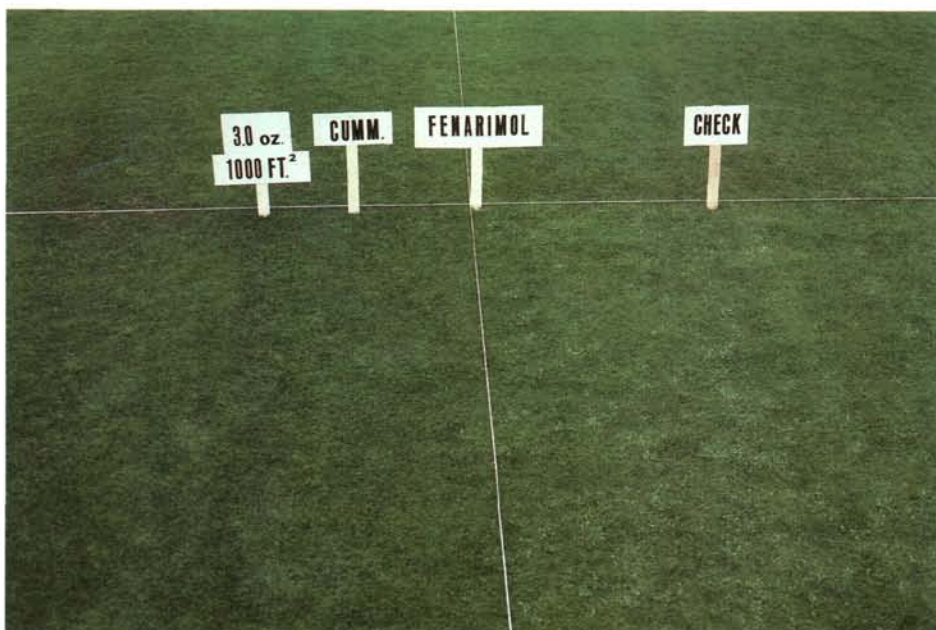


Use of Fenarimol for Selectively Controlling *Poa annua* in an Overseeded Bermudagrass Golf Green

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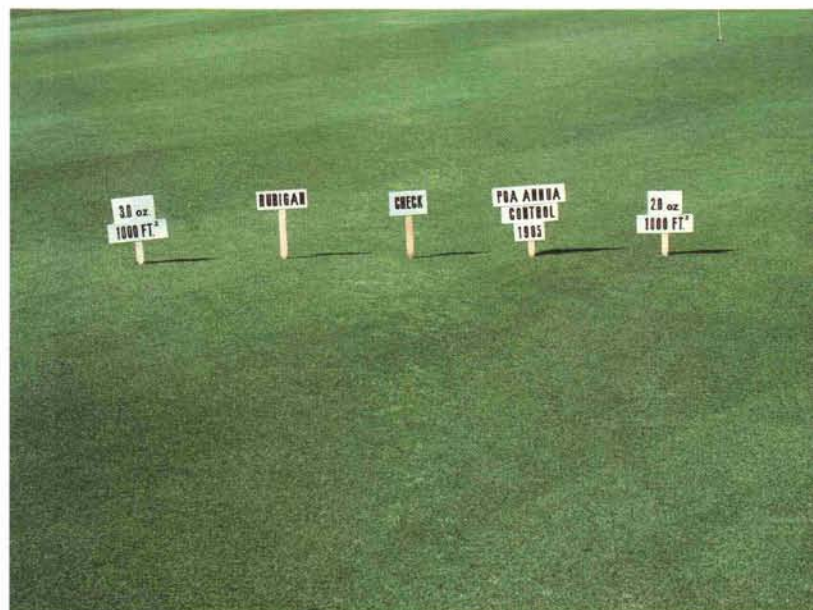


(Top) Applied cumulatively, 3.0 oz. of Fenarimol 50W/1,000 sq. ft. dramatically controls *Poa annua* on a golf green overseeded with a mixture of perennial ryegrass and trivialis bluegrass. (Above) An untreated strip in the center of this green shows the control of *Poa annua* by both the high and low rates of Fenarimol 50W applied cumulatively.

SELECTIVE CONTROL of annual bluegrass on overseeded bermudagrass golf greens is one of the most difficult weed problems facing superintendents of golf courses in the South. Use of various preemergent herbicides during late summer approximately six to eight weeks prior to overseeding has been successful, but it is not yet recommended by most herbicide manufacturers. Because of differences in climate, growing media, cultural practices, and overseeding susceptibilities, the use of preemergent herbicides prior to overseeding still presents a high risk to successfully establishing the cool-season species. At best, early application of preemergent materials is only effective in controlling early germination of *Poa annua* and it does not provide for control of this weed following the actual date of overseeding.

Fenarimol was initially evaluated for and is presently being used as a broad spectrum systemic, pyrimidine fungicide for ornamentals and turfs. During its fungicidal testing at Pennsylvania State University, it was noticed that in addition to disease control, repeated use of this material also seemed to bring about a reduction in the occurrence of *Poa annua*. Following up on this observation, researchers at Texas A&M University began evaluating Fenarimol in 1982 for its herbicidal properties, and, more specifically, its ability to control annual bluegrass.

During 1983, 1984, and 1985, both pre- and postemergent control studies were conducted at Texas A&M University, in College Station, Texas. Fenarimol was also evaluated cooperatively at Ridgewood Country Club, in Waco, Texas, and at Briarcrest Country Club, in Bryan, Texas. Test applications at both locations looked very promising for selective preemergent control of *Poa annua*.



(Above, left) Four experimental plots at Texas A&M University. Three were treated with 2-3 oz. of Fenarimol 50W/1,000 sq. ft., while the lower left plot was untreated.

(Above) Experimental plots showing *Poa annua* control effected by the 3.0 oz. cumulative rate of Fenarimol 50W/1,000 sq. ft.

SUBSEQUENT postemergent control evaluations have shown Fenarimol to have little or no effect when it is applied to actively growing annual bluegrass. At higher rates (>3.0 ounces of Fenarimol 50W/1,000 square feet), there may be some discoloration of the bermudagrass. This phytotoxic effect is usually short lived; it goes away after several mowings.

Studies have shown that for best results, Fenarimol should be applied at lower rates (1.0 ounce of product/1,000 square feet) in two or three applications spaced approximately two weeks apart. The last application should be timed at three to four weeks before the overseeding date. The product should be watered-in lightly following each application. Cumulative rates of 2.0 to 3.0 ounces of product/1,000 square feet should yield season-long control of *Poa annua* without interfering with the establishment of the overseeded species. It may be noted that Fenarimol is only effective in controlling the true annual strain of *Poa annua*, not the semi-perennial strain known as *Poa annua*, *reptans*.

Even though Fenarimol appears to cause no significant reduction in stand of the overseeded species, it was observed that when applied to a 100 percent stand of Sabre trivialis bluegrass, the overseeded grass did not tiller as quickly and thereby, did not thicken up as readily as the untreated areas. Where Fenarimol is used on golf greens that will be subsequently overseeded with predominately

bluegrass, it is suggested that only the lower rate (2.0 ounces of a product/1,000 square feet) be applied.

The use of Fenarimol on overseeded golf greens has become quite popular, and indications are that its use could end the problem of *Poa annua* infested putting surfaces in the South.

Effects of Fenarimol on preemergent control of *Poa annua* out of Sabre rough bluegrass and Derby perennial ryegrass overseeding.

Rate of 50% WP per 1000 ft ² (per 100 m ²)	Method of Application	Control Ratings*	
		Tifgreen	Tifdwarf
Out of Sabre			
2.0 oz (61.0 g)	Cumulative	9.0 a**	9.0 a
3.0 oz (91.5 g)	Cumulative	9.0 a	9.0 a
2.0 oz (61.0 g)	Single treatment	8.5 a	9.0 a
3.0 oz (91.5 g)	Single treatment	9.0 a	9.0 a
Untreated check		1.0 c	1.0 b
Out of Derby			
2.0 oz (61.0 g)	Cumulative	8.7 a**	9.0 a
3.0 oz (91.5 g)	Cumulative	8.8 a	9.0 a
2.0 oz (61.0 g)	Single treatment	8.7 a	8.8 a
3.0 oz (91.5 g)	Single treatment	8.8 a	9.0 a
Untreated check		1.0 b	1.0 b

*Ratings based on a rating scale of 1 to 9: 1 = no control and 9 = complete control.
**Values followed by the same letter are not significantly different at the 5% level of Duncan's Multiple Range Test.