs (GHWF)



# Various GHWF Immature Stages



Crawlers, pupae, others

# Red-eyed Pupa

Eyes of  
developing adult





## Adult GHWF

- Larger than SLWF
- Wings held flat over abdomen

## Adults (SLWF)



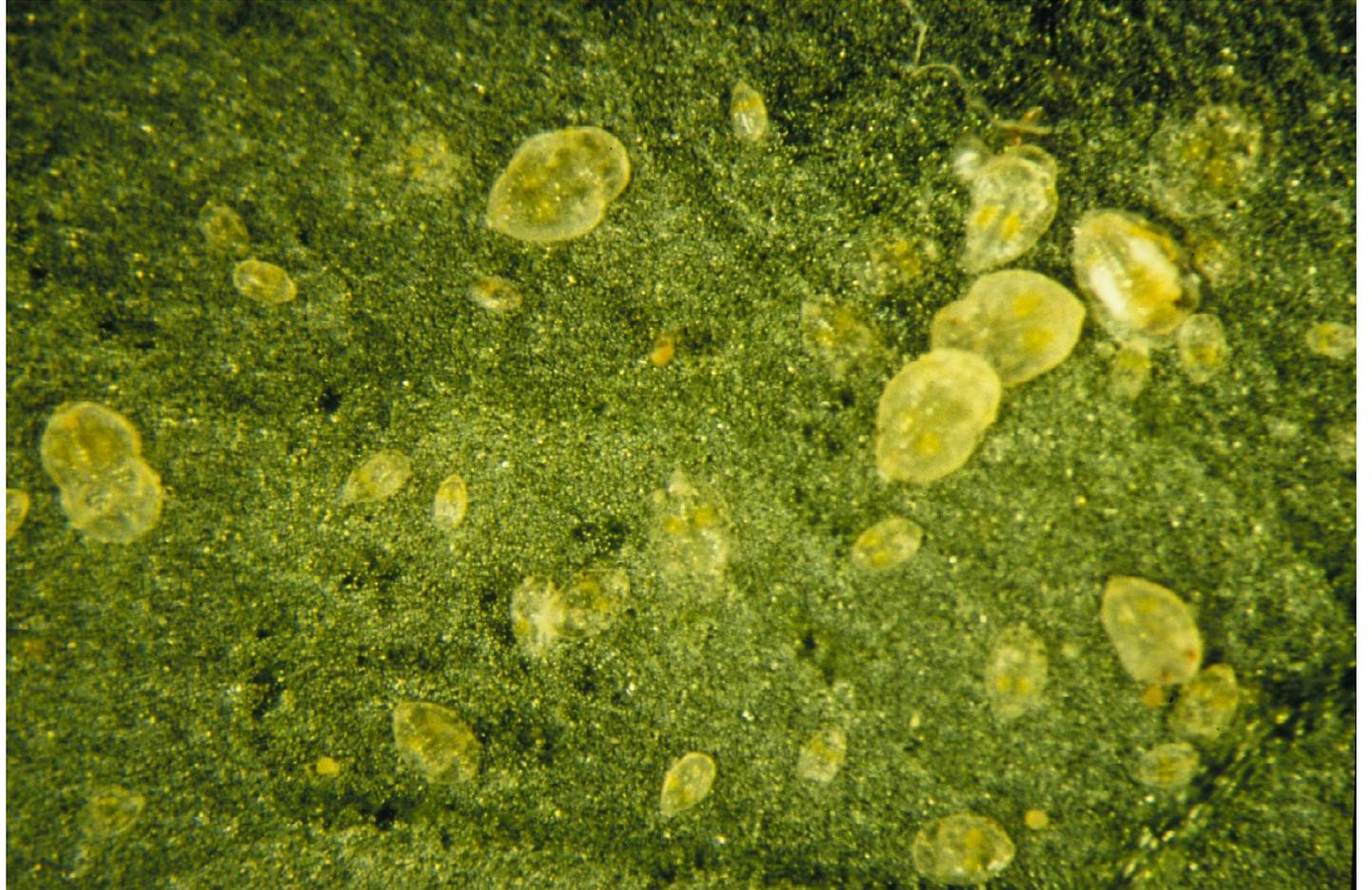
- Smaller than GHWF
- Wings held more roof-like over abdomen

Eggs (SLWF)



Same shape as GHWF in side view but tend to be amber then grey

Various SLWF  
Immature  
Stages



Tend to be more yellow than GHWF

# Greenhouse vs Silverleaf Whiteflies

GHWF

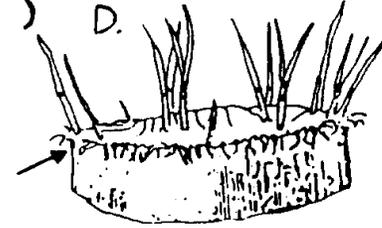
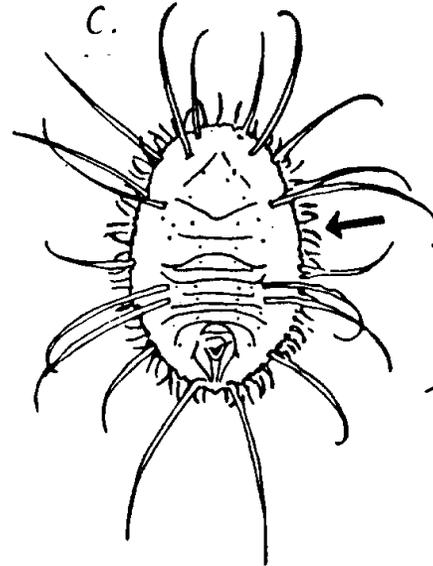
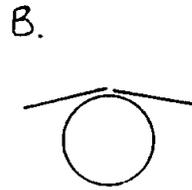
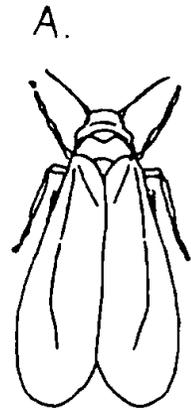


SLWF

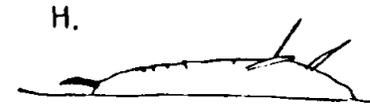
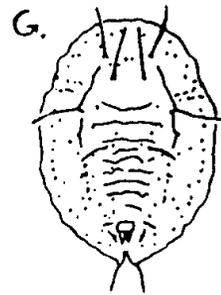
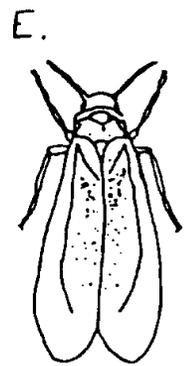


# Greenhouse vs Silverleaf Whiteflies

GHWF



SLWF



# Bandedwing Whitefly



Adult



Pupa

Rarely a pest. May find on sticky traps in the Fall.

# Monitoring for Whiteflies



- Plant inspection is crucial  
Top, middle, bottom leaves
- Look for immature stages



Yellow sticky traps  
for adults

Note: can't tell  
GHWF vs. SLWF  
on a sticky trap

# Monitoring for Whiteflies

## Tips on WF on sticky cards

*Not sure if it's a WF?*

- touch it
- if you feel anything it is not a WF

*Trouble seeing them?*

- look at the edge of a card
- they are easier to see that way
- always have the sun at your back

*Bandedwing WF seem to melt into the cards*

-but even when they disappear you can see the bands

Source: Elise Lobdell



# Besides poinsettias, on which crops are whiteflies most often found?

WF will overwinter in the greenhouses on weeds & perennials

Fresh ones come in on the Mandevillas, Hibiscus & other tropicals

then bounce right to the lantanas, fuchsias, & verbenas.

Very common on eggplants, gerberas, dahlias, and kale.

Heliotrope, herbs (esp. sages), Crassandra, scented geraniums