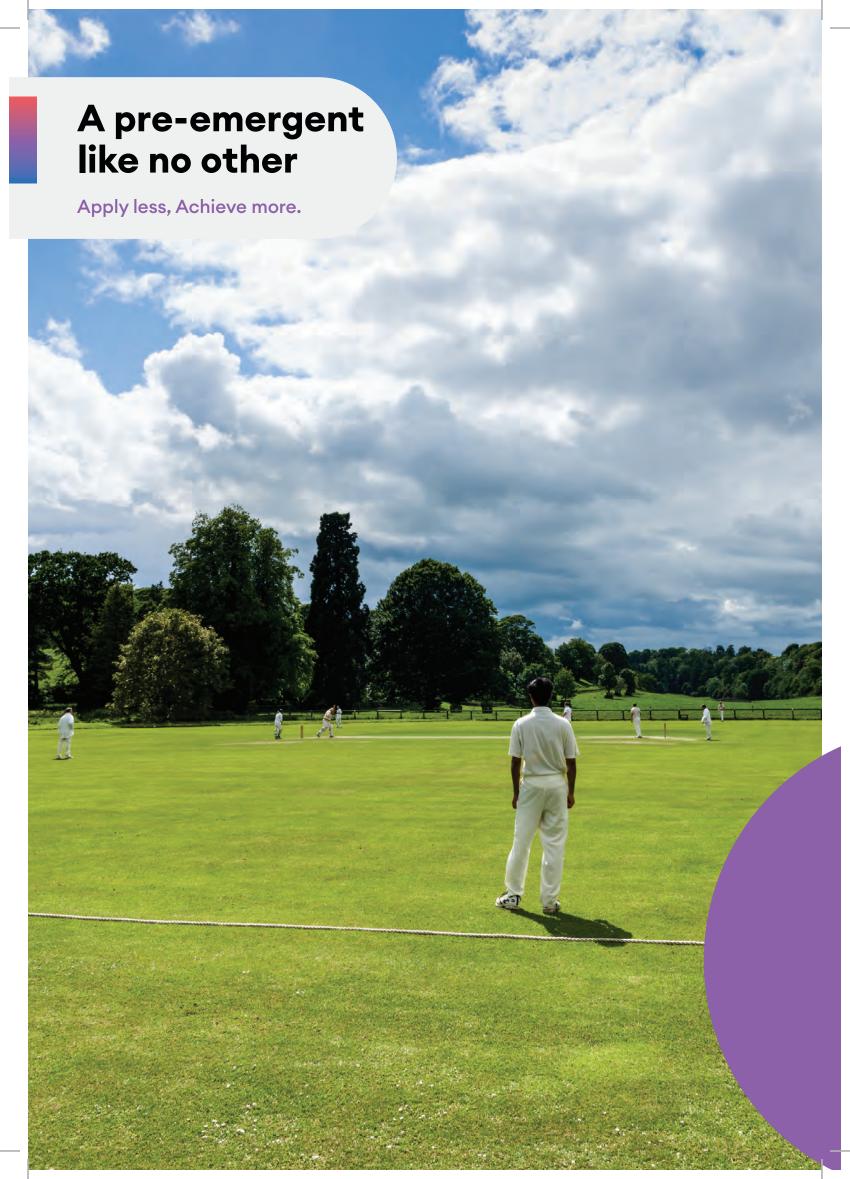


Apply less, Achieve more.







Specticle is an innovative herbicide for warm-season turf that sets a new standard for pre-emergent weed control. It provides up to 8 months of pre-emergent control in warm-season grasses.

Delivering an exceptional level of protection against *Poa annua*, Crowsfoot grass and Summer grass and a range of common broadleaf weeds. Specticle provides unmatched use flexibility with a wide application window, making it an ideal choice as the foundation of a year-round herbicide program.

### **Benefits of using Specticle**

- + Superior turf quality and playability outstanding preemergent control of *Poa annua*, Crowsfoot grass, Summer grass and a range of common broadleaf weeds including bindii, white clover, capeweed and plaintain
- Longer residual control Specticle outperforms the competition, even in the most difficult conditions, without losing control late in the season, meaning fewer applications and reducing fuel, labour and pesticide costs
- \* Easier application scheduling the longer residual control with Specticle means a wider application window, giving more flexibility to turf managers to select the most appropriate application timing for their operation
- + A significant step for resistance management being a new mode of action for turf in Australia, Specticle controls weeds, like *Poa annua*, that are known to have developed resistance to other commonly used herbicides. This makes Specticle one of the most effective tools in any turf manager's arsenal
- A significant reduction of herbicide placed in the environment – an application of Specticle applies up to 40 times less active ingredient per hectare than many competitive products
- + No concern about stains or odour Specticle's applicator-friendly formulation will not stain or leave odour behind after application

### Unique Mode of Action

The active ingredient in Specticle, Indaziflam, is classifed a Group 29 herbicide.

Specticle works by inhibiting crystalline cellulose deposition in the plant cell wall, affecting cell wall formation, cell elongation and division. Consequently, actively growing meristematic regions are affected.

Active ingredient	Brand/s	MOA group
Indaziflam	Specticle®	29
Prodiamine	Barricade*	3
Oryzalin	Embargo*	3
Dithiopyr	Dimension*	3
Pendimethalin	Stomp*	3

Like other pre-emergent herbicides,

Specticle does not prevent seeds from germinating. However, once the weed seedlings come into contact with the Specticle barrier, the growth is terminated by inhibiting the development of cells within the roots.

Apply less, Achieve more.



FIELD ONE - With Specticle



FIELD TWO - Without Specticle







### **Testimonial on using Specticle**

No concern about stains or odour – Specticle's applicatorfriendly formulation will not stain or leave odour behind after application In early 2018, Stephen Foster from Green Options, conducted a field trial at the Cronulla Sharks JRLFC. The trial aimed to evaluate an application of Specticle Herbicide for pre-emergent control of *Poa annua* (Winter grass) on a couch rugby league field with a history of significant *Poa annua* infestation each winter.

Stephen applied Specticle to the first field at a rate of 250mL/ha in 400 litres of water. The application was followed up with a light irrigation to get it into the top layer of the profile where most of the *Poa annua* seed sits, and create a really good barrier.

As shown by the photos taken in mid-winter, 2018, the untreated field had a significant infestation of *Poa annua* which required an intense program of post-emergent herbicide applications in the spring. The field treated with Specticle had less than 1% weed infestation, and did not require any spring post emergent herbicide application.

The couch recovery in spring on the treated field was excellent and the minimal high wear areas that needed to be re-laid with turf in the spring established rapidly with excellent root tack down.

"The results were definitely a positive," Stephen said.

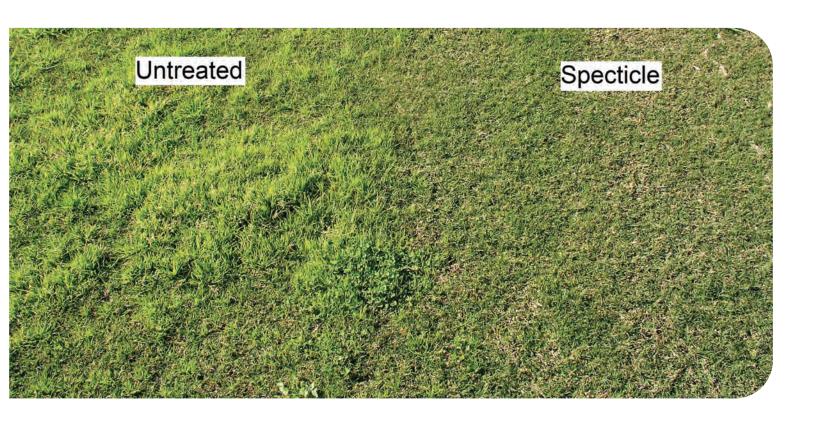
"Specticle is second to none! The main benefit of using Specticle was the fact it finds time, i.e. I only needed to do I application, which freed up time for me to do other things around the facilities, rather than having to do 3 or 4 applications. I'd definitely use it again. I've also found that the turf has been more tolerant to wear this year, which may be due to the lack of weeds. The health of the couch this year was really good, obviously with the prolonged summer and spraying in April for Winter grass control meant we were flying going into April. It was more slowing the couch down so it wasn't too aggressive going into winter.

"Finding the balance in a program is key. I don't think you can cut corners. If you've got a product like Specticle that helps you find new edges to your program, you're only going to improve and provide a better surface all round. Also, using Specticle saved time and money, which I then could use elsewhere, in other areas – better utilising my budget. I think anytime we are cutting budgets, we are hurting ourselves. It's better to try and use your budget in smarter ways, by finding different ways of being able to stretch it more, then we're only going to get better surfaces and meet our clients' needs. The time you save using Specticle, it's gold! You can't beat it!"

The benefits from the Specticle application in this trial were:

- + a cleaner, more consistent playing surface through winter and spring
- + time saving with precious resources able to be allocated to other areas of facility improvement

Apply less, Achieve more.



Addressing the challenge of weed resistance

Specticle has a different mode of action and is therefore a very timely tool to enable effective management of weeds that are resistant to existing pre and post-emergent herbicides.

Not only have many of the current pre-emergent herbicides been on the market for many years, they all have the same mode of action.

There have been no documented cases of resistance to Indaziflam.

Research trials around the world have shown that Specticle controls weeds like *Poa annua* that are suspected to be resistant to Group 29 herbicides.



### **Best Practice Guidelines**

- + The right timing.
- + The proper moisture.
- + The best results.

As a pre-emergent herbicide, Specticle should be applied before weed seeds germinate<sup>1</sup>. Best practice is to irrigate with 3-6mm water as soon as practical after application<sup>2</sup>. Adequate soil moisture is needed to activate Specticle and provide maximum control.

### Clean-up with caution

The sprayer must be thoroughly decontaminated before being used again to spray susceptible plants or turf. Ensure that sprayer clean-up is carried out in an area that is clear of waterways, desirable vegetation and tree roots, and preferably in an area where drainings can be contained.

See Product Label for further instructions.

- 1. Specticle is not expected to control weeds that have already emerged prior to application or perennial weeds emerging from rhizomes and roots.
- Specticle may affect sensitive grasses downslope from treated areas after excessive rainfall. To minimize effects on sensitive grasses, irrigate after application as directed on the Specticle label.

Local conditions such as soil compaction, slope, amount and timing of irrigation or rainfall and sensitivity and growth stage of non-target plant species may affect the severity of damage.

SITUATIONS FOR USE AND APPLICATION RATES			RESTRAINTS
Situation	Weeds Controlled	Rate	DO NOT use on
General Turf Situations Warm season turf grasses only, including:	Summer grass or Crab grass ( <i>Digitaria</i> spp.)	250 mL/ha in 200 to 500 L water per ha	+ Turf under stress, or turf that is not well established or in a robust healthy condition
Bahia grass (Paspalum notatum);	Crowsfoot grass (Eleusine indica)	125 mL/ha applied twice as a split application at a 4- to 6-week spray	+ Golf or bowling greens, collars, tees, tennis courts or croquet lawns
Buffalo grass (Stenotaphrum secundatum);	Winter grass (Poa annua)		+ Turf species not listed on the label
Common couch	Bindii (Soliva sessilis)	interval	+ Cool-season grasses
(Cynodon dactylon) and Hybrid couches;	White clover ( <i>Trifolium repens</i> )	Apply in 200-500 L water per ha	+ Waterlogged soil or when heavy rainfall is forecast within 48 hours
Queensland Blue Couch (Digitaria didactyla);	Brome grass ( <i>Bromus</i> spp.)		(golf courses) or 3 days (other turf areas) of application
Kikuyu (Pennisetum clandestinum);	Plantain ( <i>Plantag</i> o spp.)		+ Turf that is to be oversown or seeded within 12 months
Zoysia (Zoysia spp.)	Chickweed (Stellaria spp.)		
	Capeweed (Arctotheca calendula)		

Specticle is a suspension concentrate formulation containing 200 grams per litre of the active ingredient, Indaziflam. Specticle is available in 250 mL and 1 litre bottles.





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### Get ahead, Stay ahead



Apply less, Achieve more.

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- + A significant step for resistance management being a new mode of action for turf in Australia, Specticle controls weeds, like *Poa annua*, that are known to have developed resistance to other commonly used herbicides. This makes Specticle one of the most effective tools in any turf manager's arsenal
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### Unique Mode of Action

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Indaziflam	Specticle®	29
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### Addressing the challenge of weed resistance

Specticle has a different mode of action and is therefore a very timely tool to enable effective management of weeds that are resistant to existing pre and post-emergent herbicides. Not only have many of the current pre-emergent herbicides been on the market for many years, they all have the same mode of action.

There have been no documented cases of resistance to Indaziflam. Research trials around the world have shown that Specticle controls weeds like *Poa annua* that are suspected to be resistant to Group 29 herbicides.



# SPECTICLE®

### **Specticle Testimonials**

Chris Allan, Course Manager Keysborough Golf Club, has struggled to effectively control *Poa*, with *Poa* germinating all year round. Chris trialled Specticle on one fairway in mid-winter with great success and followed this with a February application to all fairways, resulting in a large reduction in *Poa*.

When you are chasing *Poa annua* and spot spraying there's a lot of time and money wasted. We can now focus on those one percenter jobs that enable us to play golf year round."

For Keenan Hobbs, Course Superintendent at Wollongong Golf Club, it had become increasingly challenging to achieve effective post-emergent control of *Poa annua* on his two couch fairways, both of which had no history of pre-emergent herbicide application and had an extremely high seed bank as a result. Keenan was interested to trial Specticle and reduce reliance on post-emergent herbicide applications.

Poa is a major problem. I'd like to stop the problem rather than fix the problem. If we can use pre-emergents with good results then I can stop the problem. We trialled Specticle on two fairways and had a great result. I've never seen those fairways looking so clean."

Charlie Giffard, Course Superintendent at Indooroopilly Golf Club ranks crowsfoot grass as his highest priority weed to address in preparing clean, playable surfaces. Expanding windows for potential crowsfoot grass germination resulting from warmer winter conditions has heightened his concern and pre-emergent herbicides are now the backbone of Charlie's crowsfoot grass management. In the late winter/spring of 2016, Charlie trialled Specticle for control of crowsfoot grass on two fairways.

Crowsfoot grass is the number one concern for us. With the longevity Specticle offers, you've got peace of mind it's going to carry on and provide protection against crowsfoot grass right through the summer. And being a new mode of action, Specticle is also a really good tool to have in our armoury to manage the risk of crowsfoot resistance."

Apply less, Achieve more.

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General Turf Situations Warm season turf grasses only, including:	Summer grass or Crab grass ( <i>Digitaria</i> spp.)	250 mL/ha in 200 to 500 L water per ha	+ Turf under stress, or turf that is not well established or in a robust healthy condition
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	Capeweed (Arctotheca calendula)		

Specticle is a suspension concentrate formulation containing 200 grams per litre of the active ingredient, Indaziflam. Specticle is available in 250 mL and 1 litre bottles.



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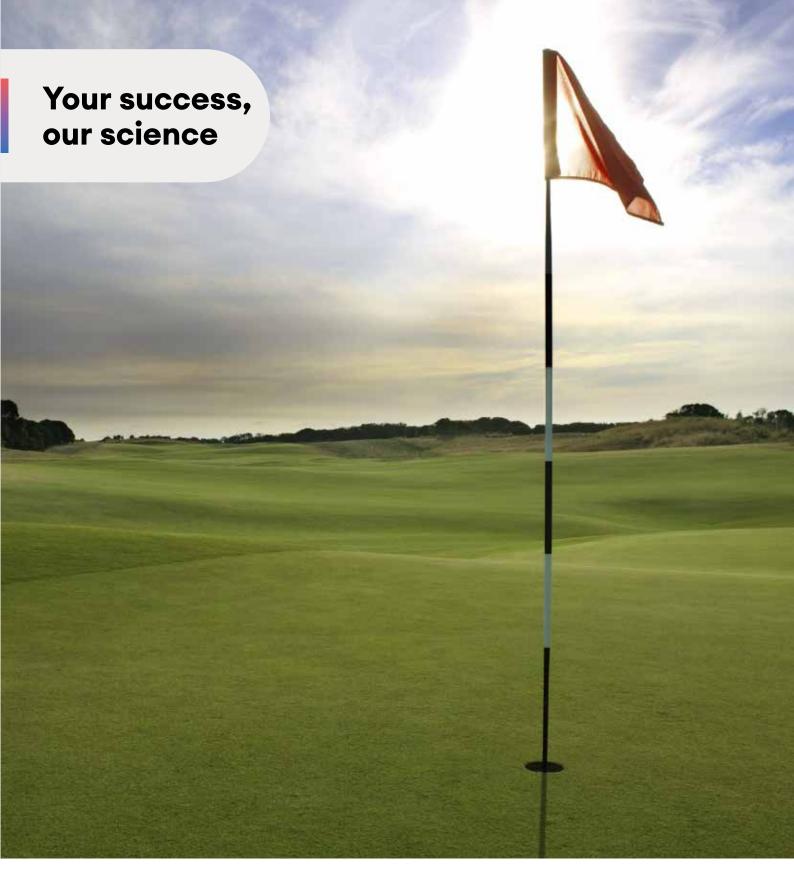
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Learn More →



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# Innovative Weed Management Tool

For Ornamental Production Nurseries

# Innovative Weed Management Tool

For Ornamental Production Nurseries





### Introducing a new, innovative, labour saving, weed management tool for ornamental production nurseries

- + Weed control in ornamental production nurseries is becoming increasingly problematic due to the occurrence of difficult to control weeds, such as fleabane, as well as weed resistance to common herbicides and the high labour cost associated with frequent herbicide applications and hand weeding. Therefore, new weed control methods are required to allow the development of sustainable weed management programs that help break the cycle of difficult to control weeds across all areas of the nursery.
- + Specticle is an innovative herbicide that sets a new standard for pre-emergent weed control in bareground areas of ornamental production nurseries.
- + Specticle is labelled for use in maintaining bareground in outdoor production areas (e.g. underneath and around ornamental potted plants and benches) in access areas like driveways, walkways, and around infrastructure such as buildings and fencelines.
- + When applied prior to weed seed germination, Specticle prevents establishment of a range of grass and broadleaf weeds for up to 8 months.
- + Specticle provides long-lasting control against both grass and broadleaf weeds and can greatly assist nursery managers reduce labour and lower costs associated with weed control in the nursery.
- + Specticle effectively and efficiently controls weeds in the bareground areas of the nursery, reducing the risk of weed seeds contaminating potted plants. Specticle offers significant advantages compared to current industry practices which require multiple applications of knockdown herbicides or shorter lived pre-emergent herbicides.
- + Specticle has been trialled in nursery situations in Australia with excellent long-term weed control achieved in a number of different settings, validating the strong value that Specticle can provide for ornamental nursery managers.
- + Specticle offers an alternative mode of action versus many current post and pre-emergent herbicides, helping to break the cycle of weeds and manage weed resistance to herbicides.



### Weeds Controlled

Specticle Herbicide is registered to control a range of over 30 annual grasses and broadleaf weeds. Refer to product label for full list of weeds.

### **Application Rate**

375 ml /ha or 7.5 ml /10 L water

### **Best Practice Guidelines**

Always read the product label before use.

For use in nurseries, make applications during clean up, sanitation and preparation prior to plant production.

Apply prior to weed seed germination, or if weeds have emerged, use Specticle in combination with a knockdown herbicide. Specticle is compatible with Roundup Biactive®, Basta® and Slasher®.

Uniform application is essential for satisfactory weed control. Ensure that complete and even spray coverage is achieved.

Debris should be removed from the area to be treated for optimum control.

Specticle will provide residual weed control when adequate moisture is present and the application is followed by rain or irrigation (3 to 6 mm) within 21 days and prior to weed seed germination.

For outdoor appplications, containers can be moved onto the treated ground bed areas after irrigation or rainfall and once the treated surface has dried.

### **Product Profile**

Active Ingredient: 200 g/L Indaziflam

MoA Group: Group 29 (previously O)

Formulation Type: Suspension Concentrate

romulation type: suspension concen

Pack sizes available: 250 mL and 1L

#### Coverage:

250 mL treats 6,600 m2 or makes up 333 L of spray solution 1 L treats 2.66 hectares or makes up 1,333 L of spray solution

**Product safety:** When preparing spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and goggles and disposable mist face mask covering mouth and nose. Always read the product label before use.

### **Use Restraints**

Do not use Specticle on ornamentals, fruit or nut trees or any food producing plants grown in ground or in pots. Do not treat soil where food producing plants in pots or in ground will be placed.

Specticle is not approved for use in garden beds and if allowed to contact foliage of ornamental plants may cause localized injury to the foliage, especially young leaf tissue.

Do not apply if heavy rain or storms that are likely to cause run-off are forecast within 3 days.

Do not apply with spray droplets smaller than a coarse spray droplet size category.

### Testimonials on using Specticle

We use a knockdown every 2 to 3 months and it takes about 3 weeks to cover the property. We sprayed Specticle in late June. We applied Slasher® for knockdown and 1 week later sprayed Specticle. We reviewed in September and the site was completely clean of weeds. We had another review in January and again the Specticle plots were completely clean of weeds. Having a product that lasts even longer will benefit us so much. It will also save time to do one application of Specticle, mixed with other knockdown products, saving time for me by allowing me to spray in one application."

+ Mark Handy, Research Development Manager Greenstock Nurseries We have natural bushland and farmland neighbouring the nursery, so seed can come onto the site from wind, rain and run off. At the present time, fleabane is a problem. General herbicides haven't been knocking that. Probably once or twice a month we would go through and spray with general herbicides, such as glyphosate. It's pretty well a full time job, 4 days per week, making herbicide application via knapsacks or tractor. Specticle will help us cut down on labour, cut down on costs, so it is a great investment."

+ Beau Hartshorn, Nursery Operations Manager Plants Direct Queensland

### Other Envu products for Ornamental Production Nurseries

### + Banol® Turf and Ornamental Systemic Fungicide

Banol is a systemic fungicide for the control of dampingoff in ornamental plants, turf and eucalyptus forestry production nurseries caused by *Pythium* spp.

Active Ingredient: 600 g/L Propamocarb

Pack Size: 1 L

Rate per 100m<sup>2</sup>: 65 mL

Rate for ornamentals: See label

### + Dedicate® Turf and Ornamental Fungicide

Dedicate is a premium, highly effective turf and ornamental fungicide, providing dual modes of action and featuring both contact and systemic activity to provide the ultimate protection.

Active Ingredient: 200 g/L Tebuconazole, 100 g/L Trifloxystrobin

Pack Size: 1 L

Ornamental rate: 75-150 mL/100 L water

### + Initiator® Systemic Plant Insecticide and Fertiliser

Initiator tablets provide enhanced growth and longlasting protection against the damage caused by various insects that attack containerised, newly planted and established plants.

Active Ingredient: 200 g/kg Imidacloprid Fertiliser: NPK 5.6% - 5.4% - 4.2% + Mg 1.4%

**Pack Size:** 750 g, 3 kg

Rate for ornamentals: 1 tablet per metre of plant height

Rate for Eucalypts: 1 tablet per seedling tree



### Ronstar® Turf and Ornamental Herbicide

Ronstar is a unique and proven pre-emergent herbicide, with a novel mode of action. With its foliar uptake activity, it is unlike any other pre-emergent herbicide in that it does not have any impact on root development. This provides Ronstar with excellent properties for being used in containerised plant situations.

Active Ingredient: 20 g/kg Oxadiazon

Pack Size: 15 kg

Rate per 100m<sup>2</sup>: 1.5-2.0 kg Rate per hectare: 150-200 kg

### + Tempo<sup>®</sup> Xtra Turf and Ornamental Insecticide

Tempo Xtra with HAS technology is a unique dual model of action insecticide designed to control tough pests in turf and ornamental situations. It is registered for 12 pests in ornamentals.

Active Ingredient: 50 g/L Imidacloprid,

25 g/L Beta-cyfluthrin

Pack Size: 5 L

Rate for ornamentals: See label

### For further information contact the Envu Turf and Ornamentals team

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