

Study 1: Phosphite fungicides and fertilizers and contact fungicides

Trade name	Product type [†]	Active ingredient	Phosphite source	Formulation	Application rate		Manufacturer
					rate/1,000 square feet	pounds a.i./1,000 square feet	
Not applicable	phosphite standard	phosphorous acid	potassium phosphite	70.5 grams/liter	30.9 fluid ounces	0.17	Acros Organics
Not applicable	phosphate standard	phosphoric acid	potassium phosphate	85.2 grams/liter	30.9 fluid ounces	0.17	Fisher Scientific
Alude	phosphite fungicide	phosphorous acid	potassium phosphite	3.4 pounds/gallon	7.4 fluid ounces	0.20	Cleary Chemical
Vital	phosphite fungicide	phosphorous acid	potassium phosphite	4.2 pounds/gallon	5.0 fluid ounces	0.16	Phoenix Environmental
Magellan	phosphite fungicide	phosphorous acid	sodium-ammonium-potassium phosphite	4.3 pounds/gallon	4.1 fluid ounces	0.14	Nufarm
Phosphite 30	phosphite fertilizer	phosphorous acid	potassium phosphite	0-0-27	4.0 fluid ounces	0.14	Plant Food Co.
Magnum	phosphite fertilizer	phosphorous acid	ammonium-potassium phosphite	2-0-16	1.8 fluid ounces	0.7	Verdesian
Fairphyte	phosphite fertilizer	phosphorous acid	potassium phosphite	1-0-26	4.5 fluid ounces	0.9	Grigg
Daconil Ultrex	fungicide	chlorothalonil	not applicable	82.5WDG	3.4 ounces	0.18	Syngenta
Protect	fungicide	mancozeb	not applicable	75DF	6.0 ounces	0.28	Cleary Chemical
TerraCyte	fungicide	sodium carbonate peroxyhydrate	not applicable	34G	8.0 pounds 3.0 pounds	2.72 [‡] 1.02	BioSafe Systems

[†]All treatments except sodium carbonate peroxyhydrate were applied at a volume of 2 gallons/1,000 square feet via a single AI95008E nozzle every 14 days from May 20 to Aug. 26, 2010, and from May 25 to Sept. 30, 2011.

[‡]Sodium carbonate peroxyhydrate was applied with a hand-held shaker jar, initially at 8 pounds/1,000 square feet, on May 20, 2010 and May 25, 2011, and at 8 pounds/1,000 square feet every 14 days thereafter.

Table 1. Phosphite fungicides, phosphite fertilizers and contact fungicides evaluated in Study 1 for cyanobacteria control in creeping bentgrass putting green turf in Storrs, Conn., during 2010 and 2011.