



Sampling for Insects & Mites

Dollar Store Method

"Plant Washing"



Why?

- When receiving new cuttings, pull a few samples from each shipment to test for any arthropods present. Identifying pests early allows you to dip in appropriate control product before sticking the cuttings.
- When scouting containerized plants, randomly sample a few leaves from each bench or area. This helps detect pests at low populations before visible damage occurs.
- An added benefit is that washing leaves can also reveal beneficial insects and mites, giving growers reassurance about the biological control agents present on the plants.

Supplies:

- Two quart jars
- Funnel
- Coffee filter
- Isopropyl or ethanol alcohol
- Plant cuttings
- Dissecting microscope, USB scope or hand lens



Procedure:

1. Select plant cuttings.
2. Place a funnel lined with a coffee filter into Jar #1.
3. Place the cuttings into Jar #2.
4. Pour alcohol to cover the cuttings (at least half of the jar).
5. Screw the lid on tightly and shake for 30 seconds.
6. Remove the lid and pour the liquid into the lined funnel. Allow it to drain completely. Save the alcohol for next test, it can be reused.
7. Remove the coffee filter and examine it under a dissection microscope. Look for thrips, aphids, mites, beneficials and other arthropods.

				
Aphid Cotton Melon <i>Aphis gossypii</i>	Thrips Western Flower <i>Frankliniella occidentalis</i> Adult	Thrips Short-spined <i>Thrips parvispinus</i> Adult	Thrips Short-spined <i>Thrips parvispinus</i> Larva	Mite Twospotted Spider <i>Tetranychus urticae</i> Adult and egg

Method is based on work done by Els Mechant. Three-step detection protocol for broad mites in pot azalea. 2015.

