



Insecticide/ Miticide for Turf and Ornamentals

Grandevo® PTO is an advanced cross-spectrum insecticide that offers protection against chewing and sucking insects and mites. Its complex actions on pests — oral toxicity, reduced reproduction and repellency — and up to 14 days of residual control, gives golf course superintendents, lawn care professionals, nurseries and greenhouses a powerful new tool to strengthen their pest management strategies. Grandevo PTO provides performance and flexibility for control of **chinch bugs, sod webworms, chafers, cutworms** and other damaging pests in turfgrass. In woody and herbaceous ornamentals it controls **aphids, mites, numerous Lepidoptera species, thrips, whiteflies** and many other types of insects.

IDEAL FOR GOLF COURSES, RESIDENTIAL LAWNS, COMMERCIAL TURF, LANDSCAPES AND GREENHOUSE

Grandevo PTO gives you benefits that add value to your operations and your lawn care service:

- Grandevo PTO allows you to offer a premium spray program to environmentally-minded customers.
- No “chemical” smell to upset sensitive customers or players.
- With a low risk to developing resistance, using Grandevo PTO in a rotation or in a tank mix can help extend the effective life of higher risk insecticides.
- Grandevo PTO has been shown to cause no harm to beneficial insects or honey bees.

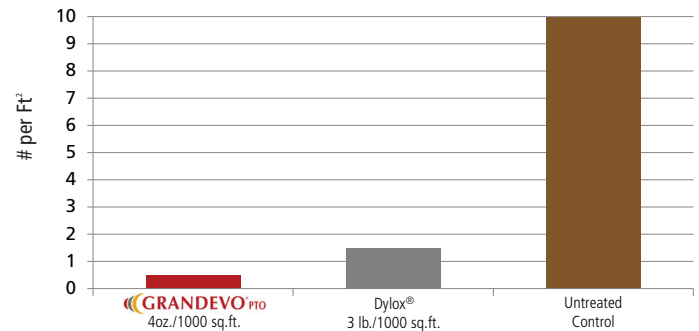
FEATURES

- Cross-spectrum protection against mites and chewing and sucking insects
- Complex mode of action
- Easy on beneficials
- 4-hour REI / 0-day PHI



Southern Masked Chafer- White Grubs (*Cyclocephala lurida*)

M. Stamm and F. Baxendale, University of Nebraska, Lincoln, NE, 2012

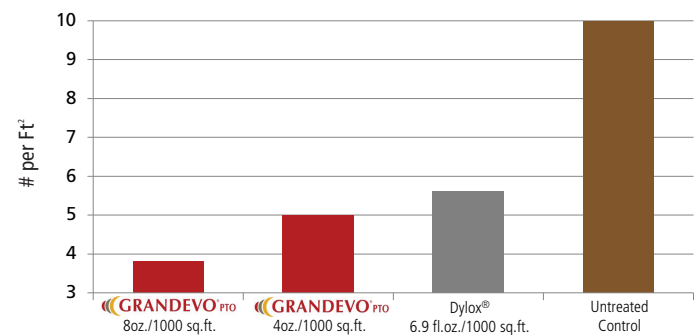


Treatments applied on Aug 2 (70% first instar, 30% second instar).
Insects evaluated Sep 14 (10% second instar, 90% third instar).
Kentucky Bluegrass: *Poa pratensis* L. (50%)
Tall Fescue: *Festuca arundinacea* (50%)

Grandevo PTO offers effective pest control on surface feeders and grubs.

Southern Masked Chafer- White Grubs (*Cyclocephala lurida*)

M. Stamm and F. Baxendale, University of Nebraska, Lincoln, NE, 2011



Treatments applied on Aug 22 (5% first instar, 55% second instar, 40% third instar).
Insects evaluated on Sep 15 (15% second instar, 85% third instar).
Kentucky Bluegrass: *Poa pratensis* L. (50%)
Tall Fescue: *Festuca arundinacea* (50%)

- Tolerance exempt
- Minimal PPE / no buffer required for spray applications
- Approved for field and greenhouse applications
- No limit on the number of allowed applications

LABELED USES

- Commercial turfgrass
- Recreational turfgrass
- Outdoor residential
- Herbaceous ornamentals
- Woody ornamentals
- Conifers
- Shrubs
- Trees

LABELED PESTS (PARTIAL LIST)

- Aphids
- Armyworm
- Budworms
- Caterpillars
- Chinch bug
- Cutworm
- Leafhopper
- Leafrollers
- Loopers
- Thrips
- Webworms
- White grubs

BEST USE RECOMMENDATIONS

Control of foliage feeding pests of turf, including chinch bugs, leafhoppers, sod webworms, armyworms and cutworms:


Grandevo PTO is highly effective against newly hatched larvae and nymphs of targeted species and significantly reduces the reproductive capabilities of many adult sucking pests. Apply Grandevo PTO at 0.75 – 1.5 ounces per 1000 square feet in a minimum of 100 gallons of water per acre (about 300 fluid ounces per 1000 square feet) when infestations are first observed targeting newly hatched small larvae and nymphs. Additional applications may be necessary on a 7 - 14 day interval depending upon pest pressure and length of egg hatch. Monitoring flight patterns of armyworms, black cutworm and sod webworm with pheromone traps can aid in timing of applications. Do not irrigate for at least 24 hours following application of Grandevo PTO. Include a quality non-ionic adjuvant to promote coverage of Grandevo PTO.

Control of soil dwelling pests including European, northern and southern masked chafer:

Grandevo PTO must be applied following egg hatch of targeted pests. The need for an application can be based upon historical monitoring of the site, previous records or experiences or current adult beetle monitoring. Optimum control will be achieved when applications are followed by natural rainfall or sufficient irrigation to move the active ingredient in Grandevo PTO through the thatch. Apply Grandevo PTO at 4 ounces per 1000 square feet in a minimum of 100 gallons of water per acre (about 300 fl.oz/1000 ft²) following egg hatch or when infestations are first noted. If rainfall is not expected within 24 hours, irrigate as soon as practical following application with ½ - 1 inch of water.

Control of foliage feeding pests of ornamentals including aphids, thrips, whiteflies, mealybugs, lacebugs, leafhoppers, mites and caterpillars:

Apply Grandevo PTO at 1 – 3 pounds per 100 gallons of water when infestations are first observed targeting newly hatched small larvae and nymphs. Additional applications may be necessary on a 7 – 14 day interval depending upon pest pressure. Use lower label rate when tank mixing with another registered insecticide. Use sufficient water volume to provide complete coverage but not excessive that causes runoff of spray material. Include a quality non-ionic adjuvant to promote coverage of Grandevo PTO.

Product*	Armyworm	Chinch Bug	Cutworm	Leafhopper	Sod Webworm	White Grub	European Chafer	Northern Masked Chafer	Southern Masked Chafer	Oriental Beetle
 GRANDEVO[®] PTO	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
DYLOX [®] 420 SL	◆	◆	◆		◆	◆		◆	◆	◆
DELTAGARD [®] G	◆	◆	◆	◆	◆					
MERIDIAN [®] 0.33G		◆		◆	◆	◆	◆	◆	◆	◆
TEMPO [®] SC ULTRA	◆	◆	◆		◆					
ARENA [®] 50 WDG						◆	◆	◆	◆	
MERIT [®] 0.5 G		◆	◆				◆	◆	◆	◆
TALSTAR [®] GC		◆	◆	◆	◆					

* Chart reflects Florida use applications on grasses.

Always read and follow label directions.

FOR ADDITIONAL INFORMATION, CONTACT YOUR LOCAL RETAILER
OR CONTACT ENGAGE AGRO USA:
Phone 928-445-7990



www.engageagrousa.com