

3rd evaluation and results

Fertiliser Trials and Winter Colour ratings

By Nathan Dutschke

This evaluation and trial has been conducted to observe the second year winter colour ratings for each variety after separate fertilizer treatments have been made in autumn on both A and B plots at the Richmond site.

On the 19th April 2007 Nathan Dutschke fertilized 1/3 of all the plots with a quick release fertilizer (Shirleys No. 17), 1/3 of all the plots with a slow release fertilizer (Scotts Lawn Builder) and the last 1/3 remained as is without any fertilizer application.

The fertilizer applications were applied this time of year so that we could observe if fertilising in autumn with a slow release fertilizer and a quick release fertilizer would have any benefit in producing better winter colour compared to no fertilizer application at all.

Following is the table of results showing the 3 individual winter colour ratings from Ian Paananen, Henry Locock and Nathan Dutschke. The ratings were conducted independently on different days in July and August 2007.

Ian's Colour ratings for winter fertiliser trial at Abulk. Average for each variety over the 3 replicated plots.

2/08/2007	Kikuyu	Palmetto	Sir W	Smaster	Greenlees	Empire
No Fertiliser	4.8	6	5	4	1.8	2.2
Quick release	4.7	5	4	3	1	1.7
Slow release	5	5.5	4.3	3.3	1.3	2.2

Henry's colour ratings for winter fertiliser trial at Abulk

25/07/2007	Kikuyu	Palmetto	Sir W	Smaster	Greenlees	Empire
No Fertiliser	5.5	5.5	3	1.5	0.5	1
Quick release	5.5	6	2	1	0.5	1
Slow release	5.5	6	2	1	0.5	1

Nathan's colour ratings for winter fertiliser trial at Abulk

24/07/2007	Kikuyu	Palmetto	Sir W	Smaster	Greenlees	Empire
No Fertiliser	6	4.5	4	1.5	1	1.3
Quick release	5.8	5.2	3.5	1.8	1	1.5
Slow release	6	5.2	3.5	2	1	1.5

Average of results combined – 2nd year results

	Kikuyu	Palmetto	Sir W	Smaster	Greenlees	Empire
No Fertiliser	5.4	5.3	4	2.3	1.1	1.5
Quick release	5.3	5.4	3.2	1.9	0.8	1.4
Slow release	5.5	5.6	3.3	2.1	0.9	1.6
Average	5.4	5.433333	3.5	2.1	0.933333	1.5

First year results combined

Late Winter 2006	Kikuyu	Palmetto	Sir Walter	Shademaster	Couch	Empire
Richmond	7.6	6.17	4.6	2.27	1.5	1.77
Pitt Town Fertilised	7.9	6.23	5.1	2.93	1.7	2.23
Pitt Town Unfertilised	7.43	5.03	4.23	2.5	1.6	1.57
Average all 9 plots *	7.64	5.81	4.64	2.57	1.6	1.86

Combined average results of 1st and 2nd year Winter colour trials

	Kikuyu	Palmetto	Sir Walter	Smaster	Couch	Empire
1st Year Results	7.64	5.81	4.64	2.57	1.6	1.86
2nd Year Results	5.4	5.43	3.5	2.1	0.93	1.5
Average	6.52	5.62	4.07	2.335	1.265	1.68

Again we can see from the 2nd year results that overall Kikuyu had the best winter colour from all the varieties tested. The second best is Palmetto Buffalo. Palmetto had a 55% better late winter colour compared to Sir Walter, which was the next best. Palmetto had a 158% better winter colour than Shademaster, and Sir Walter had a 66% better winter colour than Shademaster. Empire had worse winter colour than all the Buffalos, and Couch had the worst winter colour of all varieties.

We observed that the Buffalo varieties did green up faster with the quick release fertilizer and had slightly taller growth after 4-6 weeks. From the results gathered from the 2nd year trial it shows that a slow release or a quick release fertilizer application in Autumn does not have any significant effect on producing or keeping a better winter colour through the dormancy period for these particular varieties. The only variety which reached a slightly better winter colour with both the quick and the slow release fertilizer applications was Palmetto.

Overall combining the results for both the 1st and 2nd year trials, Kikuyu has the overall best winter colour. When fertilized however, Palmetto had a better winter colour than Kikuyu. So the best lawn when Fertilised is Palmetto. Overall however, including a combination of non fertilized and fertilised the Palmetto was just behind Kikuyu, and out of all the Buffalo's Palmetto has 38% better winter colour compared to Sir Walter which ranked third and 140% better winter colour compared to Shademaster which ranked fourth best overall. Sir Walter had 74% better winter colour than Shademaster. The best winter colour for a low maintenance turf from the combined 1st and 2nd year results is Palmetto. Overall Empire had worse winter colour than all the Buffalos, but still better than Couch. Couch had the worst winter colour of all the varieties.