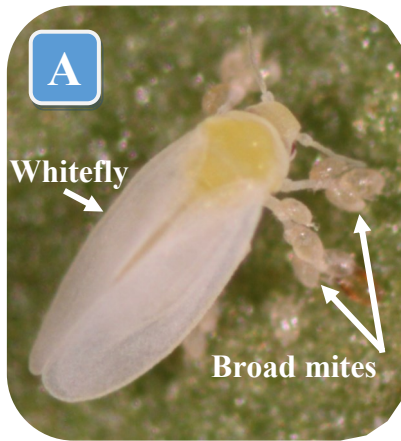
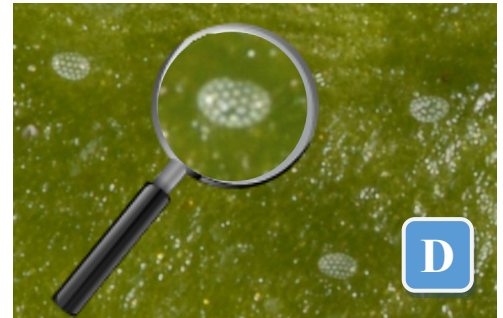
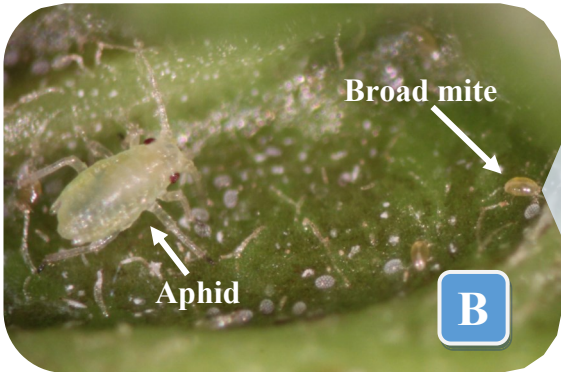
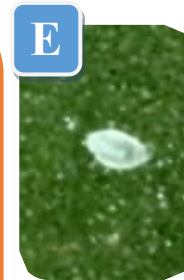


Broad Mite - Life Stages



- A.** Mites often attach themselves to winged insects (such as whitefly) for dispersal
 - B.** Adult female and eggs with immature aphid for size comparison
 - C.** Adults
 - D.** Eggs (note the white “speckles”)
 - E.** Young (6-legged) larvae
 - F.** Male carrying quiescent female
- More detailed descriptions on the reverse.*



Signs & Symptoms



- Left: Foliar damage and leaf curl on tomato
- Above: Malformed leaves on pepper
- Top right: Discoloration and leaf stippling on melon
- Bottom right: Growth comparison of infested (right) versus non-infested (left) gerbera daisy; notice stunting and wilt



¹Nicole Casuso, Doctor of Plant Medicine Student, University of Florida & Hugh Smith, Assistant Professor, Gulf Coast Research and Education Center, University of Florida
Photo Credits: Life stages A, B, C, & E - Lorena Lopez, University of Florida | Life stage D & Pepper damage - Lyle Buss, University of Florida | Melon damage - David Riley, University of Georgia | Tomato damage - Gerald Holmes, California Polytechnic State University at San Luis Obispo | Gerbera daisy damage - Chazz Hesselein, Alabama Cooperative Extension System

Broad Mite, *Polyphagotarsonemus latus* (Banks)

General Morphology:

What does it look like?

Mites are nearly impossible to see without a hand lens. Females are nearly 0.2mm in length while males are 0.1mm long. Their eight-legged bodies are swollen ovals that can be amber, yellow, or green. The hindmost legs in females are very reduced while enlarged in males. Eggs are colorless ellipses with tiny microscopic tufts that give them a speckled appearance. Immature mites are flattened, have only 6 legs (at the earliest stage), and are slow moving. **Quiescent** nymphs appear bloated, immobile, and pointed at each end.

General Biology:

What is its life cycle?

1. Adult females lay eggs on the underside of host plant leaves or in depressions of fruit.
2. Eggs hatch in 2-3 days after which the larva begin to feed.
3. Within the next 2-3 days, the mobile larval will develop into a quiescent (sedentary, non-feeding stage similar to a pupal stage) nymph.
4. Mature males carry quiescent females to new leaves where he will mate with her once she completes the quiescent stage (about 1 day).

Pest Host Range:

Where is it found?

Broad mites are pests on many fruit, vegetable, and ornamental crops throughout the tropics. Like other pests they can also be found in greenhouses at temperate regions. Some hosts are cotton, citrus, avocado, guava, and pepper.

Natural Enemies:

Predators & Parasitoids

Knowledge of natural broad mite enemies is limited. Currently, the primary subjects of biological control research for this pest are predatory mites.

Signs & Symptoms:

What type of damage does it cause?

- ❑ Feeding of broad mites causes malformations in young leaves and flower buds, stunted growth, drooping leaves, plant fragility, discolored fruit, and coppering or purpling leaves.
- ❑ In some cases, severe mite infestations can lead to premature fruit drop and even plant death.
- ❑ Overall plant health and quality is significantly diminished due to the toxins found in broad mite saliva.