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## 2012

### **Fire Ant Products for Tennessee's Schools**

### **Sorted By Active Ingredient**

Intended as a supplement to UT Extension PB1788 Managing Fire Ants in and Around Schools, https://utextension.tennessee.edu/publications/Pages/pestMngmt.aspx

One of the most efficient ways to manage fire ants on school grounds is to broadcast a fire ant bait. Treating individual mounds can be expensive and requires more time and effort to scout for all the mounds, and often the smaller mounds are overlooked. In this publication you'll find a list of fire ant baits and their estimated costs. Products and their estimated costs are also listed for individual mound treatments or other broadcast applications should these be deemed necessary as suggested in PB1788. If baits are broadcasted twice a year, often other treatments are not needed. This is not a complete listing of all fire ant management products. Prices will vary but are provided to give a relative comparison of cost.

## **Fire Ant Products for Tennessee's Schools**

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## **Bait Fire Ant Products Labeled for Schools**

| Bait Active ingredient               | Trade Name   | EPA Reg #       | Broadcast | Individual Mounds | Interior <sup>1</sup> |
|--------------------------------------|--|-----------------|-----------|-------------------|-----------------------|
| Abamectin B <sub>1</sub>             | Abathor Fire Ant Bait                              | 83923-7         | Х         | Х                 | Х                     |
| Abamectin B <sub>1</sub>             | Prescription Treat. Ascend Fire Ant Bait Formula 1 | 499-370         | х         | Х                 | Х                     |
| Fenoxycarb (IGR)                     | Award  | 100-722         | х         | Х                 |                       |
| Fipronil                             | Maxforce FC Fire Ant Bait                          | 432-1433        | Х         | Х                 |                       |
| Hydramethylnon                       | Amdro Pro Fire Ant Bait                            | 241-322         | Х         | Х                 |                       |
| Hydramethylnon                       | Amdro Pro Fire Ant Killer                          | 241-322-73342   | х         | Х                 |                       |
| Hydramethylnon                       | Probait Formulation For Professionals              | 73342-1-2724    | Х         | Х                 |                       |
| Hydramethylnon +<br>methoprene (IGR) | Extinguish Plus                                    | 2724-496        | х         | Х                 | х                     |
| Indoxacarb                           | Dupont Advion Fire Ant Bait                        | 352-627         | Х         | Х                 |                       |
| Methoprene (IGR)                     | Extinguish   | 2724-475        | х         | Х                 | х                     |
| Pyriproxyfen (IGR)                   | Distance Fire Ant Bait                             | 1021-1728-59639 | Х         | Х                 |                       |
| Spinosad                             | Ferti-lome Come and Get It                         | 62719-329-7401  | Х         | Х                 |                       |

<sup>1</sup> Interior treatments should be applied as crack and crevice and only when children are not present unless the label states otherwise.

Apply to cracks and crevices where insects may enter the building such as around doors, windows, pipes, vents, weep holes, under siding and in wall voids.

### **Estimated Cost for Fire Ant Baits Used Around Schools 2009**

| Bait Active Ingredient               | Trade Name  | Cost per acre | Cost/1,000 sq ft | Cost/ 10 mounds |
|--------------------------------------|---|---------------|------------------|-----------------|
| Abamectin $B_1$                      | Prescription Treat. Ascend Fire Ant Bait Formula 1            | \$6.54        | \$0.16           | \$0.74          |
| Pyriproxyfen (IGR)                   | Distance Fire Ant Bait  | \$10.50       | \$0.19           |                 |
| Hydramethylnon                       | Probait Formulation For Professionals                         | \$10.71       | \$0.25           |                 |
| Methoprene (IGR)                     | Extinguish <sup>1</sup>                                       | \$13.00       | \$0.30           |                 |
| Hydramethylnon                       | Amdro Pro Fire Ant Bait                                       | \$13.14       | \$0.30           |                 |
| Fenoxycarb (IGR)                     | Award   | \$16.68       | \$0.38           |                 |
| Hydramethylnon                       | Amdro Fire Ant Bait <sup>1</sup>                              | \$19.00       | \$0.43           | \$5.46          |
| Abamectin B <sub>1</sub>             | Prescription Treat. Advance 375 A Select Granular Ant<br>Bait | \$19.98       | \$0.50           | \$22.47         |
| Hydramethylnon + methoprene (IGR)    | Extinguish Plus <sup>1</sup>                                  | \$21.00       | \$0.49           |                 |
| Hydramethylnon                       | Maxforce Fire Ant Killer Granular Bait                        | \$22.50       | \$0.56           | \$7.03          |
| Indoxacarb                           | Dupont Advion Fire Ant Bait                                   | \$24.63       | \$0.56           |                 |
| Fipronil                             | Maxforce FC Fire Ant Bait                                     | \$30.94       | \$0.70           |                 |
| Spinosad                             | Ferti-lome Come and Get It <sup>1</sup>                       | \$54.00       | \$1.41           | \$5.75          |
| Hydramethylnon +<br>methoprene (IGR) | Amdro Firestrike Fire Ant Bait <sup>1</sup>                   | \$113.00      | \$2.59           |                 |
| Fipronil                             | Ceasefire Fire Ant Bait Insecticide                           | \$115.21      | \$2.62           |                 |
| Hydramethylnon                       | Amdro Fire Ant Bait Yard Treatment <sup>1</sup>               | \$141.00      | \$3.25           |                 |
| Hydramethylnon +<br>methoprene (IGR) | Amdro Firestrike Fire Ant Bait Mound Treatment <sup>1</sup>   |               |                  | \$5.18          |

Costs calculated from price provided by a distributor or

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<sup>1</sup> Costs taken from 2009 Fire Ant Control Material for Alabama Homeowners, http://www.aces.edu/pubs/docs/A/ANR-0175-A/

## **Granular Fire Ant Products Labeled for Schools**

| Granular Active Ingredient     | Trade Name  | EPA Reg #    | Broadcast | Individual Mounds | Perimeter |
|--------------------------------|---|--------------|-----------|-------------------|-----------|
| Bifenthrin                     | Hi-Yield Bug Blaster Turf Insect Control Granules | 5401-21-7401 | х         | х                 |           |
| Bifenthrin                     | Talstar EZ or PL                                  | 279-3168     | Х         | Х                 | Х         |
| Bifenthrin                     | Wisdom Lawn Granular                              | 5481-521     | Х         | Х                 | Х         |
| Bifenthrin                     | Bifen L/P Insecticide Granules                    | 53883–124    | Х         | Х                 | Х         |
| Bifenthrin                     | Menace GC Granular                                | 228-452      | Х         |                   | х         |
| Bifenthrin                     | Menace PL Granular                                | 228-450      | Х         |                   | Х         |
| Bifenthrin                     | Southern Ag Lawnstar Insecticide Granules         | 70506-73-829 | Х         | Х                 |           |
| Deltamethrin                   | DeltaGard G Insecttcide Granule                   | 432-836      | Х         | Х                 |           |
| Fipronil                       | TopChoice Insecticide                             | 432-1217     | х         |                   |           |
| Hexa-Hydroxyl                  | EcoExempt G Granular Insecticide                  |              | Х         | Х                 | Х         |
| Zeta-cypermethrin & Bifenthrin | Talstar EXTRA                                     | 279-3343     | Х         | Х                 |           |

# Estimated Cost for Contact Granular Insecticides Used On School Grounds 2009

| Granular Active Ingredient | Trade Name   | Cost per acre | Cost/1,000 sq ft | Cost/ 10 mounds |
|----------------------------|--|---------------|------------------|-----------------|
| Bifenthrin                 | Wisdom Lawn Granular   | \$80.00       | \$1.79           |                 |
| Bifenthrin                 | Hi-Yield Bug Blaster Turf Insect Control Granules <sup>1</sup> | \$130.00      | \$2.98           |                 |
| Bifenthrin                 | Talstar EZ   | \$160.74      | \$3.70           |                 |
| Fipronil                   | TopChoice Insecticide  | \$290.01      | \$6.67           |                 |
| Hexa-Hydroxyl              | EcoExempt G Granular Insecticide                               |               |                  | ?               |

Costs calculated from price provided by a distributor or

<sup>1</sup> Costs taken from 2009 Fire Ant Control Material for Alabama Homeowners, http://www.aces.edu/pubs/docs/A/ANR-0175-A/

# **Liquid Fire Ant Products Labeled for Schools**

| Liquid Active Ingredient                          | Trade Name  | EPA Reg #       | Broadcast | Individual Mounds | Interior <sup>1</sup> | Perimeter |
|---|---|-----------------|-----------|-------------------|-----------------------|-----------|
| Bifenthrin  | Bifen I/T   | 53883-118       | Х         | Х                 |                       |           |
| Bifenthrin  | Hi-Yield Big Blaster II Turf, Termite, and Ornamtental<br>Insect Control (liquid concentrate) | 5481-520-7401   | Х         | Х                 |                       |           |
| Bifenthrin  | Masterline Bifenthrin 7.9 Termiticide/Insecticide   | 73748-7         | Х         | Х                 |                       |           |
| Bifenthrin  | Menace 7.9% Flowable  | 228-451         | Х         | Х                 |                       | Х         |
| Bifenthrin  | Pro-Mate Bifenthrin   | 279-3206-5905   | Х         | Х                 | Х                     | Х         |
| Bifenthrin  | Speckoz Bifenthrin Termiticide/Insecticide  | 279-3206-72113  | Х         | Х                 | Х                     |           |
| Bifenthrin  | Talstar P or One Multi Insecticide  | 279-3206        | Х         | Х                 |                       |           |
| Bifenthrin  | Wisdom TC Flowable  | 5481-520        | Х         | Х                 |                       |           |
| β-Cyfluthrin                                      | TempoSC Ultra   | 432-1363        |           | Х                 |                       | Х         |
| Cyfluthrin  | Cy-Kick CS  | 499-304         |           |                   | Х                     |           |
| D-Limonene  | Orange Guard  | 61887-2-AA      |           | Х                 | Х                     | Х         |
| Deltamethrin                                      | Suspend SC  | 432-763         |           | Х                 | Х                     | Х         |
| Deltamethrin                                      | Suspend Polyzone  | 432-1514        |           | Х                 | Х                     | Х         |
| Dinotefuran                                       | Alpine Pressurized Insecticide  | 499-531         |           |                   | Х                     | Х         |
| D-Limonene  | Orange Guard  | 61887-2-AA      |           | Х                 | Х                     | Х         |
| Gamma-cyhalothrin                                 | Optimate CS   | 67760-104-53883 | Х         | Х                 | Х                     |           |
| Lambda-cyhalothrin                                | Cyzmic CS   | 53883-261       | Х         | Х                 |                       |           |
| Lambda-cyhalothrin                                | Demand CS   | 100-1066        | Х         | Х                 |                       |           |
| Lambda-cyhalothrin                                | Cyhalocap CS  | 499-535         |           |                   | Х                     | Х         |
| Lambda-cyhalothrin                                | Scimitar CS   | 100-1078        | Х         | Х                 |                       |           |
| Permethrin  | Astro Insecticide   | 279-3141        | Х         | Х                 |                       | Х         |
| Permethrin  | Martin's Permethrin SFR Termiticide/Insectide   | 70506-6-53883   |           | Х                 |                       |           |
| Permethrin  | Permethrin CS   |                 |           | Х                 | Х                     | Х         |
| 2 Phenyethyl Propionate,<br>Thyme oil, Pyrethrins | EcoPCO WP X Wettable Powder Insecticide   | 67425-25        |           | Х                 |                       |           |
| Thiamethoxam                                      | Optigard Flex   | 100-1360        |           | Х                 |                       |           |

<sup>1</sup> Interior treatments should be applied as crack and crevice and only when children are not present unless the label states otherwise.

Apply to cracks and crevices where insects may enter the building such as around doors, windows, pipes, vents, weep holes, under siding and in wall voids.

# Estimated Cost of Liquid Insecticides to be Broadcasted or Applied to Individual Fire Ant Mounds on School Grounds 2009

| Liquid Active Ingredient                          | Trade Name  | Cost per acre | Cost/1,000 sq ft | Cost/ 10 mounds |
|---|---|---------------|------------------|-----------------|
| Bifenthrin  | Wisdom TC Flowable  | \$17.37       | \$0.40           | \$1.04          |
| Bifenthrin  | Masterline Bifenthrin 7.9 Termiticide/Insecticide   | \$21.41       |                  | \$1.28          |
| Acephate  | Acephate E 75 WP <sup>1</sup>   |               |                  | \$2.22          |
| Bifenthrin  | Hi-Yield Big Blaster II Turf, Termite, and Ornamtental Insect Control (liquid concentrate) <sup>1</sup> | \$93.00       | \$2.14           | \$3.44          |
| Bifenthrin  | Bifen I/T <sup>1</sup>  |               |                  | \$4.12          |
| Bifenthrin  | Menace 7.9% Flowable  | \$88.36       | \$2.03           | \$5.28          |
| Bifenthrin  | Talstar One Multi Insecticide   |               |                  | \$11.13         |
| Lambda-cyhalothrin                                | Scimitar CS   | \$50.29       | \$1.20           | \$20.12         |
| 2 Phenyethyl Propionate,<br>Thyme oil, Pyrethrins | EcoPCO WP X Wettable Powder Insecticide   |               |                  | \$25.20         |
| D-Limonene  | Orange Guard  |               |                  | \$27.50         |
| Permethrin  | Astro Insecticide   | \$13.92       | \$0.32           | \$32.40         |
| Permethrin  | Permethrin CS   | \$267.00      | \$6.13           |                 |
| Permethrin  | Permethrin Pro Termite, Turf, Ornamental  | \$36.11       | \$0.83           | \$33.00         |
| Deltamethrin                                      | Suspend Polyzone  | \$33.00       | \$2.55           | \$7.66          |
| Deltamethrin                                      | Suspend   |               |                  | \$38.32         |
| Thiamethoxam                                      | Optigard Flex   |               |                  | \$43.88         |
| B-Cyfluthrin                                      | Tempo SC Ultra  |               | \$3.00           |                 |

Costs calculated from price provided by a distributor or

<sup>1</sup> Costs taken from 2009 Fire Ant Control Material for Alabama Homeowners, http://www.aces.edu/pubs/docs/A/ANR-0175-A/

## **Dust Fire Ant Products Labeled for Schools**

| Dust Active Ingredient           | Trade Name                              | EPA Reg #                              | Individual<br>Mounds | Interior <sup>1</sup> | Perimeter |
|----------------------------------|---|--|----------------------|-----------------------|-----------|
| Deltamethrin                     | DeltaDust Insecticide                   | ust Insecticide 432-772                |                      |                       |           |
| Cyfluthrin                       | Tempo 1 % Dust Insecticde RTU           | Tempo 1 % Dust Insecticde RTU 432-1373 |                      |                       |           |
| Diatomaceous earth               | Mother Earth D Pest Control Dust        | 499-509                                |                      |                       | Х         |
| Pyrethrins, PBO, Silicon Dioxide | Bombs Away                              | 10088-93-1553                          | Х                    | Х                     |           |
| Pyrethrins, PBO, Silicon Dioxide | Demise Fire Ant & Insect Dehydrator     | 10088-93-68562                         | Х                    | Х                     |           |
| Pyrethrins, PBO, Silicon Dioxide | WildFire Fire Ant and Insect Dehydrator | 10088-93-11547                         | Х                    | Х                     |           |
| Zeta-Cypermethrin                | Cynoff Dust Insecticide                 | 279-3259                               |                      |                       | Х         |

<sup>1</sup> Interior treatments should be applied as crack and crevice and only when children are not present unless the label states otherwise.

Apply to cracks and crevices where insects may enter the building such as around doors, windows, pipes, vents, weep holes, under siding and in wall voids.

### Estimated Cost for Dust Insecticides to be Applied to Individual Fire Ant Mounds on School Grounds 2009

| Dust Active Ingredient | Trade Name                                     | Cost/ 10 mounds |
|------------------------|--|-----------------|
| Acephate               | Surrender Fire Ant Killer <sup>1</sup>         | \$1.92          |
| Acephate               | Hi-Yield Acephate Fire Ant Killer <sup>1</sup> | \$2.96          |
| Deltamethrin           | DeltaDust Insecticide <sup>1</sup>             | \$5.87          |
| Cyfluthrin             | Tempo 1 % Dust Insecticde RTU                  | ?               |

Costs calculated from price provided by a distributor or

<sup>1</sup> Costs taken from 2009 Fire Ant Control Material for Alabama Homeowners, http://www.aces.edu/pubs/docs/A/ANR-0175-A/

# Dust Fire Ant Products Labeled for Motor Housings, Switch Boxes, Junction Boxes, & Conduits in Schools

|                                  |   |                | Individual | • • • 1 |           | boxes, junction boxes, |
|----------------------------------|---|----------------|------------|---------|-----------|------------------------|
| Dust Active Ingredient           | Trade Name                              | EPA Reg #      | Mounds     |         | Perimeter | conduits <sup>2</sup>  |
| Diatomaceous earth               | Mother Earth D Pest Control Dust        | 499-509        |            |         | Х         | Х                      |
| Pyrethrins, PBO, Silicon Dioxide | Bombs Away                              | 10088-93-1553  | Х          | Х       |           | Х                      |
| Pyrethrins, PBO, Silicon Dioxide | Demise Fire Ant & Insect Dehydrator     | 10088-93-68562 | х          | Х       |           | Х                      |
| Pyrethrins, PBO, Silicon Dioxide | WildFire Fire Ant and Insect Dehydrator | 10088-93-11547 | Х          | Х       |           | Х                      |

<sup>1</sup> Interior treatments should be applied as crack and crevice and only when children are not present unless the label states otherwise.

Apply to cracks and crevices where insects may enter the building such as around doors, windows, pipes, vents, weep holes, under siding and in wall voids.

<sup>2</sup>For safety reasons, only electricians or licensed pest control operators should treat electrical equipment. Specialized products and training are necessary to treat these sites safely and effectively.

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Motor housings switch

### Speed and Mode of Action of Active Ingredients in Fire Ant Products

| Common name of active ingredients    | Signal Word <sup>1</sup> | Speed of control   | Mode of Action or How it works          |
|--------------------------------------|--------------------------|--------------------|---|
| (S)-methoprene                       | Caution                  | 3 to 6 months bait | stops production of new fire ants (igr) |
|                                      |                          |                    | mix of two types of baits (see (S)-     |
| (S)-methoprene, hydramethylnon       | Caution                  | 2 to 4 weeks       | methoprene, hydramethylnon)             |
| abamectin B1                         | Caution                  | 2 to 8 weeks bait  | kills workers as well as queens         |
| acephate                             | Caution                  | 1 to 2 days        | contact insecticide                     |
| beta-cyfluthrin                      | Caution                  | 1 to 2 days        | contact insecticide                     |
| bifenthrin                           | Caution                  | 1 to 2 days        | contact insecticide                     |
| carbaryl                             | Caution                  | 1 to 2 days        | contact insecticide                     |
| cypermethrin                         | Caution to Warning       | 1 to 2 days        | contact insecticide                     |
| D-limonene                           | Caution                  | 1 to 2 days        | contact insecticide                     |
| deltamethrin                         | Caution                  | 1 to 2 days        | contact insecticide                     |
| fenoxycarb                           | Caution                  | 2 to 4 weeks       | stops production of new fire ants (igr) |
| fipronil                             | Caution                  | 3 to 4 weeks       | slow-acting insecticide                 |
| gamma-cyhalothrin                    | Caution                  | 1 to 2 days        | contact insecticide                     |
| hexa-hydroxyl (clove oil, thyme oil) |                          | 1 to 2 days        | contact insecticide                     |
| hydramethylnon                       | Caution                  | 2 to 6 weeks       | bait kills workers as well as queens    |
| indoxacarb                           | Caution                  | 3 to 7 days        | bait kills workers as well as queens    |
| lambda-cyhalothrin                   | Caution                  | 1 to 2 days        | contact insecticide                     |
| permethrin                           | Caution                  | 1 to 2 days        | contact insecticide                     |
| 2 phenylethyl propionate             |                          | 1 to 2 days        | contact insecticide                     |
| pyrethrins                           | Caution                  | 1 to 2 days        | contact insecticide                     |
| pyriproxyfen                         | Caution                  | 2 to 6 months      | stops production of new fire ants (igr) |
| spinosad                             | Caution                  | 2 to 4 weeks       | bait kills workers as well as queens    |
| thiamethoxam                         | Caution                  | 3 to 7 days        | contact insecticide                     |
| thyme oil                            |                          | 1 to 2 days        | contact insecticide                     |

<sup>1</sup> Signal words describe the acute (short-term) toxicity of the formulated pesticide product, and are based on the results of six acute toxicity studies. The acute oral, dermal and inhalation studies evaluate systemic toxicity by those routes of entry. The primary eye and skin irritation studies measure irritation or corrosion, while the dermal sensitization study evaluates the potential for allergic contact dermatitis. See the following link for more information: http://edis.ifas.ufl.edu/PI137

The Signal Word is determined by the most severe toxicity category assigned to the acute toxicity studies with some exceptions. The Signal Words and associated toxicity categories are as follows: Toxicity Category I (most toxic) = DANGER/POISON Skull and Crossbones; Toxicity Category II (moderately toxic) = WARNING; Toxicity Category III (less toxic) = CAUTION; Toxicity Category IV (least toxic) = None Required.

If you find a fire ant product in a Tennessee store and it is labeled for schools, but not listed here, please contact kvail@utk.edu with the product information.

**Precautionary Statement** 

To protect people and the environment, pesticides should be used safely. This is everyone's responsibility, especially the user. Read and follow label directions carefully before you buy, mix, apply, store or dispose of a pesticide. According to laws regulating pesticides, they must be used only as directed by the label.

Disclaimer

This publication contains pesticide recommendations that are subject to change at any time. The recommendations in this publication are provided only as a guide. It is always the pesticide applicator's responsibility, by law, to read and follow all current label directions for the specific pesticide being used. The label always takes precedence over the recommendations found in this publication. Use of trade or brand names in this publication is for clarity and information; it does not imply approval of the product to the exclusion of others that may be of similar, suitable composition, nor does it guarantee or warrant the standard of the product. The author(s), the University of Tennessee Institute of Agriculture and University of Tennessee Extension assume no liability resulting from the use of these recommendations.

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