



earth-wise guide to

# Aphids



aphid, magnified

## description

Tiny (1/16-1/8") insect with soft body, long legs and antennae; cornicles or "tailpipes" on tip of abdomen; 250 species; reproduce quickly; attack new growth or underside of leaf

## infestation

Suck sap from plants and excrete clear, sticky "honeydew" that often grows black, sooty fungus that blocks sunlight from leaves; feeding can stunt growth, deform and discolor leaves, or cause them to drop prematurely; usually attack new growth; some aphids transmit plant diseases

## attack

- Bedding plants
- Hibiscus
- Oleanders
- Roses
- Vegetables
- Crape myrtles
- Oaks
- Pecans

**identify before you buy**

Need help diagnosing a plant problem? Call the Texas Agrilife Extension Service @ 854-9600 and ask for the master gardener desk or email them at [travismg@ag.tamu.edu](mailto:travismg@ag.tamu.edu)

## Least-Toxic Solutions

- Monitor often for early detection and to determine if control is needed; natural predators may make treatment unnecessary
- For minor infestations, spray host plants with water at high pressure to dislodge aphids
- Introduce ladybugs or lacewings and other beneficial insects to your landscape after infestation has been identified – for best results follow release instructions carefully; best to release in an enclosed area
- Use sticky barriers to prevent ants from tending aphids and protecting them from natural predators
- Help control aphids with insecticidal soaps and horticultural oils
- Use a row cover to physically keep the aphids off vegetable crops while allowing air, light and water exchange
- Use natural or slow-release fertilizer to avoid excessive new growth
- Most aphids are host-plant specific and usually don't move to other species

## If You Must Use a Pesticide...

- Avoid systemic pesticides on vegetables and edible plants. Systemic pesticides are taken up by the plant and make its tissues and fluids toxic to foliage-feeding insects
- Non-systemic pesticides must be applied to all infested plant surfaces for best results, because they must come into direct contact with the insects
- Avoid applying broad spectrum pesticides - they destroy beneficial insects as well as pests and leave trees or shrubs unprotected if pests return
- Apply only to plants specified on the label - some formulations injure tender ornamental plants and new growth
- Mix according to directions and apply only recommended dosage
- Several pesticide applications may be needed for control at 7-10 day intervals, or as instructed by the product label
- Avoid overuse of chemicals – many pests have become resistant to certain pesticides



aphids and associated sooty mold

# product toxicity comparisons

Evaluation of active ingredients only; does not include toxicity information on inert or "other" ingredients.

## Toxicity/Threat:

○ low    ◐ low to moderate    ◑ high    ● highest    NA not applicable  
 ? unknown toxicity    ☠ banned by EPA    🌍 earth-wise

## Hazards:



note	Product Name	active ingredient(s) / concentrations	human toxicity		aquatic life	birds, bees, pets	soil mobility	environmental persistence
			acute	chronic				
most toxic	Bonide® Hot Pepper Wax Ready-to-Use	Capsaicin and related Capsaicinoids 0.184%	◐	?	◐	○	?	?
	Concern® Insect Killing Soap	Fatty acid soap 1%	◐	?	◐	○	○	○
	Garden Safe® Fungicide 3-in-1 Ready-to-Use	Extract of neem oil 0.9%	◐	?	◐	●	○	○
	Orange Guard® Home Pest Control	D-limonene	◑	?	◐	◐	○	○
	Green Light® Neem Concentrate	Clarified hydrophobic extract, of Neem Oil 70%	◐	?	◐	◑	○	○
	Maxide® Dual Insect Killer	Thiamethoxan 0.20 Lambda-cyhalothrin 0.04%	◐	◐	●	●	●	◐
	Green Light® Neem II Ready-to-Use	Pyrethrin 0.02% Piperonyl butoxide 0.20% Clarified hydrophobic extract of neem Oil	◐	●	◐	●	○	○
	Ortho® Orthenex® Garden Insect & Disease Control Concentrate	Acephate 4%, Triforine 3.25% Fenbutatin oxide 0.75%	◐	◑	◐	●	◐	◐
	Concern® Multi-Purpose Insect Killer	Pyrethrins 0.24%; Potassium salt of fatty acid 20%	◐	●	◑	●	○	○
	Bayer Advanced™ PowerForce® Mosquito Killer Plus Outdoor Fogger	Tetramethrin 0.15% Permethrin 0.15% Piperonyl butoxide 0.75%	◐	◑	●	●	○	◑/◐
	Bayer Advanced™ Complete Insect Dust Ready-to-Use	Permethrin 0.25%	◐	◑	●	●	○	◑/◐
	Bayer Advanced™ Tree & Shrub Insect Control Concentrate	Imidacloprid 1.47%	◐	?	●	●	◑	◑
	Bonide® All Seasons® Horticultural Spray Oil	Petroleum oil 98%	◐	?	●	●	?	?
	GardenTech® Sevin® Ready-to-Use 5% Dust Bug Killer	Carbaryl 5%	◐	◑	●	●	◑	◑
	Bayer Advanced™ 2 in 1 Systemic Flower Care	Disulfoton 0.1%	◑	◑	●	●	◑	◑

The City of Austin and the Texas AgriLife Extension Service provide this information as a comparative reference only. Listing of specific product trade names does not constitute an endorsement of its use. Many other pesticides and pesticide products are available and may be suitable for use other than those listed in these tables.

Products rated by Grady J. Glenn, Ph.D., B.C.E., of the Pesticide Safety Education Program, Texas AgriLife Extension Service who can be reached for questions at (979) 862-1035. The rating system was developed by Philip Dickey of the Washington Toxics Coalition.

## why grow green?

The Grow Green program educates Austin area residents on the LEAST TOXIC approach to pest management and responsible fertilizer use. The goal is to reduce the amount of landscape chemicals that runoff into waterways or leach into our groundwater and degrade water quality.

Grow Green is a partnership between the City of Austin Watershed Protection and Development Review Department and Texas AgriLife Extension Service. Call 974-2550 or 854-9600 for more information or visit our website at [www.growgreen.org](http://www.growgreen.org).

