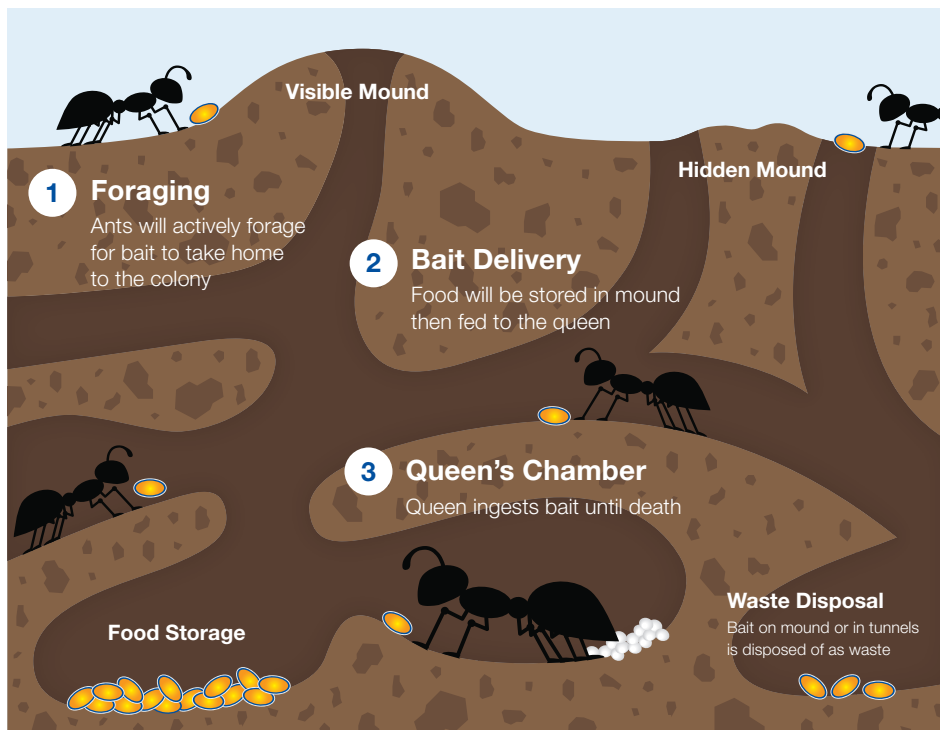
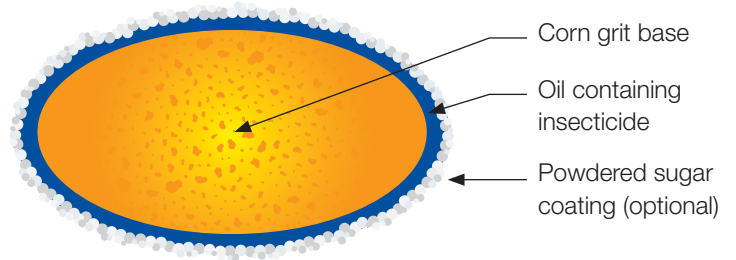


Best Management Practices for Altrevin® Fire Ant Bait Insecticide

Altrevin Fire Ant Bait Insecticide

- Active Ingredient: Metaflumizone (22B)
- PHI: 5 days
- REI: 12 hours
- Use Rate: 1.5 lbs/A
- Seasonal Max: 6 lbs/A
- Add Powdered Sugar (1:5) to increase attractiveness to sugar feeding species

Bait Schematic



Bait Considerations

- **Keep Bait Dry**
 - Moisture (precipitation, fog, irrigation, etc.) will rapidly degrade baits
- **Limit Food Sources**
 - Remove other sources of food (weed seed, honeydew, etc.) to increase foraging for bait
- **Remove Weeds and Residue**
 - Make it easier for ants to find bait during foraging
- **Residual Length**
 - Baits are only attractive for a few days after application
 - New colonies may establish quickly if pressure is heavy

Resistance Management

IRAC Technical Definition:

“A heritable change in the sensitivity of a pest population that is reflected in the repeated failure of a product to achieve the expected level of control when used according to the label recommendations of that pest species.”³

- **Social Insects:** Ant colonies have limited individuals who pass along genes
- **Mode of Action:** Active ingredient in Altrevin® insecticide is only used as an ant bait in US Agriculture
- **Active Intake:** Queens consume Altrevin insecticide as available so rate response is variable

Primary Insecticide Resistance Mechanisms³

Ant bait insecticides are less prone to resistance than foliar products and other baits

Metabolic Nerve toxins act rapidly	1	Target Site High intake rate by queen	2
Penetration Ingested baits easily absorbed	3	Behavioral Ants naturally forage	4

Primary Ant Bait Characteristics

Product	Active	IRAC	Speed of Kill	PHI (almond)	Other Ag Uses
Neuromuscular Disruptor <i>Speed: Fast</i>					
Altrevin Fire Ant Bait Insecticide	Metaflumizone	22B	4 Hours	5 Day	None ⁴
Clinch® Insecticide	Abamectin	6	1-2 Weeks	0 Day	Many
FireFighter™	Spinosad	5	3-14 Days	0 Day	Many
Insect Growth Regulator <i>Speed: Slow</i>					
Esteem®	Pyriproxyfen	7C	Weeks	24 Hour	Many
Extinguish®	Methoprene	7A	Weeks	0 Day	Limited

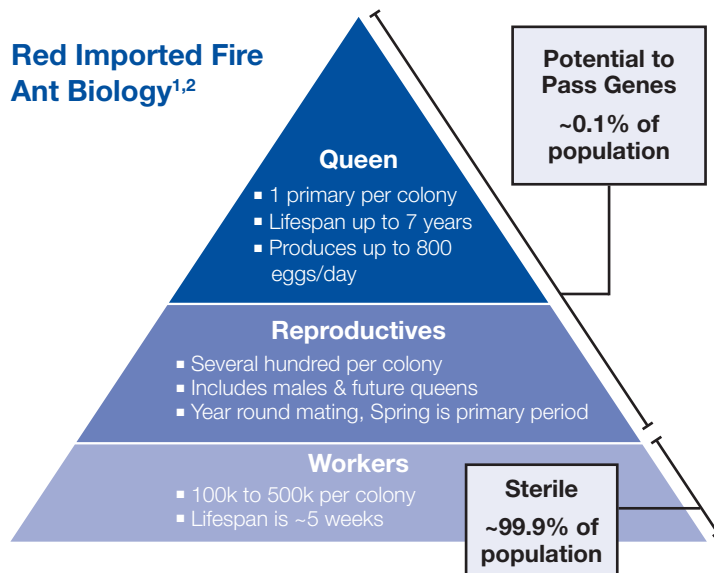
1 Greenberg, L., Kabashima, JN. (2013). University of California Statewide Integrated Pest Management Program (UC IPM): Red Imported Fire Ant. UC ANR Publication 7487. Accessed: Dec 2022. ipm.ucanr.edu.

2 Texas A&M AgriLife Extension. Texas Imported Fire Ant Research and Management Projects. Accessed: Dec 2022. fireant.tamu.edu.

3 Insecticide Resistance Action Committee (IRAC). Introduction to Resistance, Mechanisms. Accessed: Dec 2022. IRAC-online.org.

4 Only use of Metaflumizone in US Agriculture is as Altrevin Fire Ant Bait Insecticide.

Red Imported Fire Ant Biology^{1,2}



Single Queen Colony	Multiple Queen Colony
<ul style="list-style-type: none"> ▪ Territorial ▪ 40-150 mounds/A ▪ 7 million ants/A 	<ul style="list-style-type: none"> ▪ Collaborative ▪ 200+ mounds/A ▪ 40 million ants/A

Altrevin insecticide works quickly to reduce populations that may harm the crop, even in the presence of a multi-queen colony.

BASF
We create chemistry

Altrevin®
Fire Ant Bait Insecticide