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Thrips

Pest & Natural Enemy ID
Greenhouse Scout School
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Part 1: Pest ID

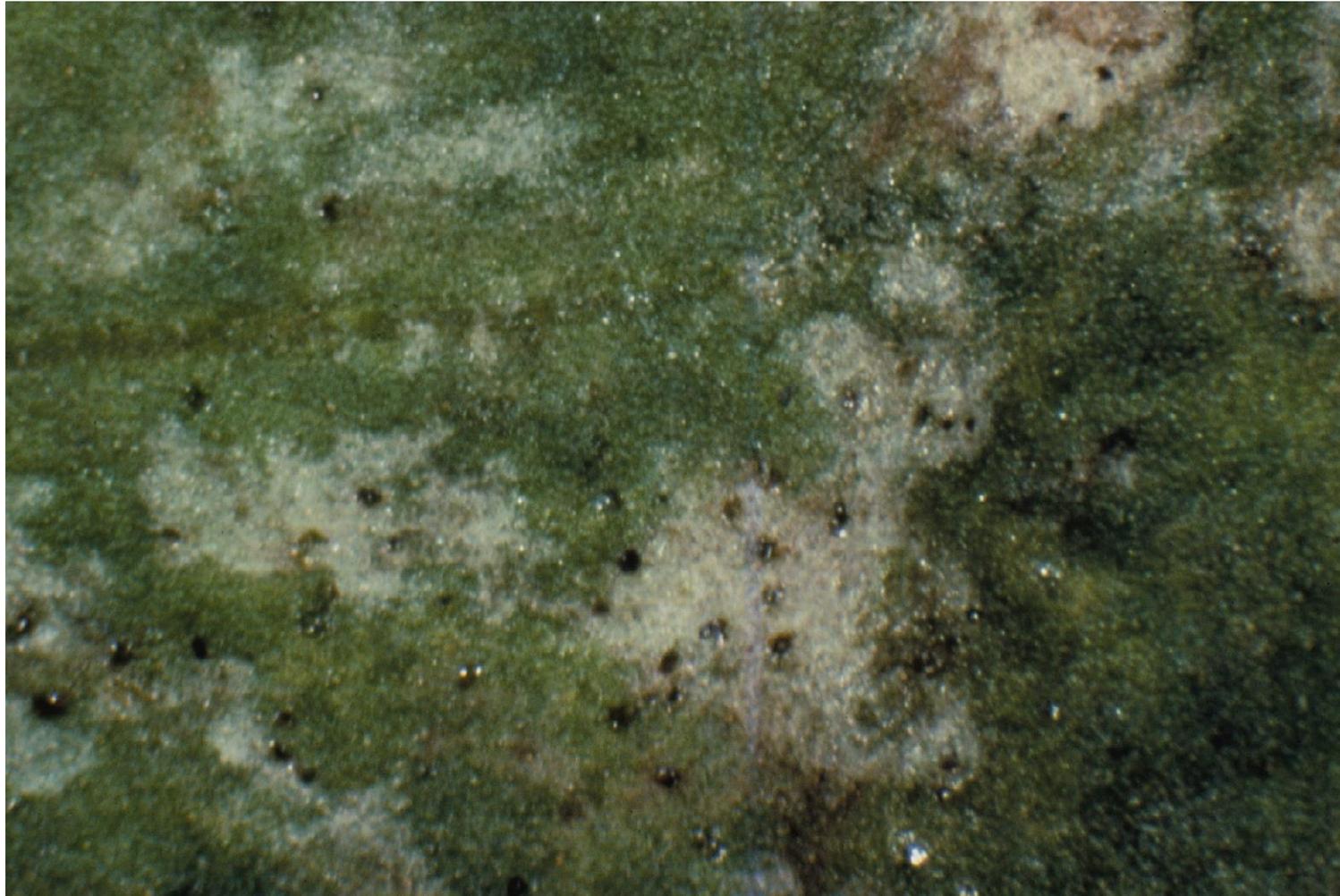
Closeup of Typical Thrips Damage



Typical Thrips Damage



T. Smith, UMass



Close up of
thrips
feeding
damage and
black fecal
spots



Typical Thrips Damage



Often found
in tight,
hidden
places



Feeding in growing points can result in stunting and deformed growth



Western flower thrips can transmit
tospoviruses (INSV, TSWV)



Greenhouse
thrips
damage

Sometimes feeding
damage will be
restricted to certain
cultivars



Did thrips cause the damage?

Seeing damage like this?



How many thrips on your sticky traps?



Thrips species can look different

Western flower thrips



Onion thrips



U. Kentucky

Echinothrips ("Poinsettia thrips")



U. Florida

Greenhouse thrips



of Florida U. Florida

But some can also look the same

Melon thrips



Western flower thrips



Onion thrips



Chilli thrips



And there can be color morphs in the same species
The light (left), bicolor (centre) and intermediate (right) color morphs
of western flower thrips (*Frankliniella occidentalis*)

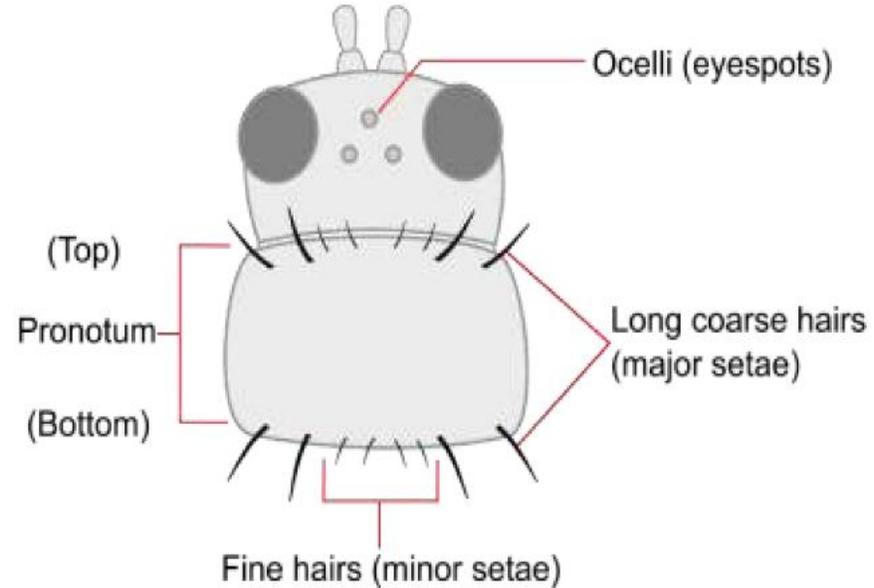
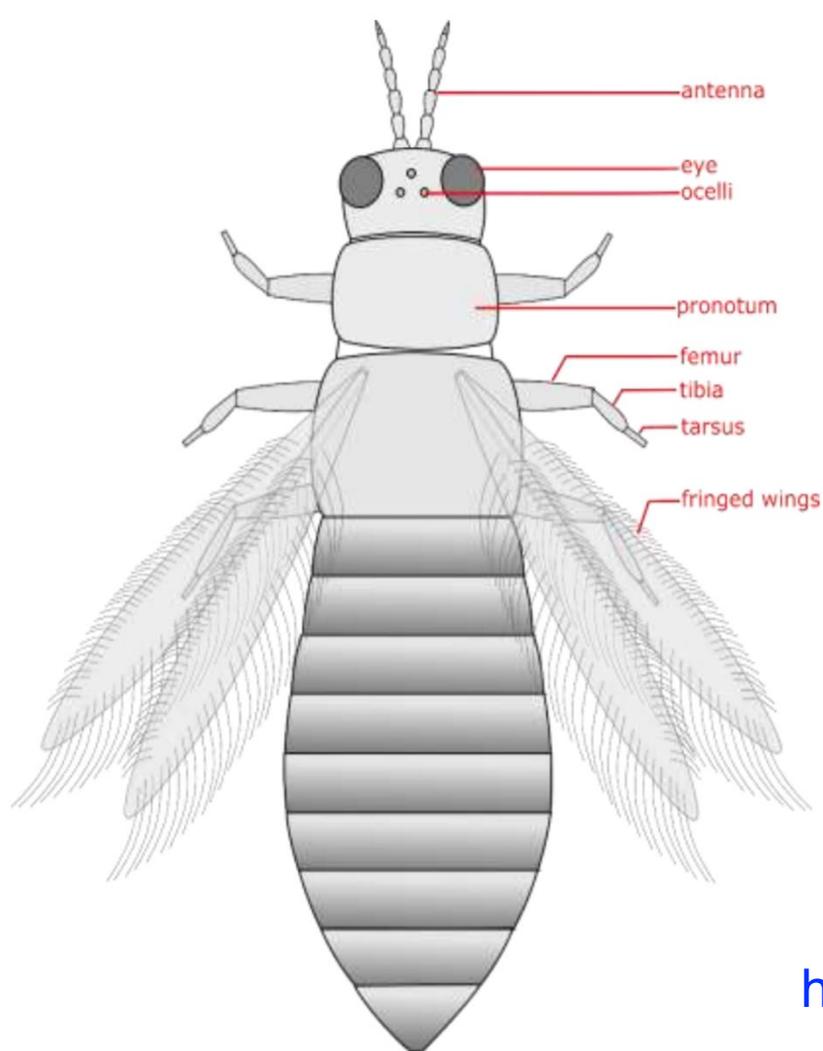


Photo courtesy of A. Summerfield

Best to send questionable samples to a diagnostic lab.

Advanced scouts/growers might use an identification key

Identification characters for thrips, based on adult females



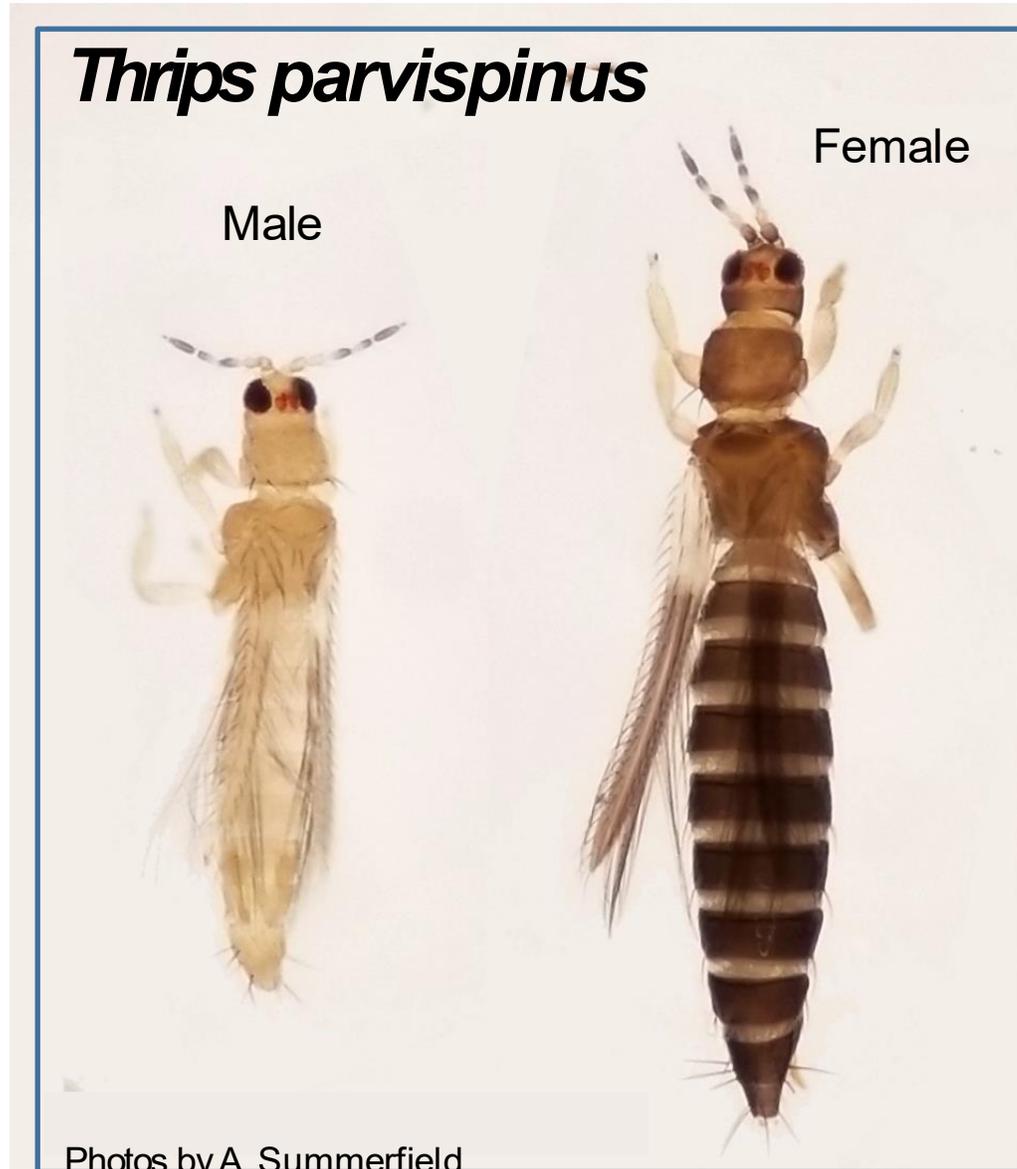
Thrips illustrations from “Simple key to important thrips pests of Canadian greenhouses”. Summerfield & Jandricic 3rd edition, 2022

<https://onfloriculture.com/thrips-id-key-for-growers/>

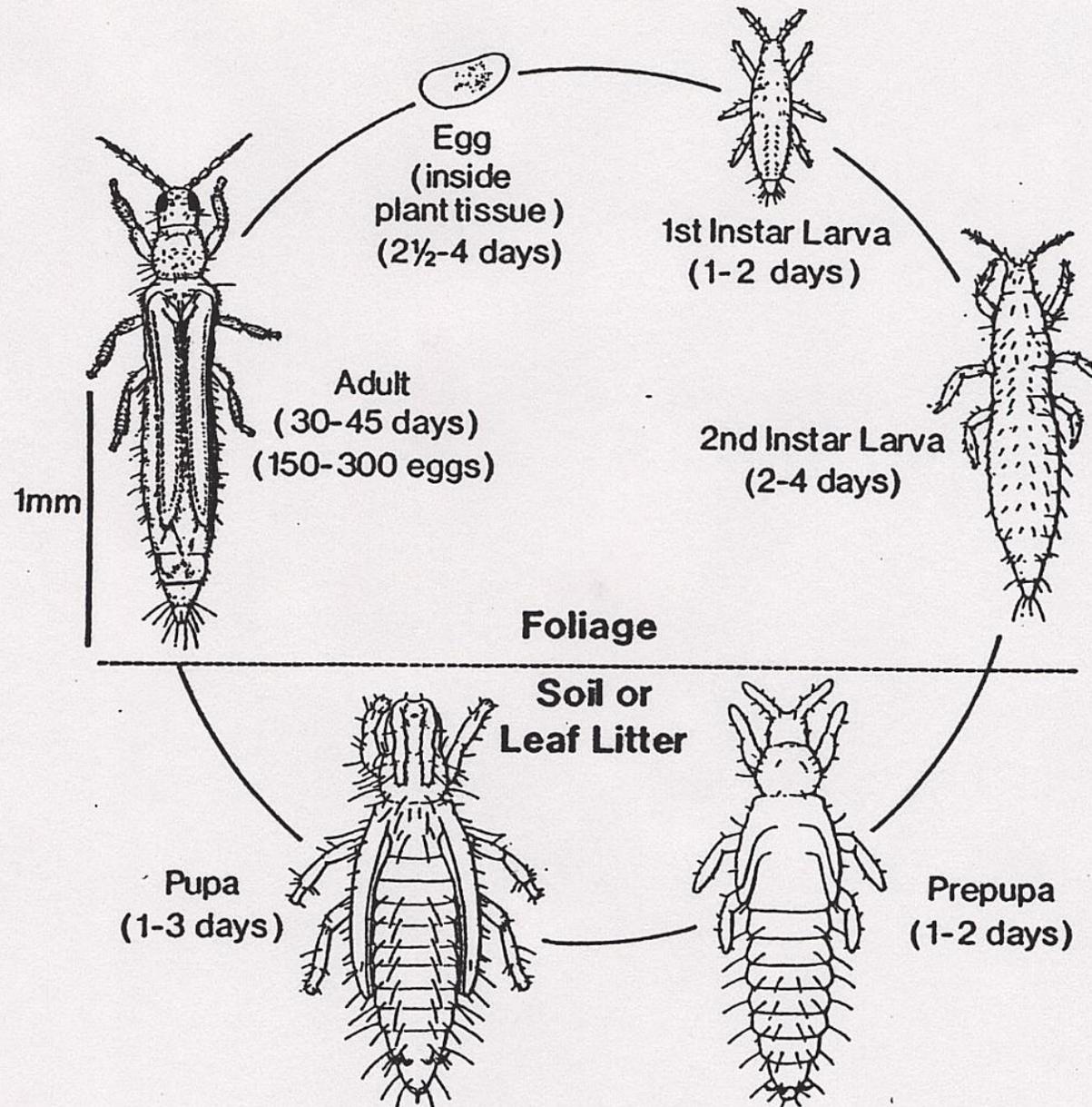
Appearance / ID

Appearance:

- VERY small, dark brown, lighter head & thorax
- Wings pale at base
- Males yellow
- VERY red ocelli



Lifecycle of Western flower thrips



Not all thrips pupate in the soil!

These are the two life stages of thrips that are most commonly seen



2nd instar



Adult

Monitoring for Thrips



Use yellow sticky traps:

- Detect thrips entry
- Monitor sensitive crops/cultivars
- Measure spray effectiveness
- Monitor biocontrol program

Thrips have fringed wings



Aggie-horticulture.tamu.edu





Monitoring for thrips

- Use a hand lens to distinguish between a thrips and a piece of peat moss on a sticky trap. They are the same color and general size and shape.

Western flower thrips are more attracted to
blue than yellow
Certain other thrips may use green or other colors



But yellow is best for general pest monitoring



Flower thrips
love pollen,
very often are
in flowers



Plant Taps for Thrips

Other monitoring techniques:
<https://onfloriculture.com/>

First plants to have thrips in the Spring

- Draceanas, spikes
- Ivy geraniums (esp. Balcon types and Cascades, those with lacier leaves)
Thrips will be found in the smallest open leaf
- Vinca vine
- Verbena
- Sweet potato vines (Ipomoea), esp. lime green ones (Margarite types)
- Scaevola
- Gerberas
- Lantanas
- Peppers

Plants that get thrips but don't show damage right away

- All the grey and fuzzy-leafed species:
Ageratum, dusty miller, artemesias, helicysums (licorice)
- Draceanas, spikes
- Vinca vines
- Thick-leafed species such as succulents, mandevillas, dipladenias
These tough leaves don't show feeding damage as much
- *Important to check these plants because they may have thrips but not show the damage*

Other thrips-prone plants (Not an exhaustive list!)

- Agerathemum
- Bidens
- Dahlia
- Draceanas
- Rudbeckia
- Verbena
- Bacopa
- Chrysanthemum



Questions?