

Tour Stop #1: New Technologies for Broadleaf Weed Control

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New and versatile active ingredients have been introduced into the turf market in the last few years: mesotrione (Tenacity), sulfentrazone (in combination with quinclorac as Solitaire), and aminocyclopyrachlor (Imprelis). Imprelis, by DuPont, is available as a liquid and granular and has been shown in field trials to have excellent activity on broadleaf weeds, such as dandelion, white clover, and broadleaf plantain. Aminocyclopyrachlor is an exciting product as a granular because it is absorbed by leaves and roots, which means the granular product can be more effective than other granular products because the target is not only the weed foliage, but also the soil surface. Imprelis, like Tenacity, can be applied on the day of seeding for most cool-season turfs as well as some warm-season turfs.

A trial was initiated in the beginning of June to investigate the efficacy of Imprelis as a liquid for grassy and broadleaf weed control during establishment. Imprelis was applied at two rates and three timings (0 DAS [days after seeding], 7 DAS, and 14 DAS). Repeat applications of Imprelis, Dimension, Drive, and Trimec Classic were also included in the trial. The trial was seeded with the blend of tall fescue cultivars on June 11, 2010. Tall fescue cover, crabgrass cover, common purslane cover, and turf injury and quality were evaluated throughout the trial period. Imprelis inhibited tall fescue cover when applied at the high rate 0 DAS. Dimension obviously inhibited tall fescue cover, as well as Drive applied 0 DAS and Trimec 14 DAS. All Imprelis, Drive, and Dimension treatments controlled crabgrass infiltration, while Trimec Classic applied 7 and 14 DAS did not differ from the untreated, which ended up on July 27 with 62% crabgrass cover. All Imprelis treatments caused some turf injury at the end of July and beginning of August. A treatment list and preliminary results are presented in Table 1.

Table 1: Broadleaf and Grassy Weed Control During Tall Fescue Establishment

Treatment	Rate	App. Time	Tall Fescue	Crabgrass	Injury**
			7/12/10 31 DAT	8/6/10 56 DAT	
			percent cover	percent cover	1-9
Imprelis	4.5fl oz/A	A*	85 abc	8 cde	1 f
Imprelis	6fl oz/A	A	61 de	3 de	1.3 ef
Imprelis	4.5fl oz/A	AD	86 ab	5 cde	3 b
Imprelis	6fl oz/A	AD	81 a-d	3 de	4.3 a
Dimension	1lb A/A	A	8 g	1 e	1 f
Drive	0.75lb A/A	A	52 ef	0 e	1 f
Trimec Classic	4pt/A	A	85 abc	28 bc	1 f
Imprelis	4.5fl oz/A	B	86 ab	15 b-e	2.3 bcd
Imprelis	6fl oz/A	B	83 abc	8 cde	2 cde
Imprelis	4.5fl oz/A	BE	85 abc	10 b-e	3 b
Imprelis	6fl oz/A	BE	80 a-d	7 cde	4 a
Dimension	1lb A/A	B	38 f	33 b	1 f
Drive	0.75lb A/A	B	72 a-e	1 e	1.7 def
Trimec Classic	4pt/A	B	70 a-e	60 a	1 f
Imprelis	4.5fl oz/A	C	80 a-d	21 b-e	2 cde
Imprelis	6fl oz/A	C	78 a-d	25 bcd	1.7 def
Imprelis	4.5fl oz/A	CF	90 a	6 cde	2.3 bcd
Imprelis	6fl oz/A	CF	83 abc	14 b-e	2.7 bc
Dimension	1lb A/A	C	63 cde	3 de	1 f
Drive	0.75lb A/A	C	73 a-e	0 e	2 cde
Trimec Classic	4pt/A	C	65 b-e	83 a	1 f
Untreated			75 a-d	70 a	1 f
LSD (p=0.05)			22	24	0.95

* Treatments A, B, C, D, E, and F were applied on 6/11, 6/18, 6/24, 7/12, 7/19, and 7/26, respectively.

** Injury is evaluated where 1= no injury and 9= completely brown or dead turf.