



earth-wise guide to

Mosquitos



Engorged Mosquito

description

Adult mosquitos are small, long-legged flies; they have two wings with scales and long segmented antennae. Mosquitos have long piercing/sucking mouthparts; they lay their eggs in still water

infestation

Found in Texas year round, but become more prevalent in the spring and summer; more active between dusk and dawn

problem

Mosquitos can carry West Nile Virus and transmit the disease to humans and animals. Infected humans may develop severe symptoms such as high fever, headaches, coma and paralysis

For more information, visit the Center for Disease Control website at www.cdc.gov

Least Toxic Solutions...

Reduce Mosquitos

- Eliminate breeding sites by reducing standing water (includes old tires, bottles, buckets, and clogged gutters)
- Replace water at least once a week in pet dishes, bird baths and watering troughs
- Repair leaky outside faucets and pipes
- Consider mowing or pruning dense vegetation to reduce mosquito habitat
- Keep window and door screens in good repair
- Fill in tree holes with sand and low spots in lawn with soil
- Stock permanent water areas with mosquito-feeding fish (*Gambusia affinis* can be bought in pet stores and bait shops)
- Carefully screen rainwater harvesting cisterns to exclude mosquitos
- Consider installing nesting boxes to attract bats and birds that feed on mosquitos

Prevent Bites

- Avoid being outside at the peak mosquito hours of dusk and dawn
- Wear light colored, loose fitting clothing when outside; mosquito repellent clothing is also available

Least Toxic Products...

- Use *Bacillus thuringiensis israeliensis* "mosquito dunks" to reduce mosquitos in rain barrels and permanent bodies of water. These products slowly release a biological larvicide that kills the pest
- Light citronella candles to provide short-term relief on areas such as patios
- Use mosquito repellents when outside. Apply to clothing and exposed skin according to label instructions. Once indoors, wash treated skin with soap and water
- Use topical, spot treatments for pets to help repel mosquitos and use in conjunction with heartworm medication because heartworms are transmitted by mosquitos

If you must use a pesticide...

- Use the least toxic pesticide first
- Read and follow label directions

Use the American Academy of Pediatrics recommendations for application when using products with DEET on children.

Avoid mosquito foggers, misters and electric zappers - they kill beneficial insects as well as pests

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 chronic aquatic life birds, bees, pets soil mobility environmental persistence

Personal Insect Repellents

most toxic	Cutter® Advanced Insect Repellent	Picaridin 7%	◐	?	N/A	N/A	N/A	N/A
	Repel® Lemon Eucalyptus Insect repellent	P-menthane	◐	?	N/A	N/A	N/A	N/A
	SC Johnson Off® Botanicals Insect Repellent	P-menthane 0.3, 8 diol	◐	?	N/A	N/A	N/A	N/A
	Cutter® Skinsations (DEET)	DEET 7%	◑	?	N/A	N/A	N/A	N/A

Standing Water Treatments

☠	Summit® Mosquito Dunks	B.t. israeliensis 10.31%	◐	?	○	○	N/A	○
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Vegetation Sprays/Granules:

most toxic	Cutter® Bug Free Backyard® Concentrate	Lambda-cyhalothrin 0.5%	◑	◐	◑	◑	◐	◑/◐
	Bayer Advanced™ PowerForce® Multi-Insect Killer Concentrate	Cyfluthrin 0.75%	◐	?	●	◑	○	◐
	Bayer Advanced™ PowerForce® Mosquito Killer Plus Outdoor Fogger	Tetramethrin 0.15%, Permethrin 0.15% Piperonyl butoxide 0.75%	◐	◑	●	◑	○	◑/◐
	Bayer Advanced™ Complete Insect Killer for Soil & Turf Ready-to-Spread Granules	Imidacloprid 0.15% Beta-cyfluthrin 0.5%	◐	?	●	◑	◑	◑

Airborne Repellent:

most toxic	Bonide® Mosquito Beater Flying Insect Yard Fog	Resemethrin .2%	○	○	◑	◑	○	◑
	Concern® Citrus Home Pest Control™	D-limonene 5.8%	◐	?	◑	◑	○	○
	SC Johnson Off® Mosquito Coil For Outdoor Use	D-CIS transallethrin 0.33%, Sodium benzoate 0.15%	◐	?	●	◑	◑	◐
	Black Flag® Backyard Fogger	Permethrin 0.2%, Tetramethrin 0.2%	◐	◑	●	◑	◑	◑/◐

Attractant:

SC Johnson Off!® Power Pad Lamp	D-CIS/transallethrin 21.97%	◐	?	●	◑	◑	◐
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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.

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.

www.growgreen.org

