



Cornell University

**John Sanderson**

Cornell University

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

# Mites

Pest & Natural Enemy ID

Greenhouse Scout School

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Entomology  
Research  
Laboratory

**Cheryl Frank Sullivan**

University of Vermont

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

Wide IPM Project  
Regents, University of California



Cornell University

**John Sanderson**  
Cornell University  
Email: [jps3@cornell.edu](mailto:jps3@cornell.edu)



# Part 1: Pest ID

Twospotted spider mite

Broad mites and cyclamen mites



Rust mites



A close-up photograph of a green leaf with two twospotted spider mites and a single egg. The mites are small, light green, and have two dark spots on their backs. They have long, thin legs. The egg is a small, clear, spherical object. The leaf's surface is covered in fine hairs and veins.

# Twospotted Spider Mite

# Twospotted spider mite damage

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# Spider mite damage to hops



Photos: Elise Lobdell





Only spider  
mites  
produce  
webbing



Spider mite  
stippling



Spider mite  
damage to zonal  
geraniums

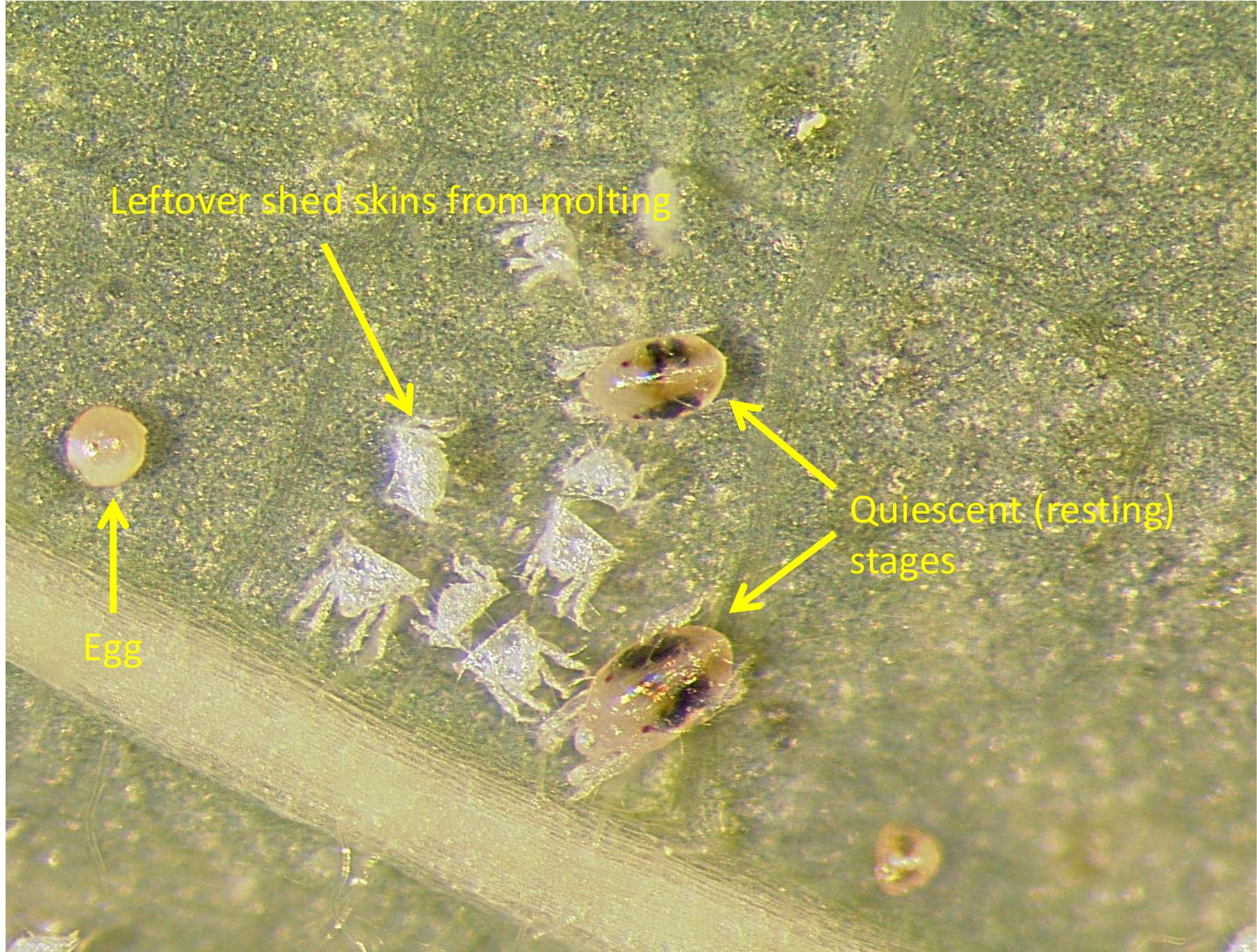
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Spider mite damage,  
NOT oedema



# Spider mite eggs

UC Statewide IPM Project  
© 2000 Regents, University of California



Leftover shed skins from molting



Egg



Quiescent (resting) stages



- Hot dry weather is ideal for spider mites
- Populations can explode within a day or two





Spider mites can be easily picked up on clothing and spread to uninfested plants

Scout plants along walkways, doors, warm and/or dry places

Photo: Elise Lobdell

Use “sentinel plants”  
to check for:

- dead spider mites  
killed by sprays
- evidence that  
predatory mites are  
active and  
reproducing (eggs,  
immatures, spider  
mite cadavers)





## Look for spider mites on:

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

# Overwintering Twospotted Spider Mite

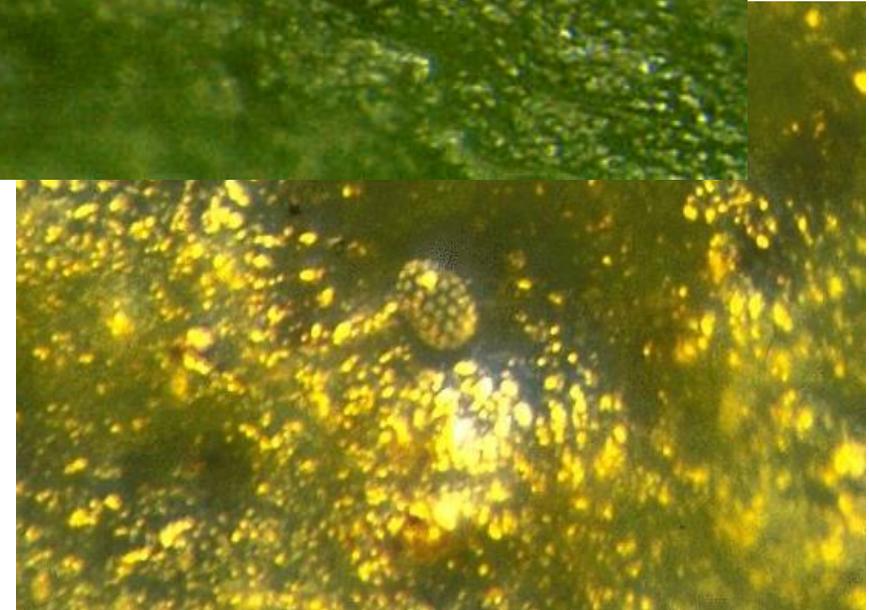
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Lewis mite  
and injury to  
poinsettias

# Broad Mites and Cyclamen Mites



**Must** use *at least* a 10X hand lens!

Broad mite injury on NGI

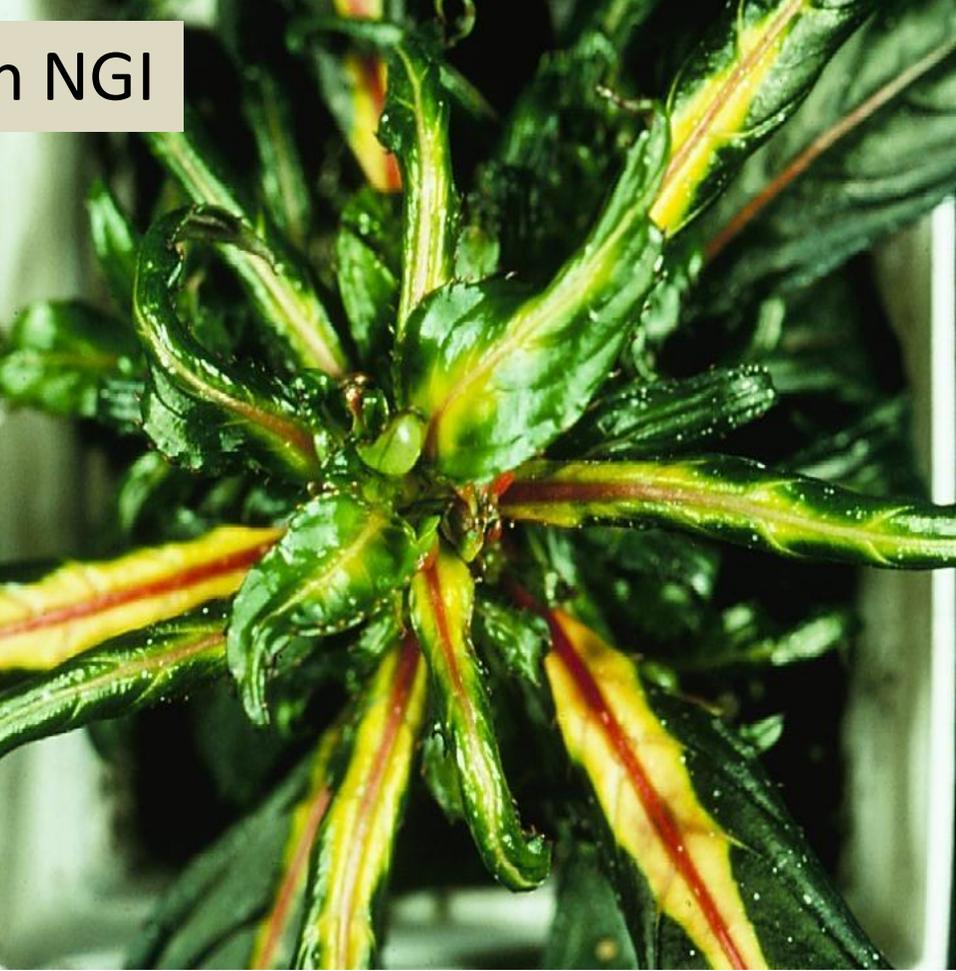


Photo: Nora Catlin, CCE Suffolk

Broad mite damage is often spotty, may be confined to one variety



Photo: M. Daughtrey

Broad mite  
injury can  
resemble  
thrips injury

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Photo: Cheryl Sullivan



Photo: D. Gilrein

Broad mite injury on begonia and salvia

# Broad mite *bronzing* damage: Gerbera, Begonia



Broad mite injury to orn. pepper



D. Gilrein

How can you tell what damaged these plants?



# Broad mite host list

New Guinea Impatiens

Bacopa

Nemesia

Angelonia

Torenia

Regal geraniums

Mandevillas and Dipladenia

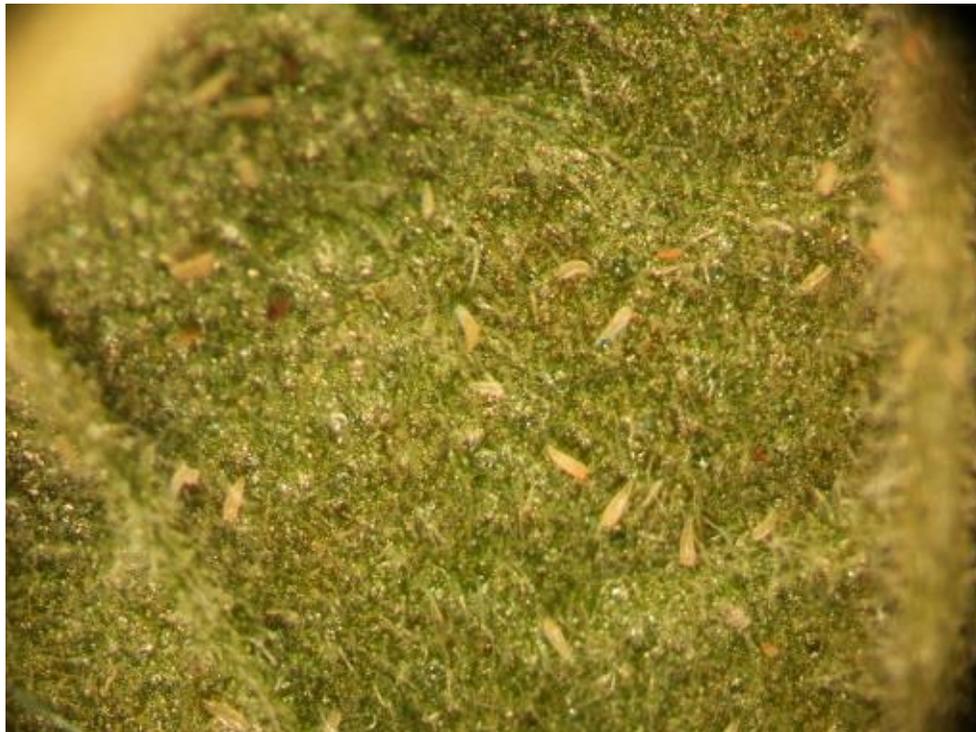
Tuberous begonias, non-stops

Others

# Rust and Russet Mites

- Some of the smallest animals on earth
- Pale yellow to orangish-brown
- Worm-like body
- Two pairs of legs

Hemp Russet Mite

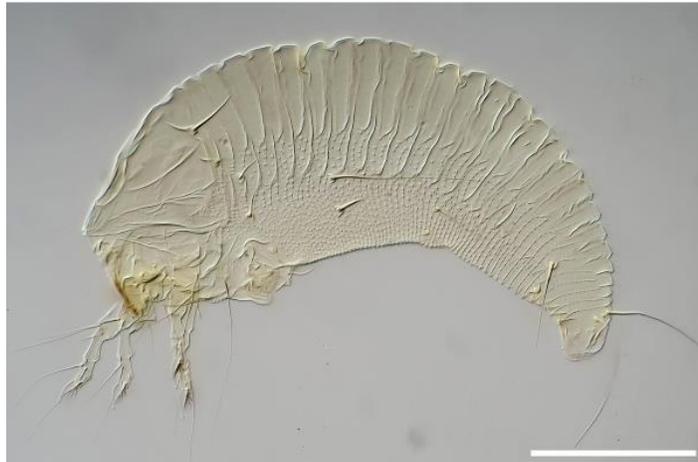


Tomato Russet Mite



# Identification

- Tiny! Too small to see with naked eye
- When abundant, can look like dust that's moving on a leaf or stem
- Damage isn't noticed until mites are abundant





## Tomato Russet Mite on Tomato



Photos: Josh Henry

# Tomato Russet Mite Damage on Tomato



# Hemp Russet Mite on Hemp



Whitney Cranshaw, Colorado State University, Bugwood.org

5574608

# Hemp russet mite on hemp

- Mites start in bottom of canopy and move up
- Leaves will begin to appear dull, slightly greyish or bronze
- Leaf size is reduced
- Developing buds can be seriously damaged in growth and size

