

Making Scouting Easier & A Recap of Sessions 1-3

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Things to consider

Be organized and systematic.

- Pick a day and time and stick with it
- Enter data immediately (don't procrastinate)

Use scouting tools that are comfortable.

Divide the greenhouse into subunits, different crops and make maps.

Integrate approaches: Combine sticky cards with a targeted plant inspection approach (focus on hot spots/areas and plants pest and/or disease infestations are common) along with randomly selected plants.

Understand how crops develop.

Avoid inspecting freshly watered plants (if over-head watered).

Think crop by crop and use 'sentinel' plants.

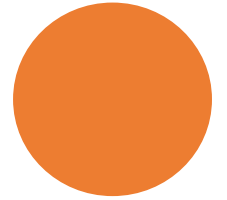


Photo by Cheryl Sullivan, UVM

Indicator/Sentinel & Trap Plants

Concept: Some plants are more attractive to pests than others.

Indicator/sentinel plants: Detect pests or diseases early (i.e., petunia for INSV/TSWV) or those marked as infested for future inspections.

Trap plants: Draws pest out of the crop, but also a targeted site to make spot treatments. i.e., yellow marigolds, mums (thrips); beans (spider mites).



Think Crop by Crop (List Examples)

Mums

White rust

Brown rust

Bacterial leaf spot (*Pseudomonas*)

Fusarium wilt

Aphids

Thrips

Spider mites (later in season)



Calibrachoa

Chlorosis from too high a pH

Black root rot

Aphids

Thrips



Geranium

Whiteflies (Regal geraniums)

Thrips & Spider mite (Ivy Geraniums)

Rust

Botrytis

Bacterial blight & *Ralstonia*

Pythium root rot

New Guinea Impatiens

INSV/TSWV viruses

Broad mites

Thrips



E Lobdell image

Thrips Feeding



AR Chase image

Oedema



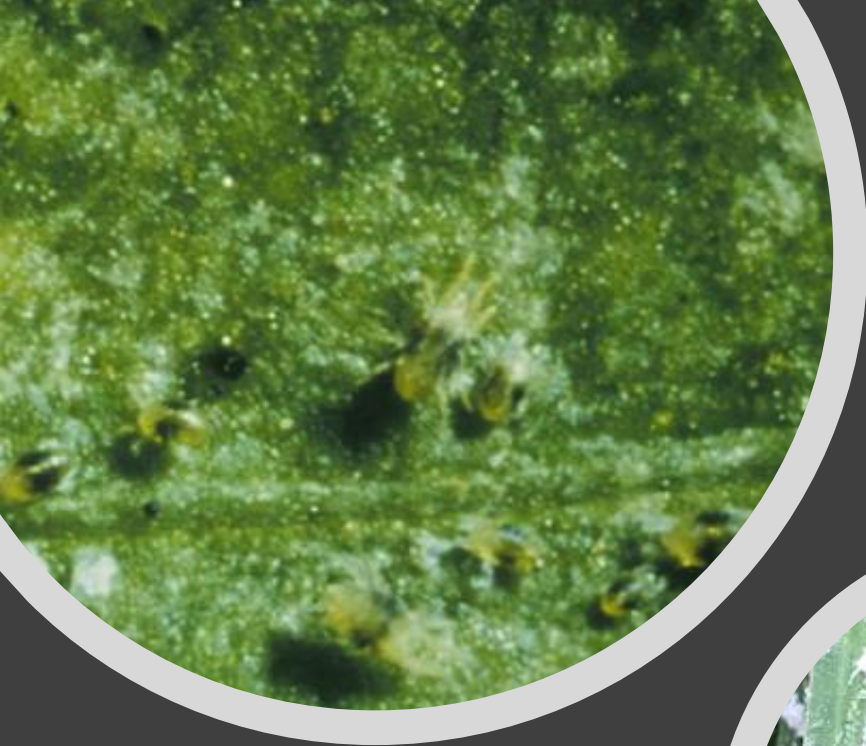
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Spider Mite Feeding

Think of Abiotic Explanations!

e.g., what if you see small blisters on the undersurface of ivy geranium leaves?

Arthropod Pest Issues that Show Up in Greenhouses (in order of appearance)



- **Fungus Gnats & Shore Flies**
- **Thrips**
- **Broad Mites**
- **Aphids**
- **Spider Mites**
- **Whiteflies**
- **Mealybugs & Scale**

(A recap of those in yellow)

Fungus Gnats & Shore Flies

A function of exposed soil, time of year & moisture management



Broad Mites

Host list:

- New Guinea Impatiens
- Bacopa
- Nemesia
- Angelonia
- Torenia
- Regal geraniums
- Tuberous begonias, non-stops
- Others



Photo by Cheryl Sullivan, UVM



Photos by Elise Lobdell



Photo by Elise Lobdell

Aphids

Common Hosts:

- Weeds!!
- Pansies
- Fuchsias
- Daylilies (if overwintered)
- Calibrachoas
- Peppers
- Eggplants
- Ipomoea
- Vinca vine
- Salvias
- Portulacas
- Geranium (foxglove)



Photo by Cheryl Sullivan, UVM

Spider Mites

Host list:

- Ivy geraniums
(sometimes zonals)
- Dahlias
- English Ivies
- Mandevillas
- Dipladenias
- Hibiscus (often from FL)
- New Guinea impatiens
- Roses and mini-roses
- Lamium
- Sweet potato vine
- Thunbergia
- Spikes
- Gerberas
- Salvias
- Hops
- Many, many others



Full Bloom is Too Late!

Photo by Elise Lobdell

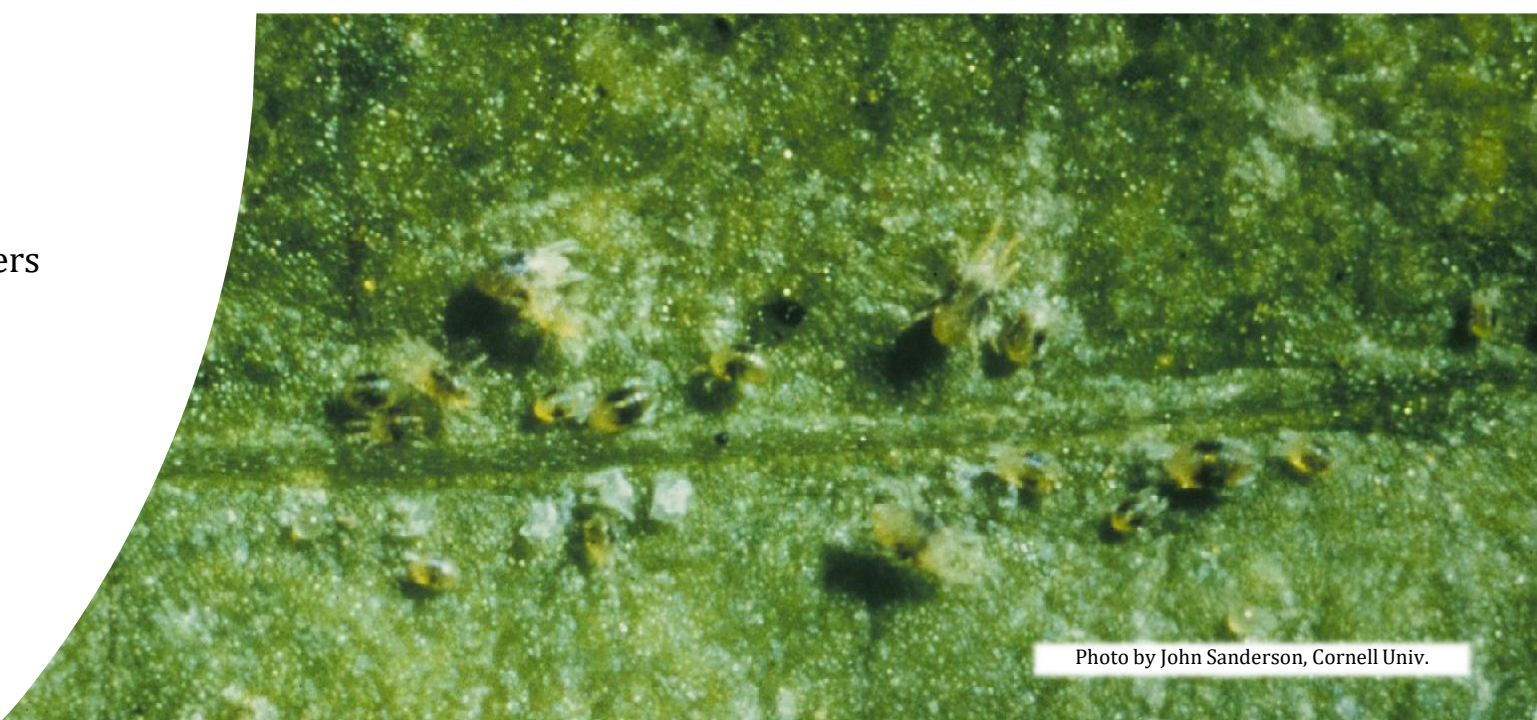
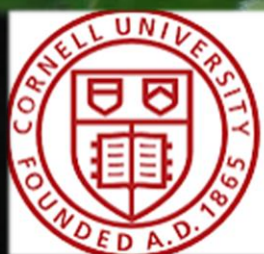


Photo by John Sanderson, Cornell Univ.

Thank You!



Cornell University



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