

# Resistance management for Pythium diseases

## Best uses

All Pythium diseases.

## Key strengths

Banol<sup>®</sup> is an effective solution for controlling Pythium diseases in turfgrass. Reliable Pythium control is essential for successful turfgrass management. Pythium can cause foliar blight, seedling damping-off and root diseases. Pythium foliar blight can kill turfgrass overnight under ideal environmental conditions for disease development. Banol provides effective control of Pythium diseases without any documented cases of resistance development in the field.

## Attributes of Banol

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

## Solutions for tough diseases

- Apply preventatively in the spring and summer to control Pythium root diseases
- Use in the summer for Pythium foliar 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 and Qols

## How to use Banol

Apply Banol as part of an integrated management program on greens, tees or fairways. Apply when conditions are favourable for disease on a 7–21 day interval. Apply Banol in 8–20 litres of water per 100 m<sup>2</sup> for both preventative and curative applications. Lightly water-in Banol applications to increase fungicide and root contact for optimal Pythium root disease control. North Carolina State University suggests Banol and Signature<sup>®</sup> XTRA Stressgard<sup>®</sup> should be part of a rotation program to control Pythium root dysfunction.



### Active ingredients

propamocarb hydrochloride (66.5%); equivalent to 722 g propamocarb HCl per litre



### FRAC code

28 (carbamate)



### Systemicity

acropetal penetrant



### Formulation

soluble liquid



### Signal word

danger

## Key diseases controlled

| Key diseases controlled | Rates mL/100 m <sup>2</sup>  | Application interval (days) |
|-------------------------|--|-----------------------------|
| Pythium blight          | <b>Preventative:</b> 64 mL<br><b>Curative:</b> 64 mL<br>apply in 8–20 L of water<br>for both preventative and<br>curative applications | 7–21                        |
| Pythium damping-off     |  |                             |
| Pythium root rot        |  |                             |

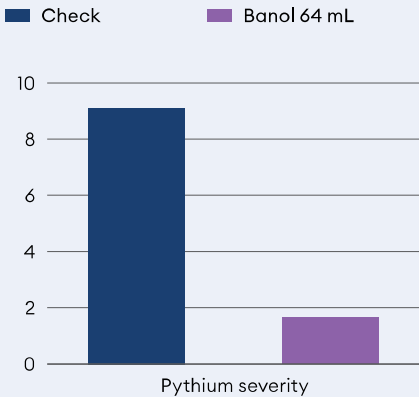
\*See the Banol label for complete details. Refer to the Banol label for application information. Always read and carefully follow label instructions.

## Banol rate chart

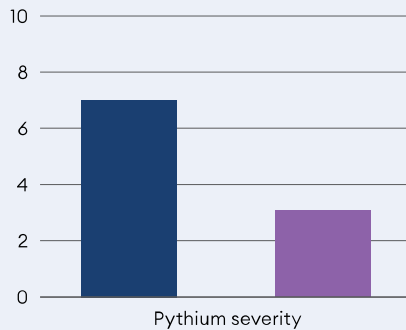
| Use rate (mL/100 m <sup>2</sup> ) | Coverage per container (100 m <sup>2</sup> ) | Coverage per container (acres) | Grams Propamocarb (per acre) |
|-----------------------------------|--|--------------------------------|------------------------------|
| 64                                | 58   | 1.4                            | 1869                         |

## Banol performance data

### Pennsylvania State University Pythium Foliar Blight 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.



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.

To talk about your specific needs or to learn more about our solutions, please contact an Envu representative.

