Inspired Innovations for Turfgrass Pest Control

Eric Reasor, Ph.D.



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INSPIRED INNOVATIONS FOR GREEN SPACES, PETS, AND PEOPLE



Employee-Owned



Professional | Home & Farm | Animal Health



- **1947:** Private Brands, Incorporated
- **1956:** Gordon Chemicals and Private Brands, Incorporated became PBI-Gordon Corporation to better reflect the company's new role in multiple markets

PRIVATE BRANDS.

CUSTOM COMPOUNDING & PACKADING

1970: PBI-Gordon introduced the Trimec[®] Herbicide for turf





New Tools in the Toolbox

















*Vexis[™] is federally registered and pending state registrations, but is not currently for sale





- Granular herbicide (0.025% pyrimisulfan)
- ALS inhibitor
- Low use rate
 0.047 to 0.062 lb ai/A single application
 0.093 lb ai/A annual max rate
- Safe on warm- and cool-season turfgrasses
- Nutsedge and kyllinga control (some annual broadleaves) Activity on ALS (sulfonylurea) resistant nutsedge





Vexis - Yellow Nutsedge



- Application June 12 fb July 27, 2015
- Photo July 15, 2015



Vexis - False-Green Kyllinga



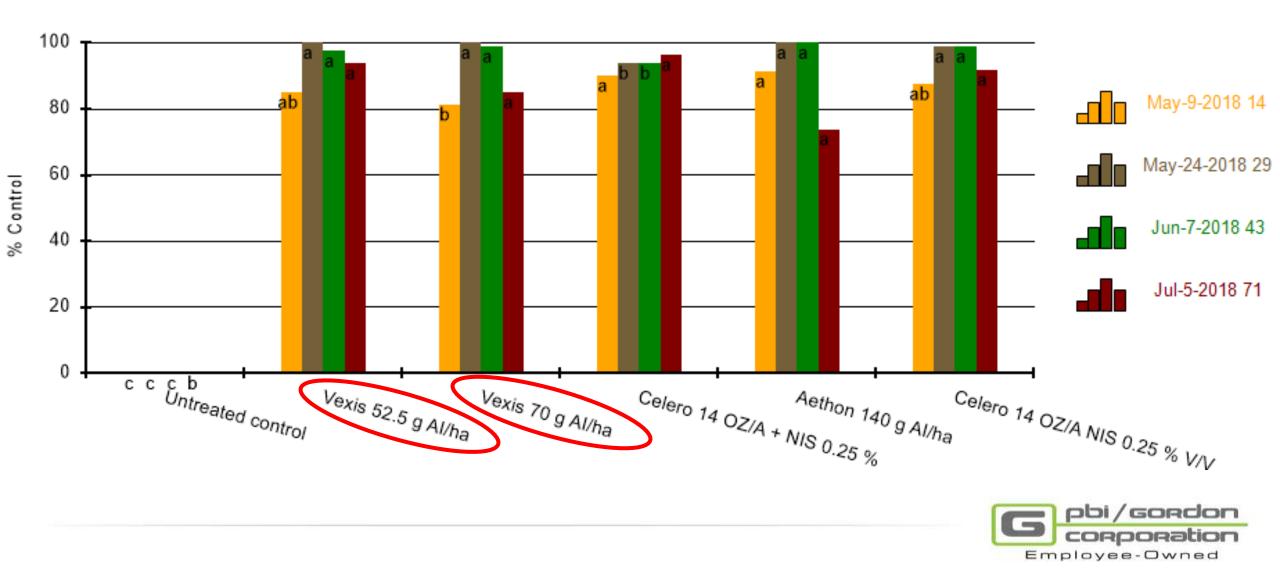


2 apps at 52.5 g/ha

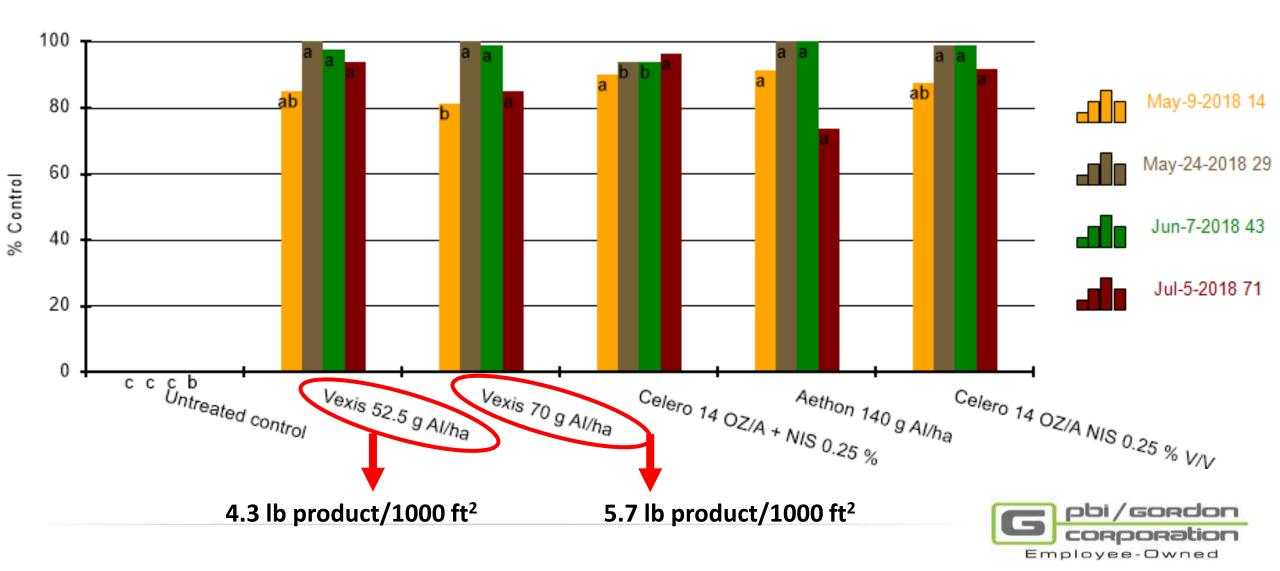
- Application June 7 and July 3, 2018
- Photo July 6, 2018



Vexis - Yellow Nutsedge



Vexis - Yellow Nutsedge

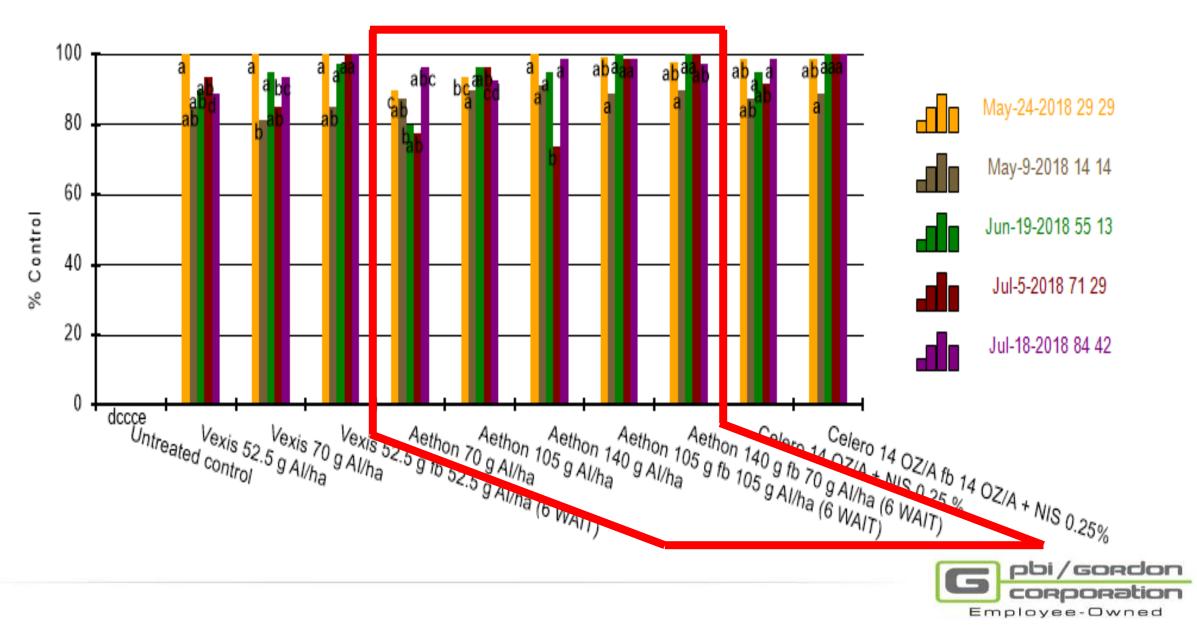




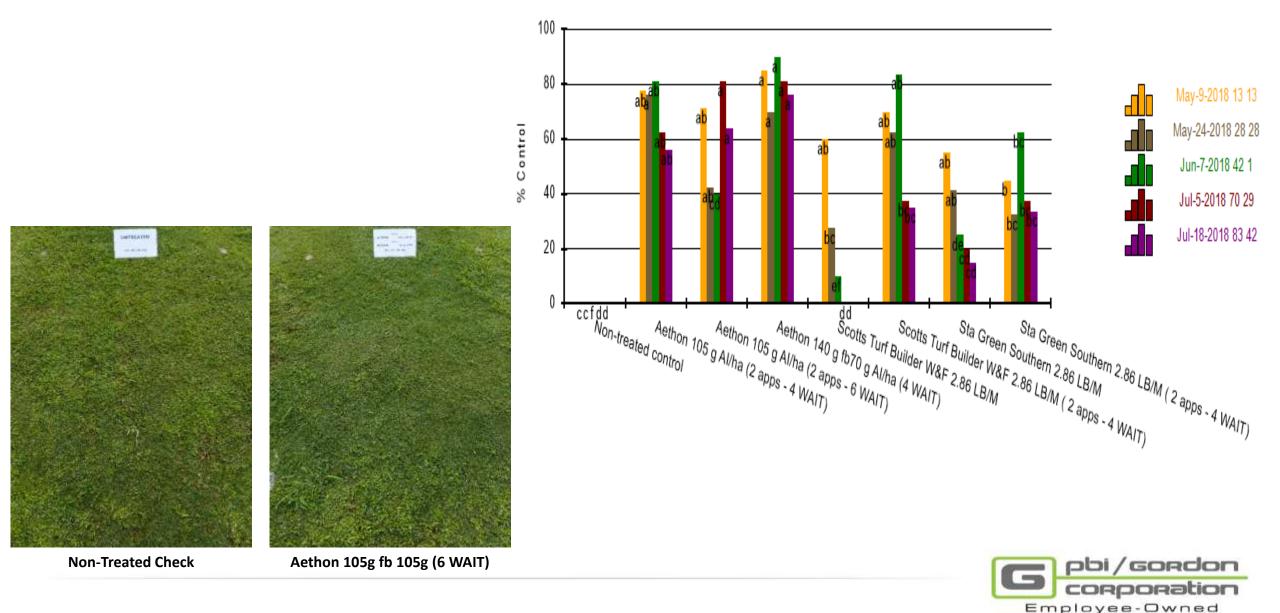
- Granular weed-n-feed
 0.025% pyrimisulfan + 0.025% penoxsulam
- ALS inhibitors
- Low use rate
 0.094 to 0.124 lb ai/A single application
 0.186 lb ai/A annual max rate
- Safe on warm-season turfgrasses
- Broad spectrum broadleaf weed control Nutsedge and kyllinga control



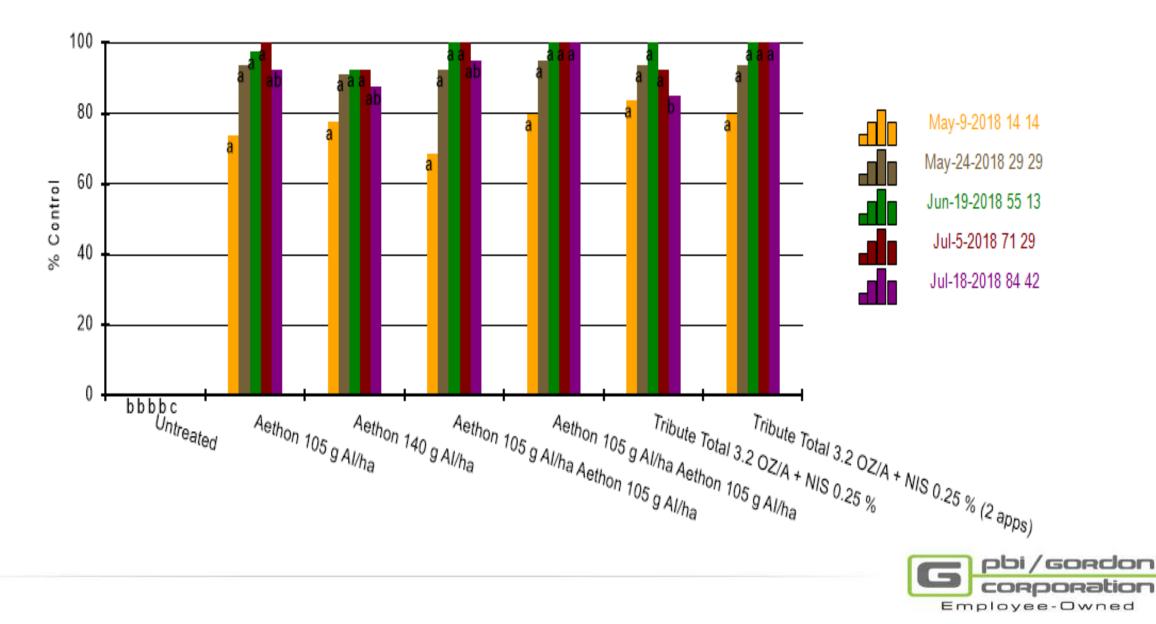
Aethon - Yellow Nutsedge



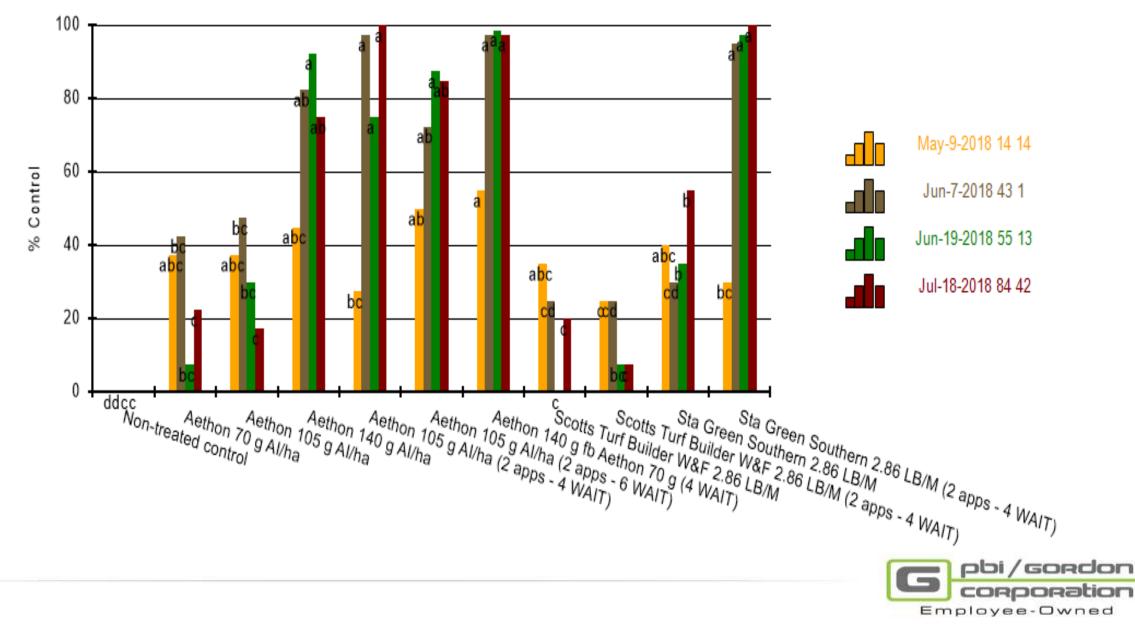
Aethon – Virginia Buttonweed



Aethon – White Clover



Aethon – Wild Violet







- Halauxifen-methyl + dicamba + fluroxypyr
- Synthetic Auxin (Group 4); NON 2,4-D
- POST-emergence systemic control of broadleaf weeds
- Cool- and warm-season turfgrass tolerance
- Resistance management for *Plantain* spp.



White Clover



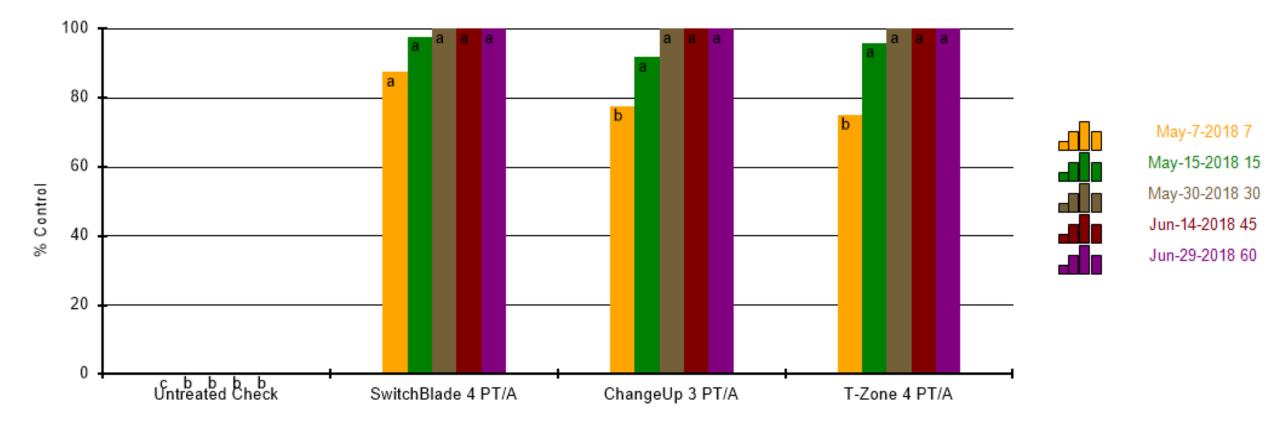


Non-Treated Check

2 apps at 4 pt/A 28 days after treatment



SwitchBlade - Buckhorn Plantain



Application April 30, 2018



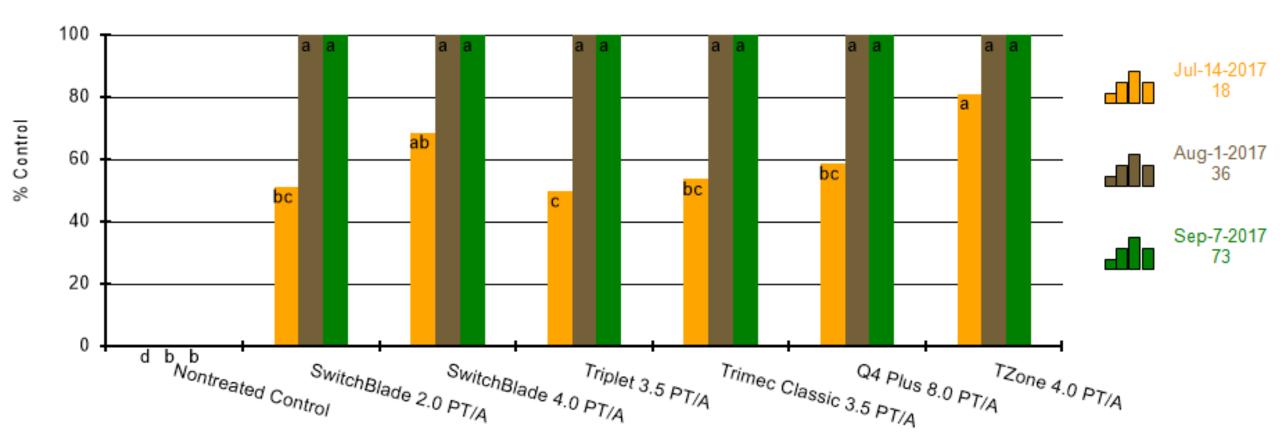
Broadleaf Plantain



4 PT/A 28 days after treatment



SwitchBlade - Broadleaf Plantain



Application June 26, 2018



Ground Ivy





25 days after treatment









Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170.

ACTIVE INGREDIENTS:

2,4-D, 2-ethylhexyl ester		9.02%
Dichlorprop-p, 2-ethylhexyl ester		5.19%
Dicamba, acid		0.59%
Carfentrazone-ethyl.		0.47%
OTHER INGREDIENTS:		84.73%
TOTA	LT	100.00%

THIS PRODUCT CONTAINS:

0.51 lb. 2,4-dichlorophenoxyacetic acid equivalent per gallon or 5.98%.

0.30 lb. (R)-2-(2,4-Dichlorophenoxy)propionic acid equivalent

per gallon or 3.51%.

0.050 lb. 3,6-dichloro-o-anisic acid equivalent per gallon or 0.59%.

0.040 lb. Ethyl a,2-dichloro-5-[4(difluoromethyl)-4,5-dihydro-3-methyl-5-axo-1H-

1,2,4-triazol-1-yl]-4-fluorobenzenepropanoate per gallon or 0.47%



ACTIVE INGREDIENTS:

2,4-D, 2-ethylhexyl ester				•	 			-						*	•				-		10.49%
Mecoprop-p acid			į,		 	+	+										+		-		2.66%
Dicamba acid	 +	.,			 	*		-					*	*		 		-		-	0.67%
Carfentrazone-ethyl												2								2	0.54%
OTHER INGREDIENTS:			4			÷	2	÷	2	÷.	÷.	4								4	85.64%
																T	0	T/	A	Ľ	100.00%

THIS PRODUCT CONTAINS:

0.52 lb. 2,4-dichlorophenoxyacetic acid equivalent per gallon or 6.96%.

0.20 lb. (+)-R-2-(2-methyl-4-chlorophenoxy) propionic acid equivalent per gallon or 2.66%.

0.05 lb. 3,6-dichloro-o-anisic acid equivalent per gallon or 0.67%.

0.04 lb. Ethyl a,2-dichloro-5-[4(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1H-

propanoate or 0.54%.

Contains Petroleum Distillate. Isomer Specific by AOAC Methods.









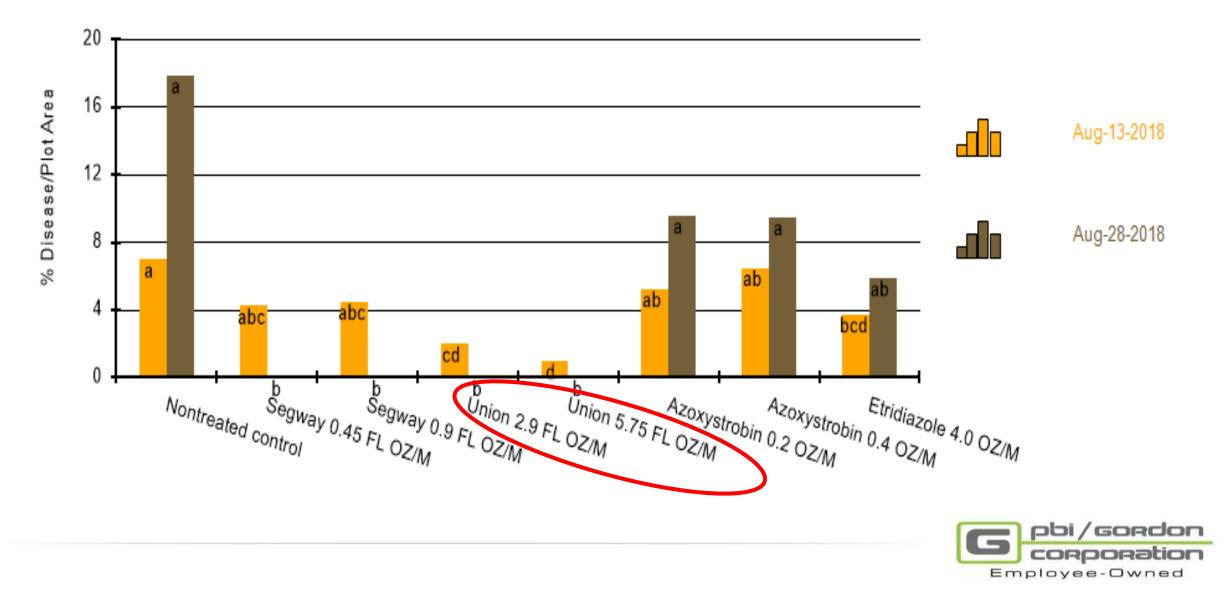


- Cyazofamid (Segway) + azoxystrobin
- No known cross resistance between QoI and Qil groups
- Rates: 2.9-5.75 fl oz/1000 sq. ft.
- Key Diseases:
 - Pythium spp.
 - Brown patch
 - Anthracnose
 - Large patch
 - Fairy ring

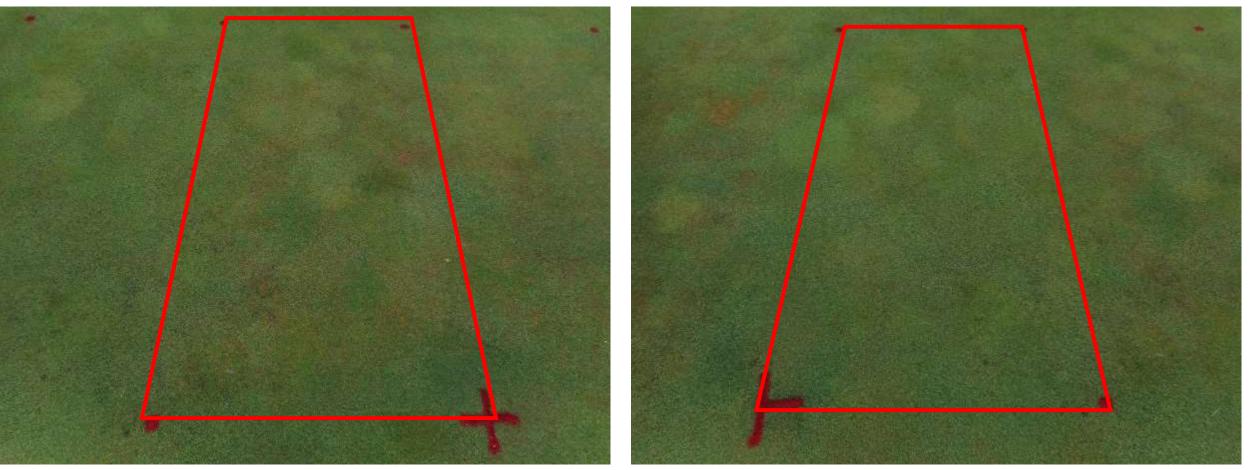


Union^M is not a federally or state registered product, nor is it currently for sale.

Union – Curative Pythium Root Rot



Union – Curative Pythium Root Rot

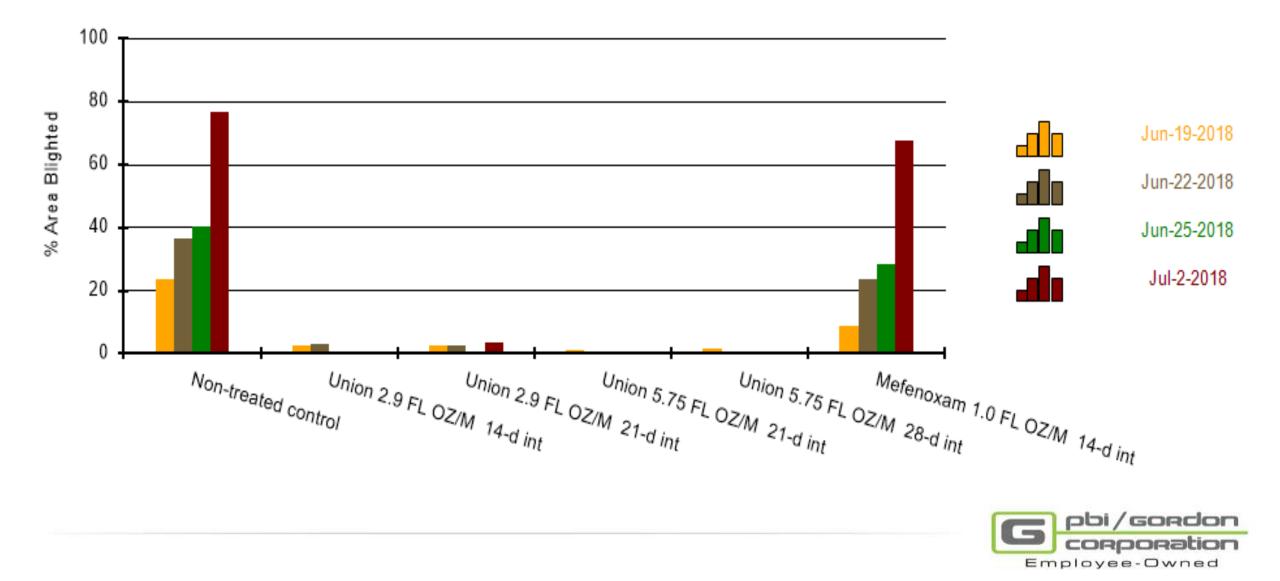


Non-Treated Check

2.9 fl oz/1000ft² Union



Union – Preventive Pythium Foliar Blight



Union – Preventive Pythium Foliar Blight



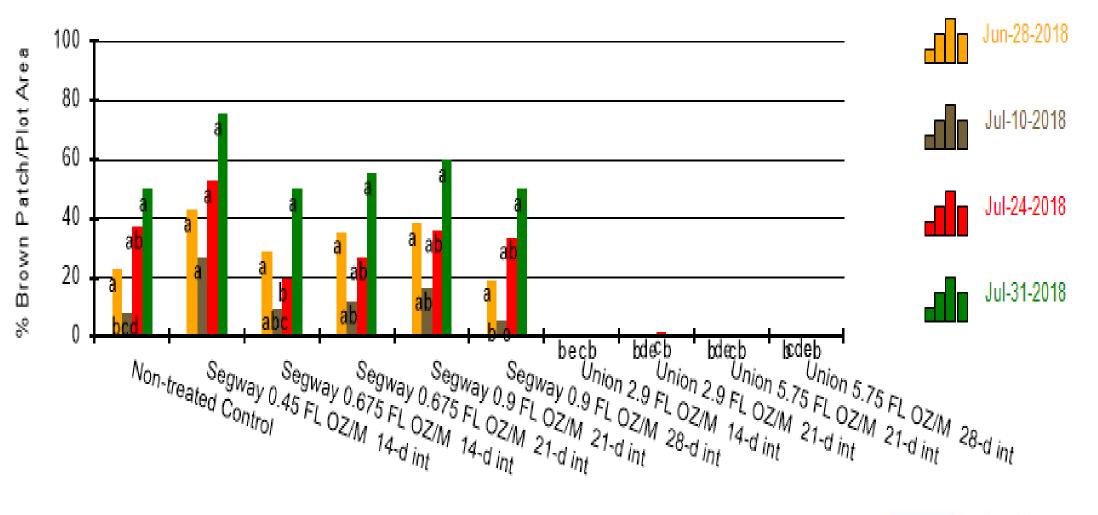
Non-Treated Check



2.9 fl oz/1000ft² Union every 14 days



Union – Preventive Brown Patch





Union – Preventive Brown Patch







Non-Treated Check

0.9 fl oz/1000ft² Segway

2.9 fl oz/1000ft² Union

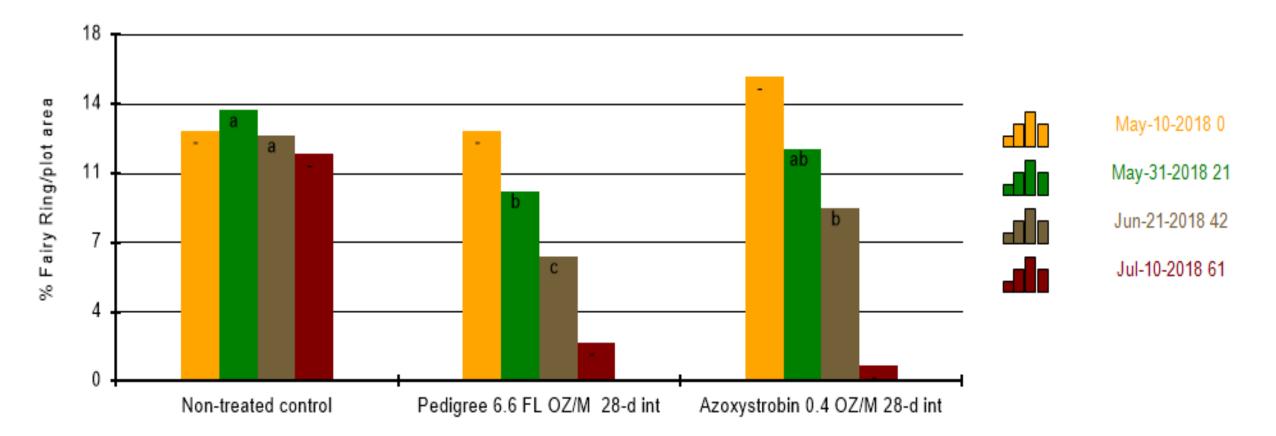




- SDHI
- Excellent fairy ring, brown patch, waitea patch, and gray snow mold control
- SC formulation has smaller particle size (better coverage)
- Application recommendations:
 - Fairy ring
 - Preventive 3.25 fl oz/1000 (21-28d interval); Curative 6.6 fl oz/1000 (30-d interval)
 - Gray snow mold
 - 4.4-6.6 fl oz/1000 (before snow cover)
 - Research trials are on the ground in various locations across the U.S. in 2018 along with tank-mix parters for complete snow mold programs



Pedigree – Curative Fairy Ring



















Questions?

