grow green

earth-wise guide to

Spider Mites

Spider mite magnified

description

Adults are tiny (1/150-1/50"); varied in color; spider-like, with eight legs and no antennae; eggs are laid on the underside of leaves and on buds

infestation

Leaves lose color as numerous yellow specks appear and often turn bronze and curl under; may be covered with a fine web; often becomes noticeable during dry, hot summer weather

attack

- Fruit trees
- Tomatoes
- Marigolds
- Strawberries
- Buddleia
- Roses
- Junipers
- Rosemary
- Many house plants

Least Toxic Solutions

- Monitor often for early detection
- Be sure to look under leaves and inspect new houseplants
- Take a white piece of paper and strike some affected leaves on it - the mites can be seen crawling slowly on the paper
- For minor infestations, spray host plants weekly with high pressure water spray upward from beneath the plant foliage
- Apply insecticidal soaps or horticultural oils; spray upward from beneath the plant foliage
- Keep plants adequately watered to prevent stress
- Encourage natural enemies like green lacewing larvae, ladybugs and predatory mites

If You Must Use a Pesticide...

- Choose less-toxic pesticides to avoid destroying beneficial insects along with pests, leaving trees or shrubs unprotected if pests return
- Apply pesticides only to plants listed on the label - some formulations injure tender ornamental plants and new growth
- Mix according to directions and apply only recommended dosage
- Apply correctly:
  - Systemic pesticides are taken up by the plant and make its tissues and fluids toxic to the feeding spider mites
  - Non-systemic must be applied to all infested plant surfaces because they must come into direct contact with the insects
- Severe infestations may require repeated applications; check the label for frequency and timing
- Avoid overuse of chemicals — many pests have become resistant to certain pesticides

Spider mite damage

identify before you buy

Need help diagnosing a plant problem? Call the Texas A&M Agrilife Extension at 512-854-9600 and ask for the master gardener desk

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 acute	human toxicity chronic	aquatic life	birds, bees, pets	soil mobility	environmental persistence
earth-wise	Green Light® Home & Garden Insect Spray	Thyme oil 0.33% Clove oil 0.33% Sesame oil 0.33%	?	○	◐	?	?	?
earth-wise	Concern® Insect Killing Soap	Fatty acid soap 1%	◐	?	◐	○	○	○
earth-wise	Bonide® Hot Pepper Wax Ready-to-Use	Capsaicin and related capsaicinoids 0.184%	◐	?	◐	○	?	?
	Garden Safe® Fungicide 3-in-1 Ready-to-Use	Extract of Neem Oil 0.9%	◐	?	◐	◑	○	○
	Green Light® Lawn & Garden Spray with Spinosad RTU	Spinosad 0.5%	◐	?	◑	◑	○	◐
	Bonide® Garden Dust	Copper 7% Rotenone 0.75% Other cube resins 1.5%	◐	○	◑	◑	◑	○
	Green Light® Neem II Ready-to-Use	Pyrethrin .02% Piperonyl butoxide 0.20% 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%	◐	◑	●	◑	○	◑/◐
	Ortho® Volck® Oil Spray	Mineral oil 97%	◐	?	●	●	?	?
	Bonide® All Seasons® Horticultural Spray Oil	Petroleum oil 98%	◐	?	●	●	?	?
	Bayer Advanced™ 3 in 1 Insect, Disease & Mite Control	Tebuconazole 0.65% Imidaproclid 0.47% Tau-fulvalinate 0.61%	◐	◐	●	●	◑	◑
	Bayer Advanced™ 2 in 1 Systemic Flower Care	Disulfoton 0.1%	◐	◐	●	●	◑	◑

most toxic

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. **Check labels carefully as trade names and active ingredients may change.**

Products rated by Grady J. Glenn, Ph.D., B.C.E., of the Pesticide Safety Education Program, Texas A&M AgriLife Extension. 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. Our goal is to reduce the amount of landscape chemicals that "runoff" into our waterways or leach into our groundwater and degrade water quality.

Grow Green is a partnership between the City of Austin Watershed Protection Department and Texas A&M AgriLife Extension. Call 512-974-2550 or 512-854-9600 for more information or visit our website at **www.growgreen.org.**

If you have leftover or banned chemicals such as diazinon or Dursban (chlorpyrifos) in your garage, please take them for safe disposal to a household hazardous waste facility. In Austin call 974-4343 for information.

City of Austin WATERSHED PROTECTION 512-974-2550
TEXAS A&M AGRILIFE EXTENSION 512-854-9600

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