

QuickSilver

The Boss of Moss

- Control Silvery thread moss
- Safe for high value turf



Photo by F. Yelverton

General Info

Active Ingredient: **Carfentrazone-ethyl**

Formulation: **224 g/L EC**

Chemistry class: **Group 14 (N-Phenyl-triazolinones)**

Phytomobility: **Contact**

Packaging: **4 x 237 ml**

Coverage per bottle: **1.2 to 4.0 ac**

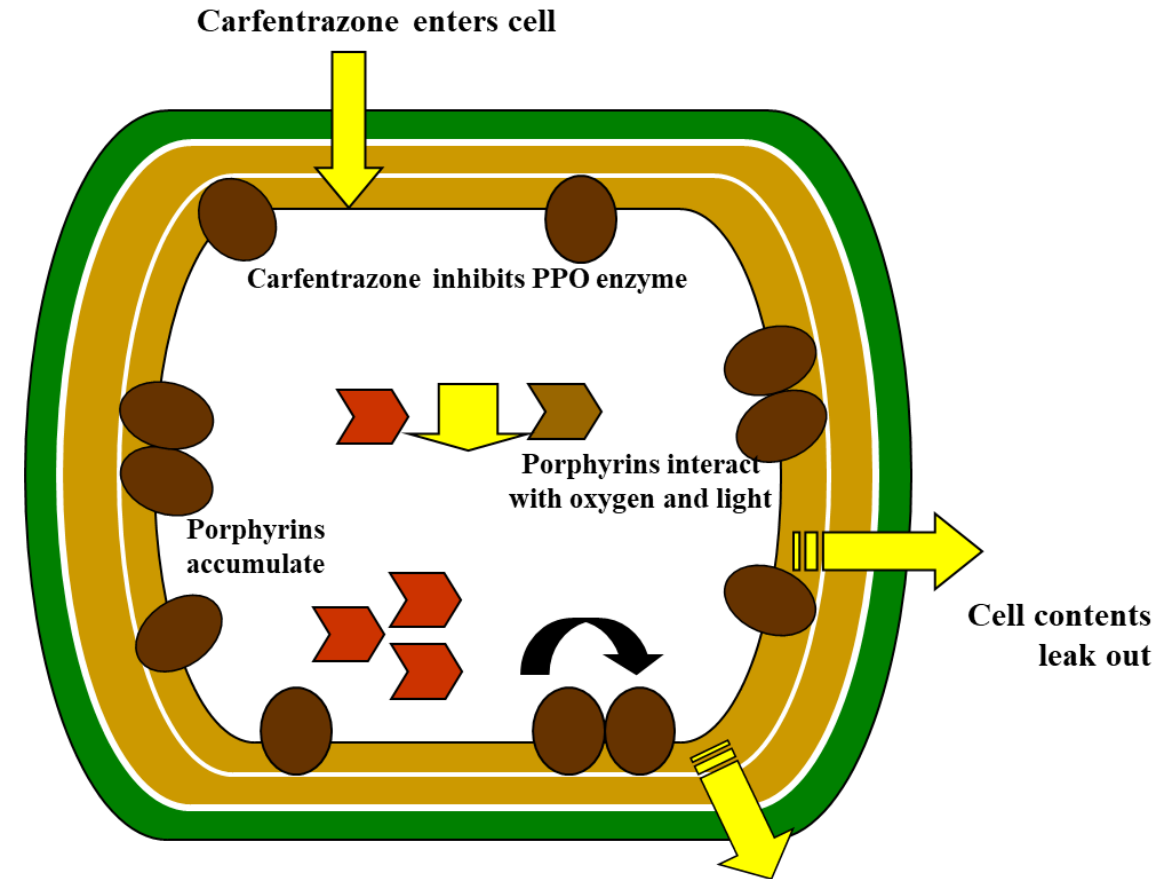


Mode of Action

Cell membrane disrupter

Mechanism-of-Action: PPO Inhibitor

- Inhibits protoporphorinogen oxidase resulting in disruption of chlorophyll and heme production



Mode of Action

Cell membrane disrupter

Mechanism-of-Action: PPO Inhibitor

- Inhibits protoporphorinogen oxidase resulting in disruption of chlorophyll and heme production

Contact Herbicide

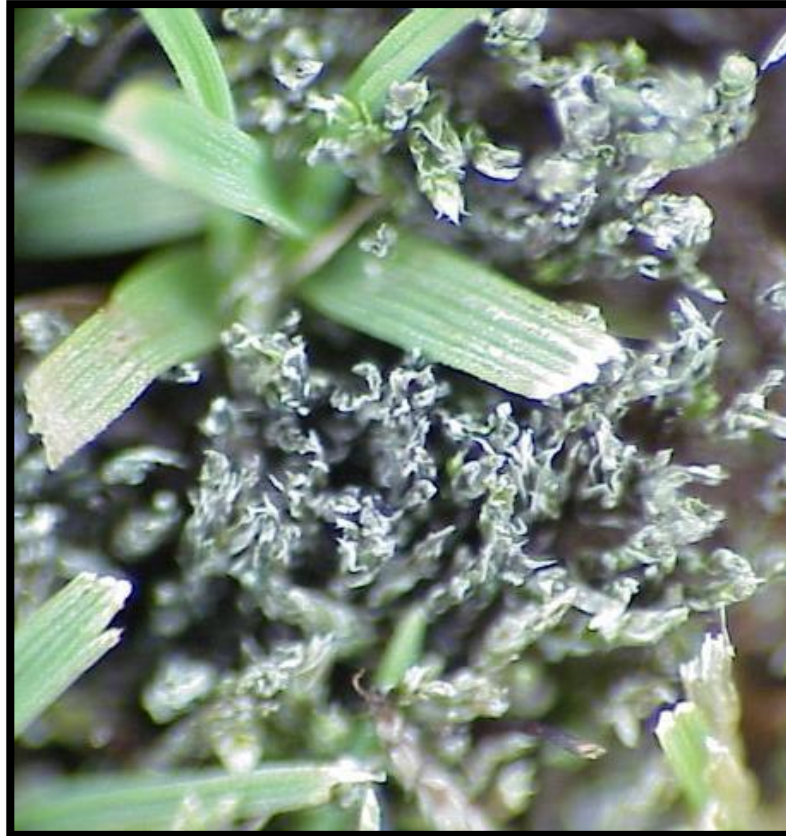
- Fast visible symptoms - 24-48 hours after app
- Minimal residual (reseed interval = 1 day)
- Not persistent in the environment
- Rain-fast within 1 hour



Mode of Action



Untreated

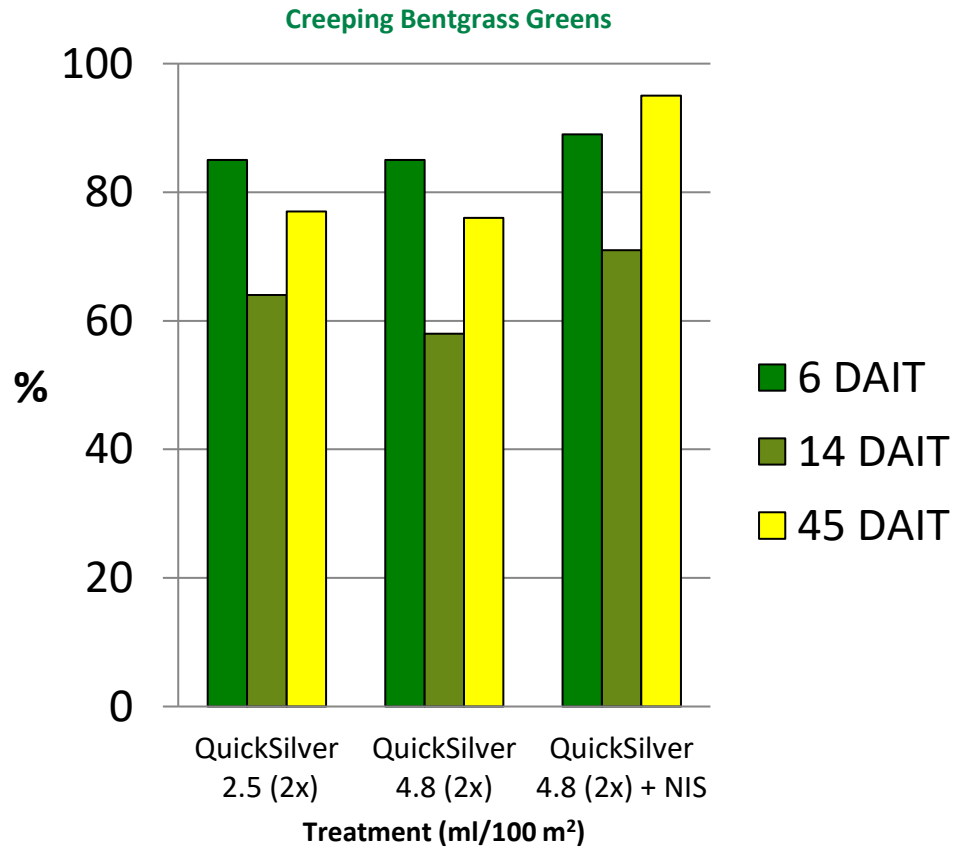


Treated

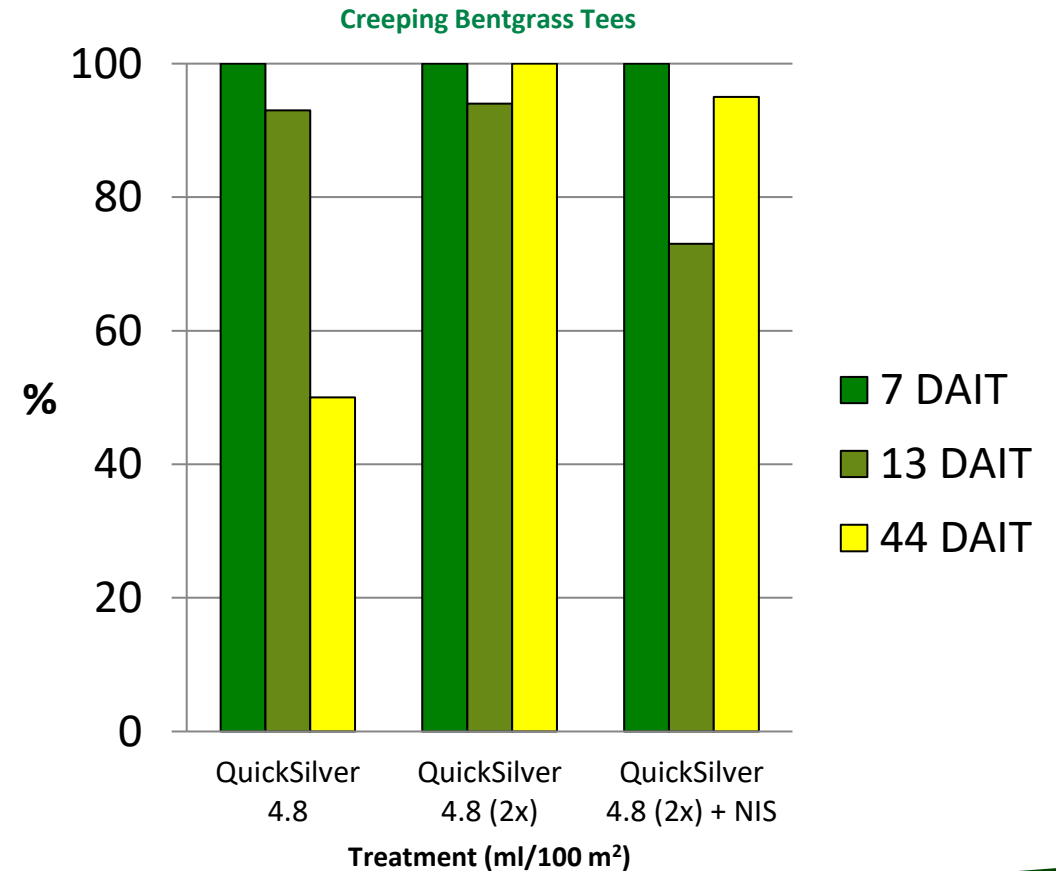


Treated

Silvery Thread Moss Control



F. Yelverton, Ph.D. 2003
 North Carolina State University
 Initial applications made July 24;
 sequential August 6



F. Yelverton, Ph.D. 2005
 North Carolina State University
 Initial applications made July 12;
 sequential July 25



Boss of Moss Recipe

Initial One Application: **4.9 ml/ 100 m²**

Sequential Applications: **1.46 to 2.45 ml/ 100 m²**

Water Volume: **8 L/100 m²**

Interval: **2 - 3 weeks when green pigment is present**

Timing: **Actively Growing Turf**

- Silvery Thread Moss control starts with sound agronomics.
- Proper fertility, irrigation and mowing heights are essential in managing moss.

Tips for Success

Incorporate with Cultural Practices

- Ideally, apply 3-5 days prior to cultural practices that manipulate the canopy
 - aerification, verticutting, topdressing etc.
 - If aerifying use min. 3/8" tine and fill holes with sand.

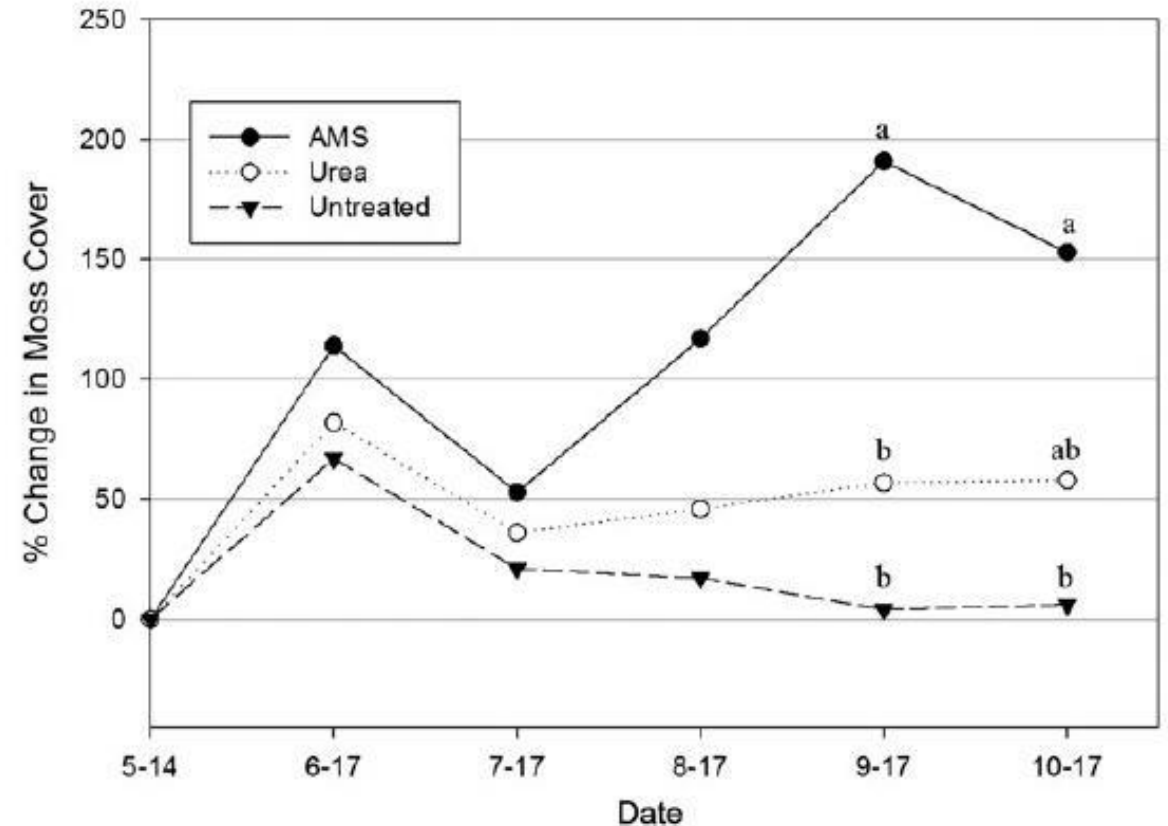
% silvery-thread moss control		Visual silvery-thread moss control [§]			
		Weeks after initial treatment			
		3	5	11	16
Treatment [†]	Rate [‡]	% control (SE)			
Quicksilver (carfentrazone)	6.67 fluid ounces/acre	68 (15.1)	43 (14.4)	36 (13.4)	54 (12.6)
Quicksilver + topdressing	6.67 fluid ounces/acre fb 200 pounds/1,000 square feet	75 (11.5)	63 (16.6)	77 (11.6)	76 (12.3)
Quicksilver + nitrogen	6.67 fluid ounces/acre fb 0.25 pound/1,000 square feet	85 (4.5)	54 (16.8)	68 (14.1)	68 (13.8)
Quicksilver + nitrogen + topdressing	6.67 fluid ounces/acre fb 0.25 pound/1,000 square feet + 200 pounds/1,000 square feet	78 (9.8)	67 (12.1)	77 (4.8)	78 (5.0)
Junction (mancozeb)	4 ounces/1,000 square feet	11 (6.9)	13 (9.8)	4 (4.2)	7 (6.7)
Nitrogen	0.25 pound/1,000 square feet	0 (0)	3 (3.3)	23 (12.9)	32 (11.5)
Topdressing	200 pounds/1,000 square feet	0 (0)	9 (5.2)	25 (15.8)	34 (13.4)
Nitrogen + topdressing	0.25 pound/1,000 square feet + 200 pounds/1,000 square feet	0 (0)	10 (6.8)	20 (13.2)	29 (11.5)
LSD [¶]		15	25	32	31



Tips for Success

Avoid Soluble Nitrogen on Moss

- Ammonium Sulphate may increase incidence of Silvery thread moss
- Recommend other nitrogen source
- Recommend granular fertility as moss has no roots



Raundenbush and
Keeley 2015

Tips for Success

- Frequent applications at lower rates (1.46 to 2.45 ml/100 m²) have also proven to be efficacious for controlling Silvery thread moss.
- Do not apply more than 19.6ml/100 m² per year.
- Avoid QuickSilver applications when desirable turf is under stress.
- Allow a 5–7 day window between any PGR applications.
- The addition of a Non-Ionic Surfactant (NIS) at a rate of 0.25%v/v can increase control of moss.
- Application coverage is critical

