

**Take your
Turf back**

Take your Turf back



Indemnify® represents a new cornerstone in integrated nematode management programs for turfgrass.

Indemnify is a next-generation, easy-to-use nematicide that controls key plant parasitic nematodes and improves root growth and turfgrass health resulting in better playability with improved wear tolerance.

Features

- New mode of action delivering fast, effective, long term control of plant parasitic nematodes
- Advanced formulation technology with soil penetrating surfactants
- Not a scheduled poison and minimal PPE requirement for application
- White to beige suspension concentrate (SC) formulation with low use rate

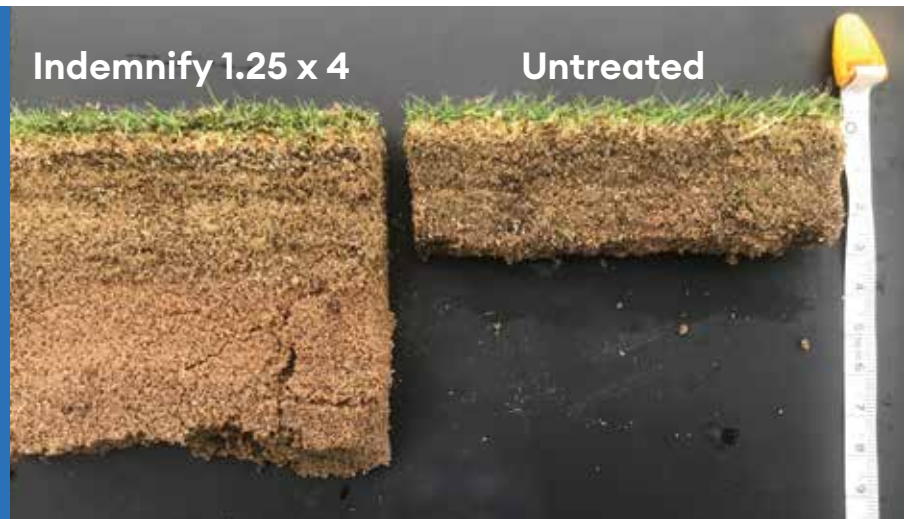
Benefits

- A tool to strengthen integrated nematode management programs
- Improved root growth and turf health
- Turf that is more resilient to stresses of climate and traffic
- Improved playability of sports turf surfaces
- Easier to get active ingredient to the target root zone without the need for invasive practices or heavy irrigation/rainfall
- Low health risk to applicators and people playing on treated turf
- Easy to mix and store. Sprays clear and is non-staining



Results run deeper with Indemnify

- + Reduced summer hand watering
- + More summer aeration
- + Reduced root diseases
- + Improved surface quality
- + Better surface stability



What are plant parasitic nematodes?

Plant-parasitic nematodes are a group of nematodes which feed on plant roots and can cause economic damage to crops including turfgrass. Plant-parasitic nematodes are defined by their habitat; ectoparasites feed on cells near the root surfaces and endoparasites enter the host roots and feed inside the root tissue. Both endo and ectoparasitic nematodes may be migratory or sedentary.

Symptoms of nematode damage in turf

Symptoms of nematode damage in turf can initially be mild and easily overlooked. Changes in the visual health of turf such as slowing growth, thinning of coverage and increased sensitivity to stress, particularly when not corrected by good cultural practice can be the first sign that plant-parasitic nematodes might be active. Such decline can then predispose turf to attack by other pathogens or result in unsightly damage and costly repairs. Nematode damage can destabilize the root mass and therefore the playing surfaces of sports grounds.

Symptoms of plant damage include galled roots, presence of cyst bodies, declining and discolored root system, root tissue growing strangely, inhibition of root growth or death of cells on which they feed. Above-ground symptoms are often found in a random patchy pattern and include chlorosis, wilting, reduced growth and vigor, stunting, thin, weak, or dead areas. Symptoms are more apparent when turf is stressed by high temperatures, a lack of moisture and poor soil fertility.

If nematodes are suspected, a soil test should be conducted to use as a guide for making control decisions.

Symptoms of sting nematode damage in a cool-season turf golf green



Optimum timing for the application of Indemnify

Indemnify should be applied as a preventative treatment when conditions are favourable for root growth, before nematode populations build up to damaging levels. The population build-up of some key species such as sting nematode often occurs during or following a period of root growth, so optimum timing of application, while situation-dependent, will often be just prior to periods of peak root growth. For cool-season turf this timing is typically early spring and autumn and for warm-season turf this timing is spring and autumn.

Apply up to four applications at the higher curative spot treatment rate if controlling outbreaks that are severe or are expected to become severe.

Indemnify use restrictions

Do not apply if there are sensitive crops, gardens, landscaping vegetation, protected native vegetation or protected animal habitat within 5 metres downwind from the application area.

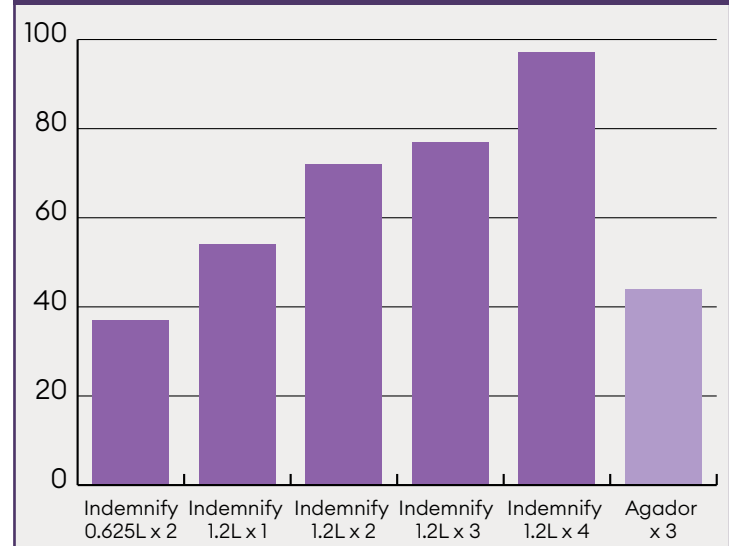
Do not apply by aircraft.

Do not graze treated turf or lawn; or feed turf or lawn clippings from any treated area to poultry or livestock.

Do not tank mix this product with soil wetting agents or surfactants.

Do not allow entry into treated areas until the spray is dry or irrigation has been applied.

Sting nematode – % reduction at 2 weeks



CROP	DISEASE	RATE	CRITICAL COMMENTS
Turf Including golf courses (e.g. fairways, greens, tees) and sports turf (e.g. football and rugby pitches, tennis, bowls and cricket pitches), racetracks, parklands and commercial and residential lawns.	Plant parasitic nematodes including Sting, Spiral, Sheath, Ring, Root Lesion, Root-knot and Stubby	625 mL/ha Apply in 400 - 800 L water/ha	Use this product as part of an integrated nematode management program for turfgrass. Apply as a preventative treatment when conditions are favourable for root growth. Reapply as needed after 28 days when nematode pressure is high. Irrigate with sufficient water as soon as possible after application to the depth of the root zone to be protected. Apply a maximum of 1.25 L / ha per year. Do not apply more than the maximum annual rate from any combination of products containing fluopyram.
Turf Intensively managed sports turf with high requirements for playability and stability of the turf surface.		1.25 L/ha Apply in 400 - 800 L water/ha	Use this product as part of an integrated nematode management program for turfgrass. Apply as a curative spot treatment for controlling nematodes over smaller areas where outbreaks are severe or expected to become severe. For curative spot treatments, treat no more than 2,500 m ² per hectare of managed turf per year. Irrigate with sufficient water as soon as possible after application to the depth of the root zone to be protected. Repeat up to four times at a minimum spray interval of 14 days. Do not apply more than the maximum annual rate

Active ingredient: 400 g/L FLUOPYRAM

Pack size: 500mL HDPE bottle

Hear what superintendents around Australia thought after they trialled Indemnify Turf Nematicide on their turf.

“The greens that we treated in the trial before the Australian Open were the worst performing greens. Those greens usually needed hand watering before the end of the day and I was really worried during the tournament that we would struggle to get the greens through the day. But those greens responded really well and they lasted all day before we had to hand water them.”

Anthony Mills,
Superintendent, The Lakes Golf Club

“It’s amazing to see that the vigour and turf health has just bounced back within a week to what it was before we had any nematode issues. And drought tolerance as well – we were hand watering two to three times a day to keep the green alive as the roots were just being demolished and even though the count of the nematodes was still there it seems to be taking the heat and the traffic a lot better.”

Cameron Hall,
Superintendent, Kew Golf Club

“The feedback we have received has been really really good on the two worst greens that we treated with double spray. We’ve got through this summer so much better than we’ve done previously.”

Michael Dennis,
Superintendent, Royal Perth Golf Club

“This year with the Indemnify trials that we did, we have seen the whole green hold up through the summer. I’ve been here for 10 years and this is probably the first time all greens have managed to get through the summer and obviously we had a fairly extreme summer.”

Greg Stynes,
Superintendent, Nelson Bay Golf Club

Take your Turf back

Mode of Action

Indemnify contains the active ingredient Fluopyram.

Fluopyram is a succinate dehydrogenase inhibitor (SDHI) that paralyzes and eventually kills nematodes by blocking cellular respiration. Fluopyram is a contact nematicide with acropetal (upwards) movement.

The effect on nematodes is initially paralysis and this effect begins once the nematicide makes contact. In general, visual improvement to damaged turf occurs four weeks after application.

Effects of improved turfgrass quality can last between two to six months. The exact duration is dependent on several factors including, but not limited to, nematode species and turfgrass type.

Integrated nematode management programs for turf

Integrated nematode management programs should employ multiple tactics to provide effective control and population reduction to help prevent economic pest damage.

These programs may include cultural practices such as fumigation, monitoring or other detection methods, proper pest identification, use of nematode-resistant or tolerant varieties and rotation of nematicides with different modes of action.

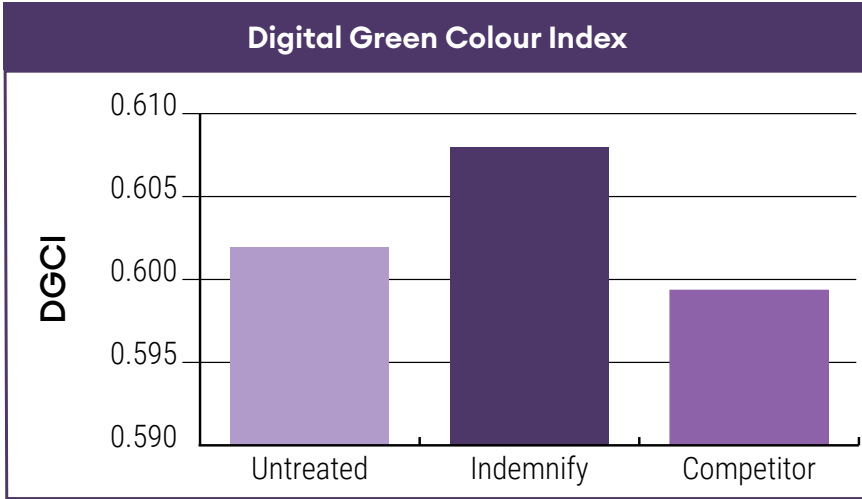
The need to supplement Indemnify with other nematode control products will depend on various factors including nematode species, pressure, turf species and turf health.



Nematodes under microscope



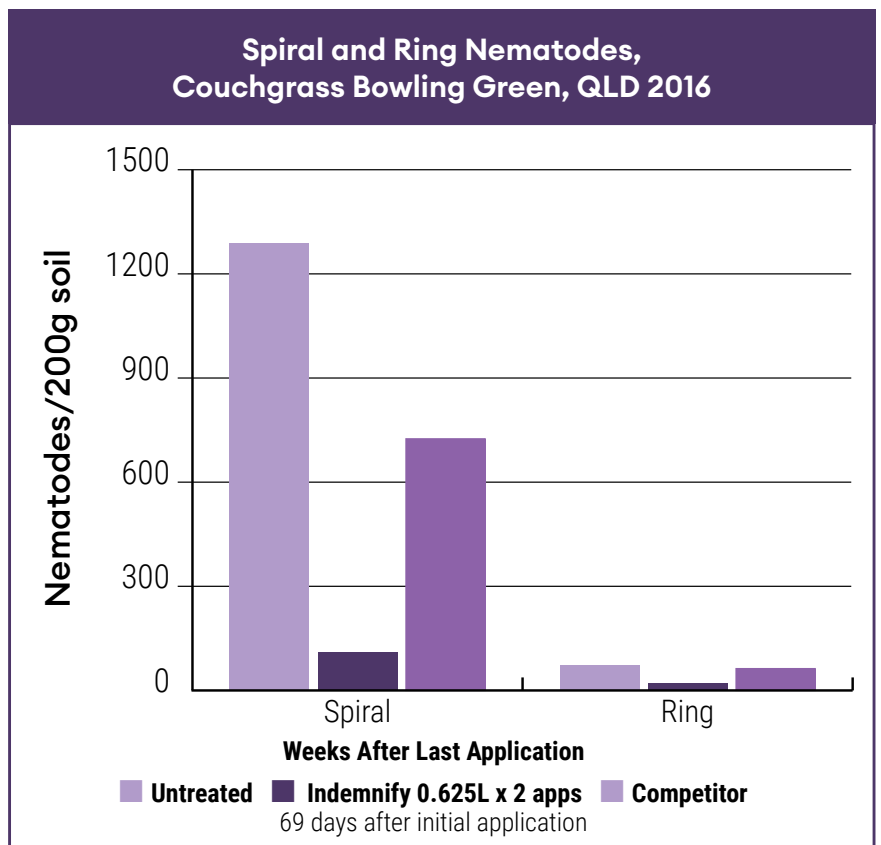
Take your Turf back



Digital Green Colour Index (DGCI) is a digital measurement of how green the turf is. The higher the number, the more “green” the turf is.

In this case, the DGCI reflects on better colour, increased turf density and hence improved turf health.

[Learn More →](#)



ALWAYS READ THE LABEL BEFORE USE
Indemnify® is a trademark of 2022 Environmental Science AU Pty Ltd
Suite 2.06, Level 2, 737 Burwood Rd, Hawthorn East, VIC. 3123

Technical Enquiries: 1800 024 209 technicalsupport.australia@envu.com
www.au.envu.com

Envu and the Envu logo are trademarks owned by Environmental Science U.S. LLC., or one of its affiliates © 2023 Environmental Science U.S. LLC.

Distributed by:



Hong Kong | Singapore | Malaysia | Australia

Email: info@centaur-asiapacific.com

Website: www.centaur-asiapacific.com