



## Recognizing Green Category Pesticides for Use in Texas Schools

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In 1991, the Texas Legislature amended the Structural Pest Control Act (SPCA) to require public school districts to have an Integrated Pest Management (IPM) program. Since 1995, all public school districts in Texas must have a written pest management policy, designate and train a district IPM Coordinator, and ensure that all pesticide applications be made only by licensed applicators. The IPM Coordinator is required to keep detailed records of all pesticide applications and to ensure that the district, or its designated pest control provider, uses the least hazardous methods to control pests.

According to Texas school pesticide regulations, all pesticides are classified as either Green, Yellow or Red category products. Green category products are those pesticides which are considered to carry the least potential hazard to people and the environment. Red category pesticides carry EPA signal words (WARNING and DANGER) which indicate the highest potential risks to applicators or the environment.

Although Texas school's may use any pesticide, they deem necessary to manage a pest problem, Structural Pest Control Service regulations require that when a Yellow or Red category pesticide is used, written justification and approval must first be recorded and kept on file for at least three years. Also, certain Green category products may have less restrictive reentry requirements than other pesticides. These requirements are designed to encourage schools to use least hazardous materials necessary to effectively do the job.

It is important that IPM Coordinators and all pesticide applicators working on school district property in Texas be able to identify Green category products. According to Title 4, Part 1, Chapter 7, Subchapter H, Division 3, Section 7.150 (h) of the Texas Structural Pest Control Regulations, Green Category products must be from at least one of the following categories:

1. *Inorganic pesticides (boric acid, disodium octoborate tetrahydrate, silica gel or diatomaceous earth.)*
2. *Insect growth regulators*
3. *Insect and rodent baits in tamper-resistant containers, or for crack-and-crevice use only*
4. *Microbe-based insecticides*
5. *Botanical insecticides (not including synthetic pyrethroids) containing no more than 5% synergists*
6. *Biological (living) control agents*
7. *Pesticidal soap and natural and synthetic horticultural oils*

### Identifying Green Category Products

Distinguishing Green products is not always easy. There is no packaging designation to show which pesticides are Green under Texas law. Even pesticide distributors and sales personnel are often unfamiliar with which products fall under Texas Green Category designation.

For this reason we have developed the following (unofficial) list of common pesticides that fall into the Green category. The listing here does not include all Green products, but is intended as a guide to the most commonly used active ingredients, and some current trade names associated with these active ingredients. **Trade names change frequently. For this reason, schools and pest management professionals should focus on learning the qualifying criteria for Green Category products, rather than depending on a listing of trade names.**

## List of Common Green Category Products

Type of Pesticide <sup>1</sup>	Qualifying active ingredient	Product Name(s) <sup>2</sup>
<b>Low-toxicity inorganics</b>		
I	boric acid (Orthoboric acid)	Borid <sup>®</sup> , Mopup <sup>®</sup> , Advance <sup>™</sup> Liquid Ant Bait, Drax <sup>®</sup> Liquidator <sup>™</sup> Ant Bait, Drax <sup>®</sup> Ant Kil Gel, Drax <sup>®</sup> Roach Assault PGF, Nibor-D <sup>®</sup> , Roach-Prufe <sup>®</sup> , Eaton's Answer <sup>®</sup> Boric Acid Insecticidal Dust, InTice roach bait, InTice granular bait, Niban FG, BorActin insecticide powder, Provaunt <sup>®</sup> , Pro-Joe <sup>®</sup> ant bait
I, F	disodium octoborate tetrahydrate	Timbor <sup>™</sup> , Bora-Care <sup>®</sup> , NiBor-D <sup>®</sup> , Uncle Albert's Ant Bait, Ant Café, Gourmet Ant Bait Gel, Boracide <sup>®</sup> , MopUp <sup>®</sup>
I	diatomaceous earth	Organic Solutions, Pyatomaceous Insecticide Dust, Diatect V, MotherEarth D Pest Control Dust, Eaton's KOI System, Concern <sup>®</sup>
I	silica aerogel	PT <sup>®</sup> Tri-Die <sup>®</sup>
I	sodium tetraborate decahydrate (Borax)	Terro <sup>™</sup> PCO Liquid ant bait, InTice ant gel, InTice Thiquid ant bait,
I	pentahydrate Borax	Boracide <sup>™</sup> borate powder
<b>Insect Growth Regulators</b>		
I	cyromazine	Citation <sup>®</sup>
I	fenoxycarb	Logic <sup>®</sup> and Award <sup>®</sup> Fire Ant Baits, Precision <sup>™</sup>
I	halofenozide	Mach-2 <sup>™</sup> Granular Turf Insecticide
I	hydroprene	Gentrol <sup>®</sup> IGR Concentrate, Gentrol <sup>®</sup> Point Source, Gentrol <sup>®</sup> Aerosol
I	methoprene	Precor <sup>®</sup> IGR Concentrate, Altosid <sup>®</sup> Mosquito Briquets
I	pyriproxifen	Distance <sup>®</sup> , Nylar <sup>®</sup> , Archer <sup>®</sup>
I	tebufenozide	Confirm <sup>®</sup>
<b>Baits – Must be in a Tamper Resistant container</b>		
I	ivermectin	PT <sup>®</sup> Avert <sup>®</sup> Cockroach Bait Stations, Advance 360A Dual Choice Ant Bait Stations

Type of Pesticide <sup>1</sup>	Qualifying active ingredient	Product Name(s) <sup>2</sup>
I	boric acid	Advance™ Liquid Ant Bait, Niban® Granular Bait, Drax, Uncle Albert's Ant Gel,
I	fipronil	Maxforce® FC Roach Killer Bait Gel, Maxforce® FC Ant and Roach Bait Stations, Maxforce® Carpenter Ant Bait Gel
I	hexaflumeron, noviflumeron	Hexpro®, Recruit® Termite Bait, Sentricon® AG III
I	hydramethylnon	Amdro® Pro Fire Ant Bait, Siege® Pro Fire Ant Bait, Siege® Gel Insecticide, Eclipse® Professional Insect Bait, ProBait™ Professional Fire Ant Bait, Maxforce® Granular Insect Bait
I	imidacloprid	Pre-Empt™ Professional Cockroach Gel Bait,
I	indoxacarb	Advion® cockroach gel bait, Advion® cockroach bait arena, Advion® ant gel bait, Advion® ant bait arena
I	acetamiprid	Transport™ roach bait
I	dinotefuran	Advance Cockroach gel bait®
I	methoprene	Pharorid® Ant Growth Regulator, Extinguish Fire Ant Bait
I	pyriproxifen	Distance® Fire Ant Bait
I	sulfluramid	Firstline™ Termite Bait Stations, Raid® Ant and Roach Controller II, Advance® Dual-Choice™ Ant Bait Stations, FluorGuard™ Ant Control Baits
I	thiamethoxam	Optigard Ant Gel Bait
R	brodifacoum	Final Blox, WeatherBlock XT,
R	bromadiolone	Contraç® All-Weather Blocks, Maki® Paraffin Blocks, Just One Bite® Rat & Mouse Bait
R	bromethalin	Top Gun™ All-Weather Bait Block, Fastrac™ Blox
R	chlorophacinone	Rozol® Paraffin Blocks
R	difethialone	Generation® Mini-blocks
R	diphacinone	Ditrac® Blox, Liqua-Tox®, JT Eaton® Bait Block® Rodenticide
<b>Microbe-based<sup>3</sup></b>		

Type of Pesticide <sup>1</sup>	Qualifying active ingredient	Product Name(s) <sup>2</sup>
I	avermectin-B, abamectin	PT <sup>®</sup> Avert <sup>®</sup> , PT <sup>®</sup> Ascend <sup>™</sup> , Advance 375A Select Granular Ant Bait, Advance Granular Ant Bait, Advance Granular Carpenter Ant Bait, Avid Insecticide, Vendetta Cockroach Gel Bait
I	<i>Bacillus sphaericus</i>	VectoLex <sup>®</sup>
I	<i>Bacillus thuringiensis</i>	Dipel <sup>®</sup> , Bactimos <sup>®</sup> Briquets, Gnatrol <sup>®</sup> , Aquaboc <sup>®</sup> , Mosuito Dunks <sup>®</sup> , Teknar <sup>®</sup>
I, B	<i>Beauveria bassiana</i>	Naturalis <sup>®</sup> -O
I	Microbial-based drain cleaners	DrainGel <sup>®</sup> , InVade Bio Foam <sup>®</sup>
I	spinosad	Conserve <sup>™</sup> SC, Eliminator <sup>®</sup>
<b>Botanicals</b>		
I	2 phenylethyl proprionate and pyrethrins	EcoPCO <sup>®</sup> D•X – Dust Insecticide, EcoPCO <sup>®</sup> AR•X – Multi-Purpose Residual Aerosol Insecticide
I	2 phenylethyl proprionate, thyme oil, pyrethrins	EcoPCO WPX
I,F	azadirachtin	Azatin <sup>®</sup> , Neemix <sup>™</sup> , Triact <sup>™</sup>
I	Clove oil, cinnamon oil, cedar oil	Snake Out Snake Repellent
I	d-limonene	Demize, ProCitra-DL, MotherEarth Wasp & Hornet Jet Spray
I	eugenol, 2 phenylethyl proprionate	Eco PCO <sup>®</sup> AC, EcoPCO <sup>®</sup> JET•X – Wasp & Hornet Jet Aerosol, EcoPCO <sup>®</sup> ACU – Unscented Contact Aerosol Insecticide
I	pyrethrins (pyrethrum)	CB-38 Extra <sup>™</sup> , PT <sup>®</sup> Inspector <sup>®</sup> , PT <sup>®</sup> Microcare <sup>®</sup> , Diatect Indoor Insect Killer, MotherEarth 2% Py Contact Insecticide, P.I. Contact Insecticide
I	Rosemary Oil, peppermint oil, oil of wintergreen, vanillin	EcoExempt IC2
<b>Biological insecticides</b>		
I, B	Entomopathogenic nematodes ( <i>Steinernema</i> )	Biovector <sup>®</sup> , Millenium <sup>®</sup> biological, Nematac <sup>®</sup>

Type of Pesticide <sup>1</sup>	Qualifying active ingredient	Product Name(s) <sup>2</sup>
Pesticidal soap and natural and synthetic horticultural oils		
I	<i>Potassium salts of fatty acids</i>	Safer's Insecticidal Soap
I	<i>Petroleum oil- foliar spray</i>	PureSpray Green Organic Horticultural Spray Oil
I, F	<i>Highly refined paraffinic oil</i>	Ultra-Fine Oil All Season Horticultural Insecticide/Miticide/Fungicide

## For More Information

For more information about integrated pest management and how it can be accomplished in schools and childcare facilities, visit the Southwest Technical Resource Center website at <http://schoolipm.tamu.edu> or call the toll-free hotline at 877-747-6872.

This is **not an official publication** by the Texas Structural Pest Control Service. If in doubt about what constitutes a Green Category product, where and when they may be used, and how to gain approval for Yellow and Red List products in schools, contact the Texas Structural Pest Control Service directly. Texas Structural Pest Control Service, P.O. Box 1927, Austin, TX 78767 (512) 305-8250 or 866-918-4481 [www.tda.state.tx.us/spcs](http://www.tda.state.tx.us/spcs)

1. I=Insecticide, R=Rodenticide, F=Fungicide, B=Biological (living) pesticide
2. Trade names and active ingredients associated with trade names change frequently. You should check with your local pest control distributor and with the pesticide label to confirm that the active ingredients match up with an approved Green Category category. Mention of trade names does not imply endorsement of a products, but is included for educational purposes only.
3. The most common microbial insecticides derive their killing power from proteins or other toxins produced by microorganisms. The microbe-based pesticides listed here include those that consist not just of living or dead microbes, but also natural compounds derived from microorganisms. Spinosad, for example, consists of an insecticide produced naturally by the Actinomycete, *Saccharopolyspora spinosa*. These pesticide active ingredients generally display a high degree of selectivity for insects.

The information given herein is for educational purposes only. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by Texas AgriLife Extension Service is implied. Additional, or updated copies of this fact sheet may be obtained by contacting the author(s) at the AgriLife Extension – School IPM Program, 17360 Coit Road, Dallas, Texas 75252-6599. Extension programs serve people of all ages regardless of socioeconomic level, race, color, sex, religion, disability or national origin. The Texas A&M System, U.S. Department of Agriculture, and the County Commissioners Courts of Texas Cooperating.

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