# A BETTER WAY To Control Fire Ants

A queen fire ant can lay 2,000 eggs each day. That's why it's essential to kill the queen. **Amdro® Pro fire ant bait** does just that, using an active ingredient that gives worker ants enough time to deliver it to their queen. No queen. No colony. When used as directed, **Amdro Pro**:



- Delivers proven, cost-effective control of fire ants.
- Provides flexible dose and application options, making it effective when used over large areas or around a single mound.
- Is approved for aerial applications.
- Is approved by USDA-APHIS for quarantine treatments for certification of nursery stock.

## Fire Ant Facts

- A queen fire ant can lay 2,000 eggs each day.
- Fire ants can move into circuit breakers, relays, motors and other electrical devices, causing short circuits and fires.
- Fire ants forage out of underground tunnels that extend up to 100 feet from a mound.





# **Technical Brief**

**Description:** Amdro Pro is highly attractive to imported and native fire ants and other ants. Worker ants carry **Amdro Pro** into the mound as food for the colony where it is eaten and fed to the queen. **Amdro Pro** starts to kill ants immediately. In about a week the queen is dead, which destroys the mound.

#### **Use Sites:**

**Ornamentals:** Container- or field-grown ornamentals, non-food-bearing nursery stock, and soil around non-bearing fruit or nut trees

**Turf:** Athletic fields, commercial grounds, golf courses, lawns, landscaped areas and sod farms (commercial turf)

**Noncropland Areas:** Airports, cemeteries, commercial grounds, parks, school and picnic grounds, recreational areas and roadsides

Formulation: 0.73% G (Granule) Packaging: 4.5 lb bag; 25 lb bag

**Use Rates:** Do not apply more than 2 lbs per acre.

Individual Mounds: 2 to 5 level tablespoons

Broadcast Treatment: 1 to 1.5 lbs per acre for imported red fire ants and harvester ants; 2 lbs per acre for

big-headed ants only. (2 to 3 oz per 5000 sq. ft.)

Active Ingredient: Hydramethylnon Chemical Family: Amidinohydrazone

**Mode of Action:** Site II electron transport inhibitor in the cell mitochondria. Stops insects' energy source, causing insects to die.

**Control Symptoms:** Satellite mounds begin to disappear when the broadcast application is made to the entire infested area. Mound treatments result in mound collapse.

Signal Word: Caution

**REI:** When dust has settled; 12 hours (Agricultural uses only)

PPE: Long-sleeved shirt and long pants; chemical-resistant gloves; shoes and socks

**Keys to Success:** Apply the product when the ants are most active in the day and when the soil temperatures are above 60° F. Avoid applications in the heat of the day. Mounds: Distribute bait uniformly around the mound. Do not disturb the mound. Broadcast treatment: Broadcast bait uniformly with ground (granular spreaders) or aerial equipment. Delay irrigation or water on the bait for 24 hours following application.

**Mound Treatments:** Treatment to the mound followed by the broadcast application will eliminate mounds more rapidly or prevent satellite mounds from developing following rainfall events. Or, use a contact insecticide on the mound as a liquid drench followed by the broadcast application of **Amdro Pro**.



# Research Brief

Partial data shown.

## **BROADCAST APPLICATION** Alabama

Treatment	Rate	Mean Number of Active Mounds			
	lb/A	Pre-2003	8/5/03	6/7/04	9/28/04
Untreated		242	234	222	127
Amdro Pro	1.5	80	20	45	18
Extinguish	1.5	114	94	22	11
Amdro Pro + Extinguish <sup>1</sup>	100	144	72	23	5

<sup>1</sup> 50:50 hopper blend applied at 1.5 lb/A Auburn University: Fudd Graham, researcher; Heritage Park, Talladega, AL

3-year trial with repeat applications in mid-summer annually, established in 2003.

Results are mean no. of red imported fire ant mounds.

Paper Title: Progress Report Fiscal Year 2004 and 2004, Alabama Fire Ant Management Program

## FIELD-GROWN BALLED AND BURLAP NURSERY STOCK Mississippi

Treatment	Rate	Percent Decrease in Number of Colonies			onies
	lb/A	3WAT	6WAT	10WAT	17WAT
Untreated		18	23	56	16
Amdro Pro	1.5	73	83	86	87

USDA-APHIS, Gulfport, MS; Soil Inhabiting Pests Laboratory; Drs. H. Collins & A. Callcott

Trial site: Jackson County, MS in a simulated nursery setting in a pasture

4 replications or 1 acre plots each

Paper Title: Late-season applications of Amdro for IFRA control, Project No. FA 02G029

#### **BROADCAST APPLICATION** Texas

Treatment	Rate	Mean Number of Active Mounds			
	lb/A	Pre	1 week	2 weeks	3 months
Untreated		19.3	20	17.3	12.7
Amdro Pro	1.5	16.3	5	0.7	7
Extinguish	1.5	17.7	18	9	0
Talstar 2G	4	19.3	4.3	2	6.7
Amdro Pro + Extinguish <sup>1</sup>	1.5	17.3	4.7	1.7	2.7
TopChoice	87	19.3	8	2	0.7

<sup>&</sup>lt;sup>1</sup> hydramethylnon + s-methoprene, 50:50 hopper blend

Texas A & M University; Project of Dr. B. Dress & Mr. C. Barr, Texas Cooperative Extension

Application: 06/11/02, Palestine, TX

Results are mean no. of red imported fire ant mounds in 3 replications in 3,200 Ft<sup>2</sup> plots

P < 0.05 with df = 16

Paper Title: Commercially Available Broadcast Compounds for the Control of Red Imported Fire Ants; as found on Texas A&M website, http://fireant.tamu.edu



# **Product Brief**

**Amdro® Pro fire ant bait,** with hydramethylnon, has been a proven standard in fire ant bait control for decades. In fact, it is one of the only products on the market today developed specifically as a fire ant control bait product. **Amdro Pro** is highly attractive to red imported fire ants (RIFA) and also has activity on bigheaded ants, harvester ants and native fire ants.

#### **How Amdro Pro Works.**

The queen is the only ant in the mound that reproduces. Therefore, to effectively eliminate the mound, you must kill the queen. **Amdro Pro** does just that, in both single- and multiple-queen mounds. In fact, unlike fast-acting contact killers, **Amdro Pro** allows for the transfer process of food to the queen while still killing the foraging workers. This ensures the bait gets to, and kills, the queen. And when the queen dies, the mound dies.

Amdro Pro has one of the most comprehensive use sites and methods for application of any bait product on the market:

**Approved by USDA-APHIS** for quarantine treatments for certification of field-grown ball and burlap nursery stock, including non-bearing fruit and nut tree stock, and for use around container nursery production sites.

<u>Used in all commercial and residential grounds maintenance</u> in and around ornamental plants and open turfgrass areas.

<u>Applied by hand-held application spreaders</u> or through mounted applicators for large-area applications in nurseries, around open fields, around bed edges or other areas where people perform daily activities and contact with fire ants needs to be limited.

**<u>Large-scale aerial applications</u>** can be used for broadcast treatments on large properties, providing excellent particle distribution on the ground to densely populated fire ant populations.

<u>Easily used as the preferred broadcast application</u>, **Amdro Pro** can also be applied directly around isolated mounds. **Amdro Pro** can be combined according to label directions with Extinguish®, an insect growth regulator, to achieve extended fire ant control.

<u>Sometimes referred to as "The Texas Two-Step,"</u> Amdro Pro is used in a comprehensive Fire Ant Program. The program includes use of a fast-acting product directly on the mound for control of surface ants, combined with a broadcast application of **Amdro Pro** across the infested area, for control of foraging workers and movement of the pesticide to the queen, deep within the mound.



# **Application Brief**

## **Making the Most Effective Fire Ant Applications.**

- Apply in early evening when temperatures are cooler and ants are actively foraging.
- Do not apply in early morning on dew-covered ground.
- Do **not** irrigate for at least 6 hours following application.
- Do **not** disturb mounds.

## HAND-HELD SPINNER SPREADERS FOR FIRE ANT APPLICATIONS

Spreader	Setting		
Ortho® WHIRLYBIRD®	A		
Republic EZ Handspreader	1		
Scott's Handy Green®	Light		



*Left to right:* Ortho WHIRLYBIRD, Republic EZ Handspreader, Scott's Handy Green

## **CHEST SPREADERS FOR FIRE ANT APPLICATIONS**

Spreader	Approx. Setting	Swath Width (ft.)	
Plant Mates Canvas	2	11	
Spyker® Poly Model 75	3.2	10	
EarthWay Canvas EV-N-SPRED® 2700A	1.5	10	
Cyclone Poly Model 1C1	1.5	8	
Cyclone Canvas Model 1A1	1.5	8	



Left to right: Plant Mates Canvas, Spyker Poly Model 75, Earthway Canvas EV-N-SPRED 2700A, Cyclone

## Vehicle-Mounted Spinner Spreader for Fire Ant Applications.

Vehicle-mounted spreaders can be mounted to tractors, all terrain vehicles, utility vehicles, etc., and do not require a PTO hook-up.

- The gate opening on the spreader should be set at 1/8-inch.
- Rate of product is controlled by adjusting ground speed.
   To apply 1.5 pounds of product per acre, ground speed should be 6 mph.



Herd GT-77 seeder/spreader

#### **Amdro Pro is Labeled for Aerial Applications.**



Texas A&M fire ant demonstration. Provided by North Star Helicopters.