



earth-wise guide to

Caterpillars

pest caterpillars



Tomato Horn Worm



Tent Caterpillar



Genista



Spring Cankerworm

Caterpillars can be found year round but are most prevalent in spring and fall; some types are specific to a season while others complete more than one life cycle per year

Least Toxic Solutions

- Monitor infestations of very young caterpillars to see if natural controls like predators, parasitic wasps or harsh weather will eliminate infestation
- Do not treat native trees; infestations are natural and rarely threaten tree health unless tree is stressed or weakened
- For butterfly gardening enthusiasts, expect some caterpillar damage - caterpillars are the larval stage of butterflies (see photos below)
- Egg masses and groups of caterpillars found on trees or branches can be removed by hand or pruned out of the tree and destroyed
- Dislodge young (small) tent caterpillars with high-pressure water sprays or a broom
- Use row covers - they are an effective barrier in vegetable gardens
- Encourage wasp and fly parasites which often attack caterpillars (see Beneficial Insects fact sheet or for details visit www.growgreen.org)
- Treat young caterpillars with *Bacillus thuringiensis* (B.t.), but do not use near butterfly gardens
- Release parasitic wasps when caterpillars first appear
- Hand-pick caterpillars from plants and drop in a bucket of soapy water

If You Must Use a Pesticide...

- 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
- Avoid systemic pesticides on vegetables and edible plants. Systemic pesticides are taken up by the plant and make its tissues and fluids toxic to feeding caterpillars
- 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 overuse of chemicals - many pests have become resistant to certain pesticides

butterfly larva:



Monarch



Swallowtail



Gulf Fritillary

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	American Brand® Thuricide Concentrate	<i>B.t. kurstaki</i>	<input type="radio"/>	?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Green Light® BT Worm Killer	<i>Bacillus thuringiensis, var kurstaki</i>	<input type="radio"/>	?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Safer® Caterpillar Killer	<i>Bacillus thuringiensis, var kurstaki</i> 1.76%	<input type="radio"/>	?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Fertilome® Borer Bagworm, Leafminer & Tent Caterpillar Spray	<i>Spinosad</i> 0.5%	<input type="radio"/>	?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Spectracide® Grub Stop™ Once & Done!™	<i>Halofenozide</i> 1.5%	<input type="radio"/>	?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Ortho® Malathion Plus™ Insect Spray Concentrate	<i>Malathion</i> 50%	<input type="radio"/>	?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Ortho® Bug-B-Gon® Max® Insect Killer for Lawns	<i>Bifenthrin</i> .115%	<input type="radio"/>	?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Bayer Advanced™ PowerForce® Multi-Insect Killer Concentrate	<i>Cyfluthrin</i> 0.75%	<input type="radio"/>	?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Bayer Advanced™ Complete Insect Killer for Soil & Turf Ready-to-Spread Granules	<i>Imidacloprid beta-cyfluthrin</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Concern® Multi-Purpose Insect Killer	<i>Pyrethrins</i> 0.02%, <i>Piperonyl Butoxide</i> Technical 0.2%	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Bayer Advanced™ Complete Insect Dust Ready-to-Use	<i>Permethrin</i> 0.25%	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Ortho® Bug-B-Gon® Max® Garden & Landscape Insect Killer Ready-to-Use	<i>Esfenvalerate</i> 0.0033%	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	GardenTech® Sevin® Lawn Insect Granules	<i>Carbaryl</i> 2%	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Eliminator® Sevin® 5% Dust	<i>Carbaryl</i> 5%	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ortho® Volck® Oil Spray	<i>Mineral oil</i> 97%	<input type="radio"/>	?	<input type="radio"/>	<input type="radio"/>	?	?	

The City of Austin and the Texas Cooperative Extension developed this information sheet 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 Education Program, Texas Cooperative Extension who can be reached for questions at (979) 862-1035. The rating system was developed by Philip Dickey of the Washington Toxics Coalition.

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For additional landscaping advice, visit www.growgreen.org