

# Monarch G Insecticide

For the control of Argentine Stem Weevil, Mole Crickets  
Funnel, Nuisance and Nesting Ants in Recreational,  
Domestic and Commercial Turf

## Technical Brief

- Active Ingredient:** 0.5 g/kg fipronil
- Mode of Action Group:** 2B - Phenylpyrazoles (GABA-gated chloride channel antagonists)
- Formulation:** Granule
- Mode of Action:** Fipronil causes excitation and convulsions in insects and, at sufficient doses, death by disrupting the nervous system. Fipronil (and one of its metabolites) binds to three types of calcium-channels on the membranes of neurons, preventing calcium ion influx into the cell. One of these types of channels is mediated by the neurotransmitter gamma-aminobutyric acid (GABA) and the other two are mediated by glutamate. Fipronil has both contact and ingestion activity, but is particularly effective by way of ingestion.
- Behaviour in Plants:** Fipronil exhibits systemic activity against certain highly susceptible pests. Following soil or seed-treatment application, fipronil movement within plants is generally upward via xylem with very limited movement within the phloem.

## Benefits

- Outstanding efficacy on target pests
- Offers exceptional control during the most susceptible periods
- Long-term residual control
- Limits the number of pesticide applications
- Can't be smelt, tasted or felt by pests
- Unique resistance management grouping
- Unscheduled (exempt from poison scheduling)
- Novel mode of action that reduces the risk of resistance development
- Is non-repellent, so the pest don't know it's there, and cannot react to or avoid it - especially important for funnel ants and mole crickets
- Granule formulation for easy application and non-repellent treatment of funnel, nuisance and nesting ants in commercial or domestic turf situations

## Insect Management

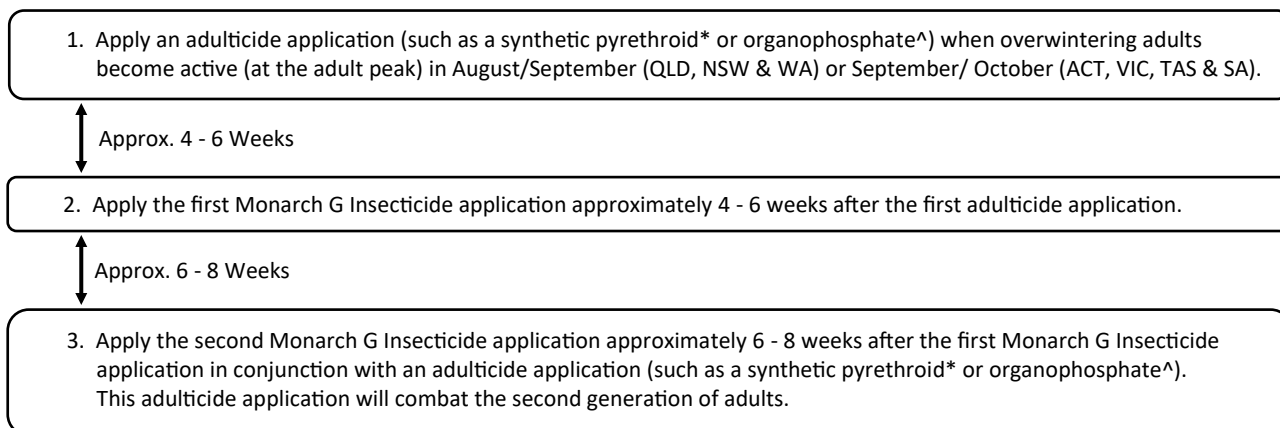
Situation	Pest	Rate per ha	Rate per 100m <sup>2</sup>	Critical Comments
<b>Recreational Turf</b> (including bowling greens, golf courses, parks and playing fields), <b>Domestic Turf and Commercial Turf Farms</b>	Argentine Stem Weevil ( <i>Listronotus bonariensis</i> )	150 kg	1.5 kg	Distribute granules evenly on the turf/grass surface at the first sign of pest activity.
	Funnel Ants ( <i>Aphaenogaster pythia</i> ), Nuisance ants, Nesting ants	120 kg	1.2 kg	Ensure incorporation with at least 6 mm of rainfall or overhead irrigation immediately after application.
	Mole Cricket ( <i>Sapteriscus didactylus</i> and <i>Gryllotalpa</i> spp.)	60 kg	600 g	

Note: The above table represents only a modified extract from the full registered label. Always read the full product label before use.

## How to get the most out of your application

Plan and implement a program to gain maximum control of your unwanted pests using the strengths of Monarch G Insecticide, by applying at the correct timings of the pest's life cycle.

**Argentine Stem Weevil (ASW)** – ASW should be managed and controlled with a program approach. Any basic program should include the following:



If pest pressure continues longer than the timelines described in the above applications (i.e. into the depths of summer) please contact Turf Culture for further program and product options to ensure you gain the best control whilst undertaking a sustainable resistance management program.

A program approach to control the larvae for African Black Beetle, Argentinian Scarab and Billbug using larvicide products such as Columbus Insecticide (250 g/L thiamethoxam) or Tirem 200 SC Insecticide (200 g/L imidacloprid) will compliment your Argentine Stem Weevil program. At minimum, a program of this nature should involve 2 applications spaced correctly over the season to ensure control during the main pest pressure periods.

Be sure to rotate the adulticide applications between the Mode of Action Resistance Management Groups. For example: if you use a synthetic pyrethroid\* for the first application listed above use an organophosphate<sup>^</sup> for the third application listed above (or vice versa if you use an organophosphate first). Rotation of Resistance Management Groups for adulticide applications is vital as Argentine Stem Weevil adults are prone to develop resistance.

\* synthetic pyrethroid – are products within the Mode of Action Management Group 3A. Product options registered for Argentine Stem Weevil control include Ceasefire 80 SC Insecticide (80 g/L bifenthrin) or Ceasefire 2G Insecticide (2 g/kg bifenthrin).

<sup>^</sup> organophosphate – are products within the Mode of Action Management Group 1B. Product options registered for Argentine Stem Weevil control include Pennside Flowable Microencapsulated Insecticide (240 g/L diazinon).

**Mole Crickets**—Ensure even application for best results as Monarch G Insecticide is non-repellent, which means Mole Crickets never know it's there, so they cannot react to it or evade it. Mole Crickets have been known to detect insecticide applications and react by burrowing down deep to evade insecticide, therefore use Monarch G Insecticide's non-repellent feature so you don't tip off the Mole Crickets by way of smell, taste or feel. The residual activity of Monarch G Insecticide is such that it can be applied before egg laying and will still control the nymphs as they hatch.

**Funnel, Nuisance and Nesting Ants**—Ensure even application for best results as Monarch G Insecticide is non-repellent, which means the funnel ants never know it's there, so they cannot react to or evade it. Funnel ants in transit to or from their colonies can pick up Monarch G Insecticide and spread it to other ants in their colony.

## Application

Apply Monarch G Insecticide evenly to the surface of turf using a granular applicator. Monarch G Insecticide must be incorporated with at least 6 mm of rainfall or overhead irrigation immediately after application.

The elimination of Ants (Funnel, Nuisance and Nesting) from an area will generally require more than 1 application. An initial application should be broadcast applied over the affected areas. As the initial numbers of active colonies is reduced, applications should shift to targeting active mounds, nests and trails. Apply granules directly to the mounds / nests and in the area immediately surrounding active mounds / nests (radius of approx. 5.6 metres, which is an area of approx. 100m<sup>2</sup>).



## Packaging

Pack size: 15kg



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