Herbicide Demonstration and Oversowing

Some turf herbicides carry warnings about plant back periods for oversowing of cool season grasses. For Destiny this is 6 weeks, for Spearhead 3 months and 4 weeks for Tribute.

This trial was established as a demonstration of herbicide efficacy at different days after spraying as well as the oversowing safety of three herbicides.

Treatments

No	Chemical	Rate	Spraying Date	Days between spraying and oversowing
1	Destiny	150g/ha	25/5/2012	76
2	Spearhead	5L/ha	25/5/2012	76
3	Tribute	2L/ha	25/5/2012	76
4	Destiny	150g/ha	20/7/2012	21
5	Spearhead	5L/ha	20/7/2012	21
6	Tribute	2L/ha	20/7/2012	21
7	Destiny	150g/ha	2/8/2012	7
8	Spearhead	5L/ha	2/8/2012	7
9	Tribute	2L/ha	2/8/2012	7

Water rate: 395L/ha

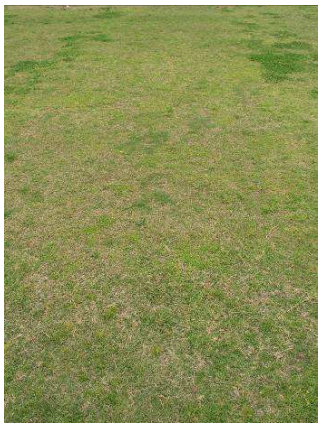
There has been no impact from Tribute on the oversown ryegrass. This has been confirmed in other trials and an amendment to the Tribute label will be requested to shorten the interval for sowing cool season grasses. Spearhead had a noticeable effect on the ryegrass when oversowing was done 7 days after spraying. The photograph below shows the bleaching which can be caused by Spearhead on cool season grasses like ryegrass. Destiny has appeared to reduce ryegrass survival at 7 and 21 days after spraying. The full extent on ryegrass survival for all treatments will be determined in the coming weeks.

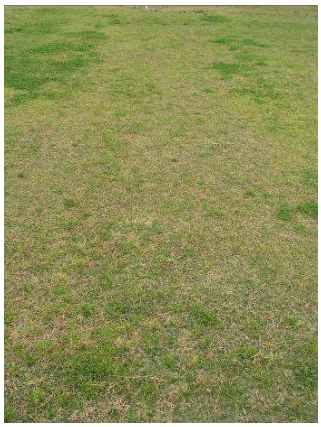
The three herbicides in the trials were sprayed on 25th May, 20th July and 2nd August.

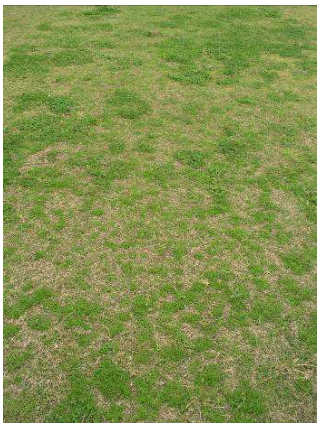
Observations we made on 18th September.

Spraying 25th May

Destiny – 100% control of clover, chickweed and bindie. 90% control of oxalis, cudweed and fleabane, 70% control of wintergrass
Spearhead – 100% control of all broad leaf weeds except Oxalis (80%)
Tribute – 100% control of wintergrass, 40% control of clover, no control of other broad leaf weeds

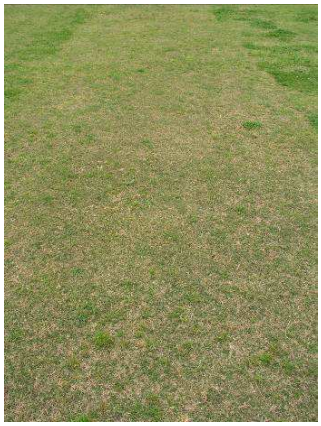

Destiny


Spearhead


Tribute

Spraying 20th July

Destiny – 100% control of clover, chickweed and bindie. 60% cudweed and fleabane, 50% control of wintergrass
Spearhead – 100% control of all broad leaf weeds
Tribute – 100% control of wintergrass, 50% control of clover, no control of other broad leaf weeds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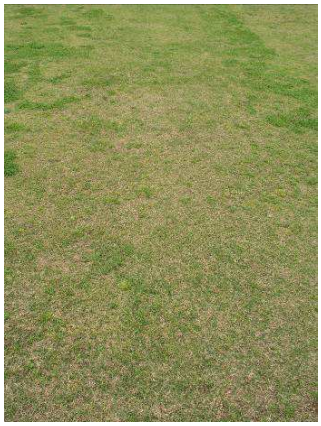
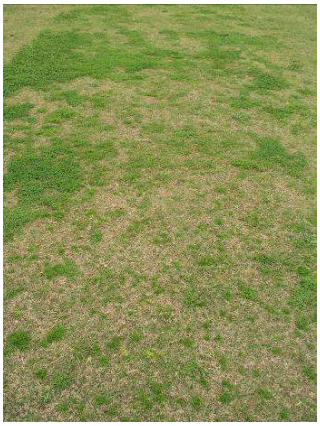
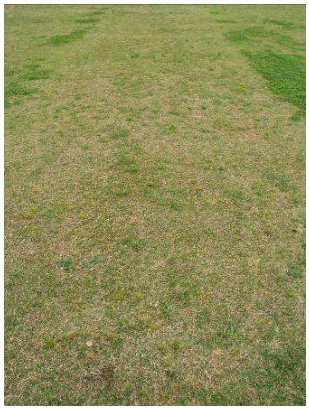

Spearhead

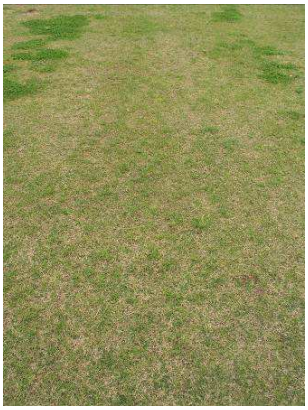

Tribute

Spraying 2nd August

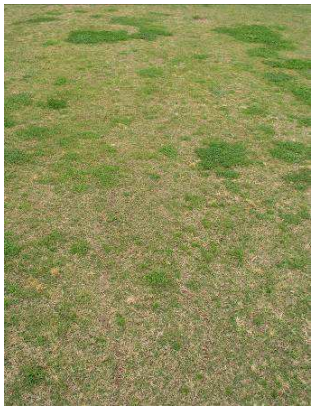
Destiny – 100% control of clover, chickweed and bindie. 50% cudweed and fleabane, 50% control of wintergrass
Spearhead – 100% control of all broad leaf weeds
Tribute – 100% control of wintergrass, 60% control of clover, no control of other broad leaf weeds



Destiny



Spearhead



Tribute

In this climate in south-western Sydney spraying winter weeds in early winter (May) provides as good weed control as leaving the spraying until later in winter (July-August). There are some advantages with this early spraying;

- weeds are quite small and easy to control,
- it takes away the eye-sore of actively growing weeds over the winter months
- generally weather conditions (it terms of wind) are more conducive to spraying in May than in August
- if using spraying contractors, they are likely to be less busy at this time of year

Ornamental Trial

On 15th September 2011 an ornamental plant nursery was established at the University of Sydney Plant Breeding Institute at Cobbity. Eight different plant species where planted in blocks and each block was replicated 9 times. At the time of planting a third of the plants were planted with 1 Initiator Plant Tablet, a third with 2 Initiator Plant Tablets and a third without any tablets.

15th September 2011

7th September 2012

Plant heights were measured at planting and again on 7th September 2012. The table below shows the increase in plant height from planting as well as some comments on insect activity.

	No Initiator	1 Initiator	2 Initiator	Comments
Melaleuca	288%	353%	306%	
Eucalyptus	525%	647%	656%	
Viburnum	89%	97%	83%	Aphid activity over the summer on plants not treated with tablets. Treated plants had no aphids.
Rose	68%	30%	29%	
Magnolia	168%	161%	165%	
Lillipilly	103%	116%	85%	
Azalea	99%	61%	58%	Significant lace bug activity on plants without tablets. Treated plants show no insect damage.
Camellia	44%	58%	21%	
Average	173%	190%	175%	

The native tube stock showed dramatic increase in height (300-600%) from planting compared to the more established exotics. The tablets had a significant effect on the growth of the Melaleuca and Eucalyptus. This was not only in plant height but also in the stem diameter as can be seen in the photographs below.

	No Initiator	1 Initiator	2 Initiator
Melaleuca			
Eucalyptus			

This summer the site will primarily be used for fungicide trials.