

Tenacity 4SC potential for tracking

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Background/Objective: Will Tenacity move with foot traffic and damage off-target desired species?

Site Information

Location:	William H. Daniel Research and Diagnostic Center
Soil Type:	Starks-Fincastle silt loam
Soil pH:	7.2
Turfgrass Species:	'Penncross' creeping bentgrass mix tall fescue and Kentucky bluegrass
Turf Condition:	good
Turf Management:	Mowing Height cm (in): 1.3 (0.5) (bent) and 8.8 (3.5) (rough mix)
	Fertilization: 3 lb N/M/YR
	Irrigation: To prevent moisture stress
Testing on Site Previous Year:	none
Target Pest:	phytotoxicity
Growth Stage:	NA

Application Information

Application Date:	25 June
Application Time:	8:30 am
Air Temperature C^o(F^o):	23.3 (74)
Relative Humidity(%):	88
Wind Speed m s⁻¹ (mph):	0.9 (2)
Soil Temperature(7.6 cm depth) C^o(F^o):	21.1 (70)
Soil Moisture:	moist
Spray Volume L ha⁻¹ (gal 1000 ft⁻²):	814 (2)
Spray Pressure:	30psi
Spray Nozzle:	8001.5
Spray Equipment:	CO ₂ backpack
Irrigation After Application:	None
Experimental Design:	Randomized complete block
Replications:	3
Plot Size m (ft):	1.5 X 1.5 (5 X 5)

Results:

Tenacity 4SC was applied to rough height tall fescue/bluegrass at 140 or 280 g ai/ha(including NIS at 0.25% v/v) and then trafficked with a utility vehicle or feet to determine the potential for tracking damage on creeping bentgrass. Treatments included:

- Applied with dew present, trafficked one hour after application
- Applied with dew present, watered-in with 0.1 inches irrigation 2.5 hours after application, and then trafficked
- Applied with dew present, watered-in with 0.1 inches irrigation 24 hours after application, and then trafficked

No phytotoxicity was seen with any of the treatments, and thus it appears Tenacity 4SC is fairly resistant to movement via traffic under the conditions of this study.