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SUSTANE TIFWAY BERMUDAGRASS STUDY - 1992

Growth Rates - At the 7/9 data collection all growth rates were equivalent. On 8/13, the growth rate for the Sustane 5-2-4 was reduced compared to the other materials, but it was still adequate. On 9/18 and 10/16 the growth rate was superior to the other treatments, probably a reflection of delayed nitrogen availability. **Sustane 5-2-4 provided exceptional growth characteristics after nitrogen became more readily available in August, September and October.**

Turf Quality and Color - Turf quality was above a minimum acceptable level of 5 for each rating date. On 7/8 and 8/6 Sustane 5-2-4 turf quality ratings were slightly lower than the other treatments. September and October ratings found equivalent or superior performance compared to other materials. Turf color rating compared favorably with turf quality.

Nitrogen Analysis - Tissue nitrogen levels were acceptable for all treatments for all dates. On 8/13 there was a statistical difference in urea compared to both Sustane materials; however the levels were still above the critical tissue percentage. On 9/18, the Sustane 5-2-4 had the highest tissue N level although it was not different from SCU, Nutralene or urea.

Nitrogen Uptake - Rates were equivalent for all materials on 7/9, slightly down for the Sustane 5-2-4 on 8/13, and greatly elevated for Sustane 5-2-4 on 9/18. This is probably a reflection of increased nitrogen availability later in the growing season as temperatures were warmer.

Summary - **Both Sustane materials performed well in comparison to synthetic and synthetic + natural organic based materials.** Additional field observations should continue to look at performance over several years.

NCSU TIFWAY BERMUDAGRASS FERTILIZER TRIAL

Material	Rate #N/M	T. 1 Growth Rate	T. 2 Turf Quality	T. 3 Turf Color	T. 4 Leaf N Analysis	T. 5 N Uptake
Sustane 12-2-3*	1.5	6.65b	7.3a	7.5bc	3.04a	187.0b
Sustane 5-2-4	1.5	9.23a	7.3a	7.6b	3.14a	313.6a
Harmony 14-3-6**	1.5	6.58b	7.1a	7.3c	2.96a	194.5b
Nutralene + P + K	1.5	7.55ab	7.3a	7.7ab	3.06a	228.6b
SCU + P + K	1.5	6.93b	7.3a	7.8a	3.18a	227.0b
Urea + P + K	1.5	6.69b	7.2a	7.8a	3.00a	208.4b

Treatments applied on 6/4, 7/14, and 9/1.

*Sustane 12-2-3 contains Polyon 44-0-0 coated slow release nitrogen.

**Harmony 14-3-6 contains methylene urea.

