



Banol®

Active Ingredients: propamocarb hydrochloride (66.5%); equivalent to 6.0 lb. propamocarb HCl per gallon

FRAC Code: 28 (Carbamates)

Systemicity: localized penetrant

Formulation: soluble liquid

Signal Word: caution

Best Uses: all Pythium diseases

Key Strengths: resistance management for Pythium diseases

Reliable Pythium control is essential for successful turfgrass management. Pythium can cause blight, seedling damping-off and root rot. Blight can kill turfgrass overnight under ideal environmental conditions. Banol® provides effective control of Pythium diseases without any documented cases of resistance development in the field.

Attributes Of Banol

- Controls all Pythium diseases in turf, ornamentals and landscape
- No documented field resistance development for over 20 years of commercial use

Solutions For Tough Diseases

- Apply preventively in the spring and summer to control Pythium root rot
- Use in the summer for Pythium blight control
- Apply during overseeding to control Pythium damping-off on seedlings
- Controls Pythium resistant to mefenoxam
- Use as a rotation partner to delay resistance development for other fungicides including mefenoxam, cyazofamid, fluopicolide and Qols

How To Use Banol

Apply Banol as part of an integrated management program on greens, tees or fairways. Apply when conditions are favorable. Apply Banol in 2-5 gallons of water for both preventive and curative applications. Lightly water-in Banol applications to increase fungicide and root contact for optimal root rot control. North Carolina State University suggests that Banol and Chipco® Signature™ should be part of a rotation program to control Pythium root dysfunction caused by *Pythium volutum*.

(http://www.turffiles.ncsu.edu/diseases/Pythium_Root_Dysfunction.aspx)

KEY DISEASES CONTROLLED ¹	RATE (per 1,000 sq ft)	APPLICATION INTERVAL
Pythium Blight ●●	1.33 - 2.0 fl oz (preventive) 3.0 - 4.0 fl oz (curative)	7 - 21 days
Pythium Damping-Off ●●		
Pythium Root Rot ●●		

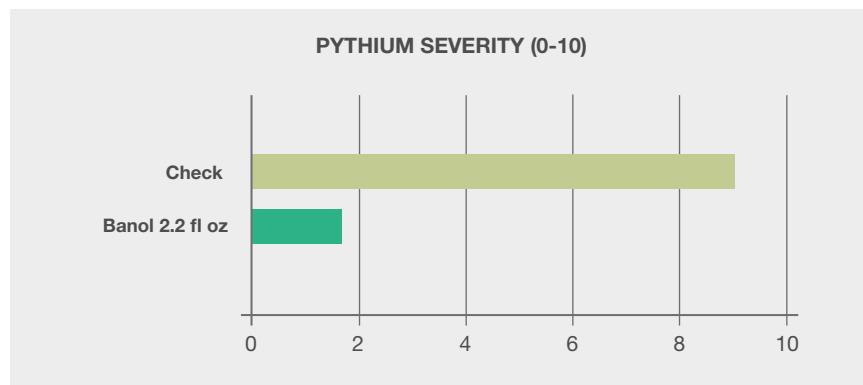
● = cool-season turf diseases

● = warm-season turf diseases

¹See the Banol label for the complete list of diseases controlled. Refer to the Banol label for application information. Do not apply more than 12.25 fl. oz./1,000 sq. ft. of Banol per year. Always read and follow label instructions carefully.

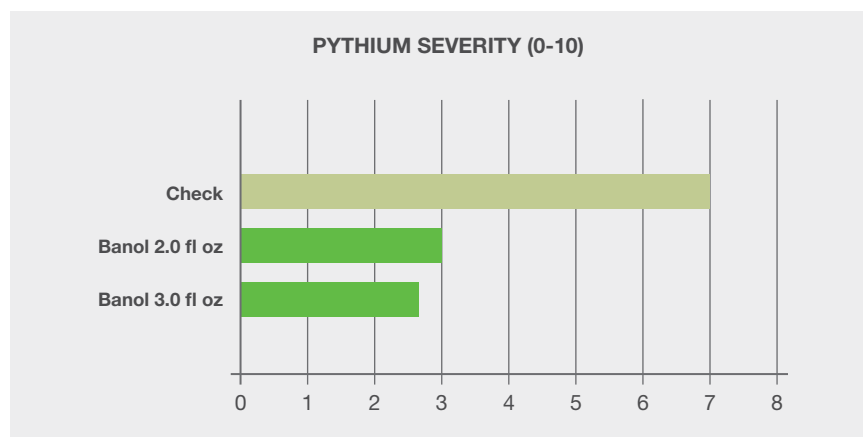
Banol Performance Data

Pennsylvania State University Pythium Control on Perennial Ryegrass, Dr. Wakar Uddin



Treatments applied July 10 and 17, and plots infested July 12. Disease severity is shown for disease development on July 21. *Plant Disease Management Reports 4:T048*

Pennsylvania State University Pythium Control on Perennial Ryegrass, Dr. Wakar Uddin



Treatments applied July 21, and plots infested July 22. Disease severity is shown for disease development on August 7. *Plant Disease Management Reports 6:T039*

USE RATE (fl oz/1,000 sq ft)	COVERAGE PER CONTAINER (1,000 sq ft)	COVERAGE PER CONTAINER (acres)	LBS PROPAMOCARB (per 1,000 sq ft)	LBS PROPAMOCARB (per acre)	APPLICATIONS AT RATE (per year)
1.33	241	5.5	0.06	2.72	9.2
2.0	160	3.7	0.09	4.08	6.1
3.0	107	2.5	0.14	6.13	4.1
4.0	80	1.8	0.19	8.17	3.1

Package size: 2.5 gallon container.

