



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 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)

# 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 |
|------|---|---|----------------------|------------------------|--------------|-------------------|---------------|---------------------------|
| 🌍    | Green Light® Home & Garden Insect Spray                         | Thyme oil 0.33% Clove oil 0.33%<br>Sesame oil 0.33%               | ?                    | ○                      | ◐            | ?                 | ?             | ?                         |
| 🌍    | Concern® Insect Killing Soap                                    | Fatty acid soap 1%  | ◐                    | ?                      | ◐            | ○                 | ○             | ○                         |
| 🌍    | 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%<br>Other cube resins 1.5%                | ◐                    | ○                      | ◑            | ◑                 | ◑             | ○                         |
|      | Green Light® Neem II Ready-to-Use                               | Pyrethrin .02% Piperonyl butoxide 0.20%<br>Extract of Neem Oil    | ◐                    | ●                      | ◐            | ◑                 | ○             | ○                         |
|      | Ortho® Orthenex® Garden Insect & Disease Control Concentrate    | Acephate 4%, Triforine 3.25%,<br>Fenbutatin-oxide 0.75%           | ◐                    | ◑                      | ◐            | ●                 | ◐             | ◐                         |
|      | Concern® Multi-Purpose Insect Killer                            | Pyrethrins 0.24%,<br>Potassium salt of fatty acid 20%             | ◐                    | ●                      | ◑            | ◑                 | ○             | ○                         |
|      | Bayer Advanced™ PowerForce® Mosquito Killer Plus Outdoor Fogger | Tetramethrin 0.15%, Permethrin 0.15%,<br>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%<br>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.

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. 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 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).

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**  
 974-2550

AgriLIFE EXTENSION  
 854-9600  
 Texas A&M System