# Higran® Turf Miticide

A new active ingredient and mode of action for controlling Couchgrass Mite in turf.





## **Key Benefits**

- An entirely different mode of action (MOA) to manage and/or prevent resistance build up
- Strong contact, translaminar and vapour activity meaning pests on the underside of leaves not directly contacted are still treated equally well
- High degree of selectivity to target pest causes rapid paralysis and feeding cessation
- Longer duration of residual control compared to traditional chemistries registered for couch mite control
- One part of a two-step strategy to better manage Couchgrass Mite in turf

### **Pest Management**

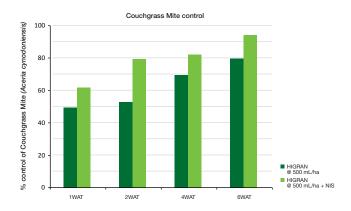
Situation	Pest	Rate	Critical Comments
Turf	Couch Mite	500 mL/ha <b>or</b> 5 mL/100 m <sup>2</sup>	Apply HIGRAN in an early curative situation (after first symptoms are apparent). Best results are achieved if applied as populations begin to build rather than at the peak of population growth.  The addition of a quality non-ionic surfactant at a rate of 0.25% v/v (1000 g ai/L products) or 0.42% v/v (600 g ai/L products) such as AGRAL Spray Adjuvant is essential.  Alternate every HIGRAN application with an alternative mode of action miticide.

Note: Please refer to the registered label for full details.

## **Turf Species**

HIGRAN can be used on the following turf species

Warm Season Turf Grasses	Cool Season Turf Grasses
Bahia Grass, Buffalo Grass, Carpet Grass, Common Couch, Hybrid Couch, Kikuyu, Paspalum, Queensland Blue Couch, Zoysia	Bent Grass, Fescue, Kentucky Blue Grass, Perennial Ryegrass,



## **Application Timing and Rate Variation**

HIGRAN can be used as a preventative or early curative miticide when treating nymph and adult couch grass mites. Ideally HIGRAN is used as the second application in a two-step process and is rotated with an alternate chemistry from a different mode of action (MOA) group. HIGRAN is a 'pro-insecticide' meaning the active ingredient goes through a conversion process post application to enter a biologically active state. Insecticidal activity occurs immediately (paralysis) with control usually occurring 5-7 days after application.

Example: In the case where environmental conditions have become conducive to mite activity and early symptoms of damage (e.g. witches broom) has been noticed on a couch grass sward, apply GYMNAST Turf Miticide first at the rate of 2 L/ha to knock the population down quickly and limit early damage. Follow this with an application of HIGRAN at 500 mL/ha, 10-14 days later for residual control of up to 4 weeks. This combination treatment should be considered a 6 week program in total and can be repeated if environmental conditions and pest pressure are sustained.

Strong adherence to this rotational program is paramount for responsible chemical use and good resistance management.

#### Good application = Good results

	Target	Wind Speed	Nozzle	Water Rate	Pressure	Droplet Size
HIGRAN	Foliage		Air induction 025 or 04		3 bar	Coarse

Consult the full registered label for additional information.

For optimal control ensure a **non-ionic surfactant (NIS)** is incorporated into the spray mix. Use Agral (600 g ai/L) at 0.42% v/v or 420 mL/100 L spray mix. Alternatively use other quality non-ionic surfactants (1000 g ai/L formulations) at 0.25% v/v or 250 mL/100 L spray mix.

#### **Active Ingredient**

HIGRAN Turf Miticide contains 500 g/L diafenthiuron, a member of the inhibitors of mitochondrial ATP synthase group of insecticides. Diafenthiuron is a Group 12A insecticide.

#### **Packaging**

HIGRAN is available in a 1 L pack size.







<sup>\*</sup>Application volume dependent of travel speed.