

Organic Pest & Disease Control

Always remember that beneficial creatures are out there, assisting you in your garden and landscape. Only 1% of insects are problematic, 99% are helpful or benign. "Every time you kill a beneficial, you inherit their job."

Spray liquids on leaf surfaces only early in the morning or late in the evening. Read and follow all package directions. Never apply insecticides to open flower, as pollinators will pick it up.

Three-step process for identifying and treating gardening problems:

1. Correct any cultural conditions contributing to the problem, and maintain plant health organically.
2. Identify the problem/pest correctly.
3. Choose the least toxic strategy for addressing the problem/pest.

Least-toxic solutions for common gardening problems:

APHIDS:

Spray a strong blast of water every 3-5 days.

(Use the *Bug Blaster*).

Spray *Insecticidal Soap* or *Soap/Spinosad* mixture.

BLACK SPOT on Roses:

(Avoid overwatering or wetting rose leaves when watering).

Pick off the most damaged leaves; rake up fallen leaves.

Grow garlic at the base of the rose.

Spray a *Bacterial Fungicide*.

Spray *Potassium Bicarbonate*.

CATERPILLARS: (Avoid harming *butterfly* larvae).

Pick off offending caterpillars.

Spray or dust *B.t. (Bacillus thuringiensis)* in the evening.

CHIGGERS:

Apply/ dust *Sulfur*, *CedarRepel*, or *Wondercide*.

CHINCH BUGS:

(All areas of lawn in full sun need to be treated).

Apply diatomaceous earth. (DE) (not pool type)

Spray *Eco Smart Organic Insect Killer* or *Wondercide*.

FIRE ANTS:

Apply beneficial nematodes. (Below 85°; water weekly)

Drench Mound with *Orange Oil*, *Spinosad* or *Molasses*.

Apply *Dry Molasses* throughout the property.

Apply *Fertilome Come and Get It* bait.

FLEA BEETLES:

Apply diatomaceous earth. (DE) (not pool type)

Apply beneficial nematodes. (Below 85°; water weekly)

FLEAS:

Spray *Eco Smart Organic Insect Killer* or *Wondercide*

Apply beneficial nematodes. (Below 85°; water weekly)

Apply diatomaceous earth. (DE) (not pool type)

GRASSHOPPERS:

Apply *Nolo Bait* to entire property.

Apply *Kaolin Clay* to desirable plants.

Spray *Neem*, *Cedar Oil* or *Garlic* as a repellent.

GRUBWORMS: (Control is needed only if there are more than 8 – 10 grubs per square foot).

Apply beneficial nematodes. (Below 85°; water weekly)

MEALY BUGS:

Use the *Bug Blaster* to dislodge insects from the plant.

Spray *Insecticidal Soap* or *Soap/Spinosad* mixture.

MOSQUITOES:

Drop *Mosquito Dunks* or *Bits* into any standing water or over wet areas of soil.

Repel with *Mosquito Barrier*, *Dr. T's Mosquito Repelling Granules*, *Amazon Lights Incense* or *Candles*, *CedarRepel*.

Use organic *personal insect repellent* on skin.

Use *Mosquito Traps* to attract and kill the adults.

PECAN WEBWORMS:

Release *Trichogramma* wasps in early May, mid-June,

& early August (at the first sign of the *moths*).

Open webs and spray inside with *B.t.* (in the evening).

PILLBUGS (ROLY-POLIES):

Apply *Sluggo Plus* once a month.

POWDERY MILDEW & RUST:

Spray a *Bacterial Fungicide* weekly for 2 – 3 wks.

Spray *Potassium Bicarbonate* weekly for 2 – 3 wks.

SCALE: (Spray oils when highs are below 85°).

Spray *Organocide* or *Neem*

Spray *Soap/Spinosad* mixture.

SNAILS & SLUGS:

Place half-full, shallow containers of beer into the ground in shady areas as traps.

Apply *Sluggo*.

SPIDER MITES: (Spray oils when highs are below 85°)

Spray *Organocide* or *Neem* weekly for 2 – 3 weeks.

Spray *Insecticidal Soap* or *Soap/Spinosad* mixture.

SQUASH BUGS, STINK BUGS, LEAF-FOOTED BUGS:

Pick bugs by hand and squish or drown in soapy water.

Apply diatomaceous earth. (DE) (not pool type)

Vacuum bugs up with a hand-held or shop vacuum.

SQUASH VINE BORERS:

Cut slit in stem; remove borer; cover stem with soil. Use Squash Vine Borer lure and trap. Cover plant with *Micromesh* or *Row cover* until both male and female flowers form; then uncover or hand pollinate.

THRIPS & WHITEFLIES:

(Spray oils when highs are below 85°)

Spray *Garlic Barrier* for prevention. Use sticky traps.

Spray *Organocide* or *Neem*

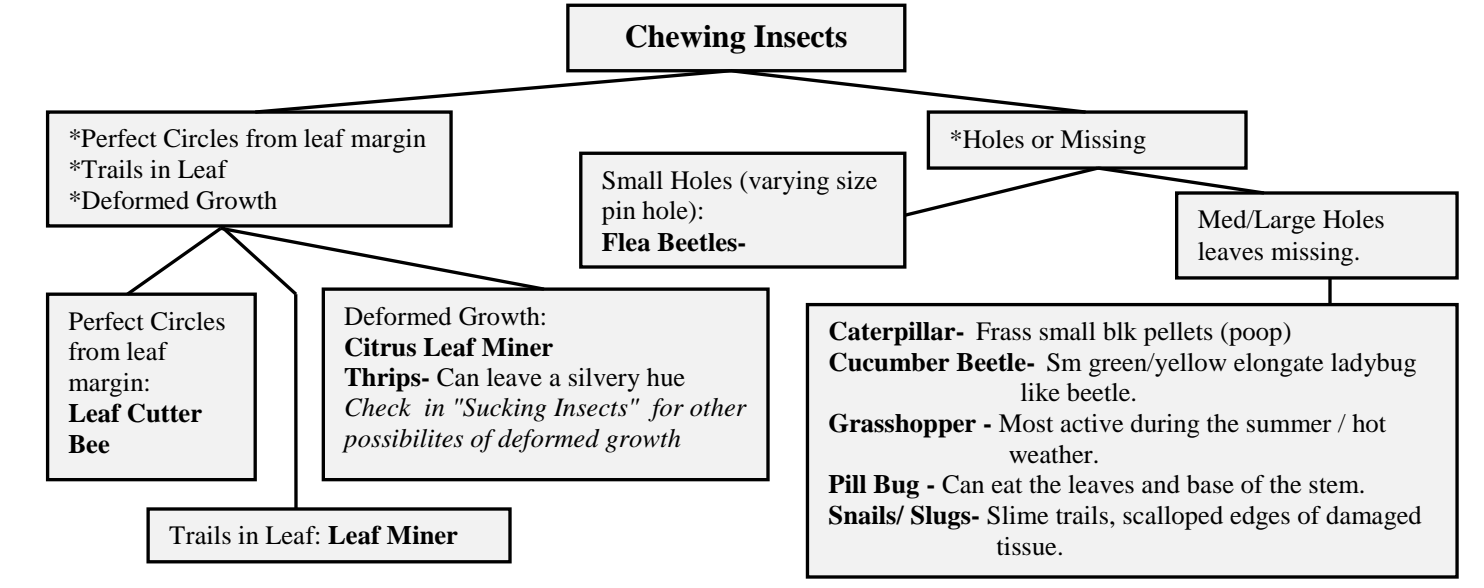
Spray & Drench *Neem Pro 100%*

Spray *Insecticidal Soap* or *Soap/Spinosad* mixture.

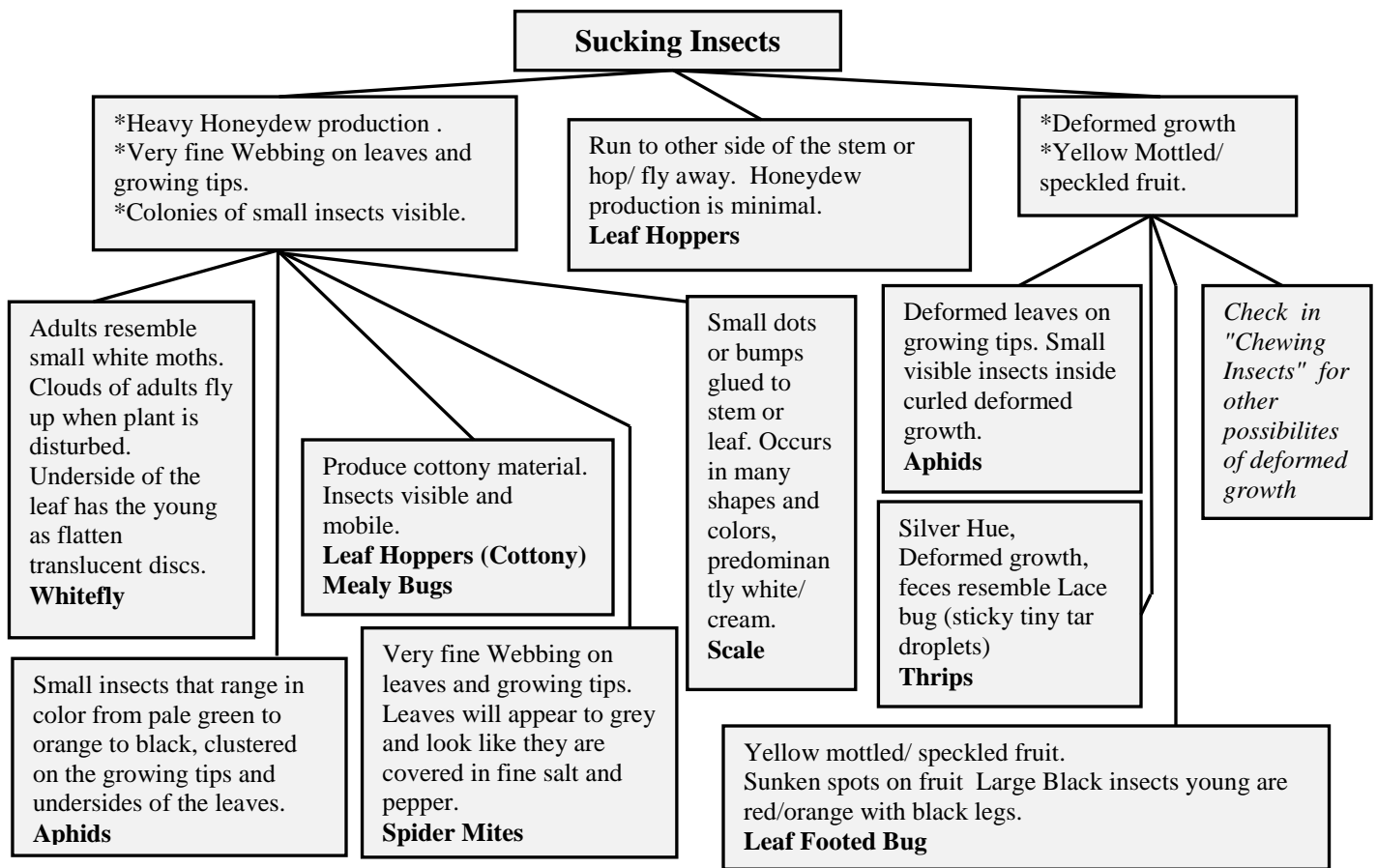
Spray *Spinosad* weekly, 2 – 3 weeks (*Thrips*).

Insect Damage Flow Chart

Chewing Insects



Sucking Insects



* There are *many* more insects that could affect your plants than what is listed here. On top of insects there are many cultural and disease issues that can affect your plant as well. If you have questions please bring a fresh sample in a sealable container to minimize the risk of spreading pests and disease to our nursery stock.