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Evaluation of SoilLife fertilizers on overseeded winter turfgrass. Kai Umeda and Gabriel Towers (University of Arizona Cooperative Extension, Phoenix, AZ), David Kopec (University of Arizona Plant Sciences Department, Tucson, AZ), James Walworth (University of Arizona Soil, Water, and Environmental Science Department, Tucson, AZ), and Ken Marcum (Arizona State University Polytechnic Campus, Mesa, AZ). A small plot experiment was conducted on a driving range tee area at the Arizona State University Polytechnic Campus, Mesa, AZ to compare the efficacy of fertilizers with and without SoilLife on overseeded perennial ryegrass turfgrass. Treatment plots measured 10 ft by 100 ft and each treatment was replicated four times in a randomized complete block design. Treatments were applied using an Earthway Walk-behind broadcast spreader. All products were applied at a rate of 5.5 lb/1000 ft^2. The effective rate of the product, 19-0-19, was 1.0 lb N/1000ft^2, 15-0-15 was 0.825 lb N/1000 ft^2, 11-0-11 was 0.605 lb N/1000ft^2. The single applications of the products were made on 05 January 2006. Visual observations of turf quality were assessed at intervals following applications.

At 15 days after treatment (DAT) on 20 January, turfgrass quality was improved by all treatments relative to the untreated check (Table). All treatments exhibited improved turfgrass quality relative to the untreated check at all rating dates through 20 April, 105 DAT. At all rating dates through March, the highest turf quality was observed for the 19-0-19 without SoilLife treatment. The turf quality was significantly improved for the 19-0-19 without SoilLife compared to 19-0-19 with SoilLife on 31 January and 21 February. For the 15-0-15 products, turf quality was better without SoilLife added to the fertilizer through February ratings. In March and April, the 15-0-15 with SoilLife provided slightly better or comparable turf quality than 15-0-15 without SoilLife. The 11-0-11 products were similar initially but late January through April observations showed the 11-0-11 without SoilLife to offer slightly better quality turf. Observations in January and February showed the fertilizers to give a rate response with the 19-0-19 at 1.0 lb N better than 15-0-15 with 0.825 lb N and better than 11-0-11 with 0.605 lb N. In March, 15-0-15 with SoilLife had slightly better turf than 15-0-15 without SoilLife, though not significant. In April, the 19-0-19 with SoilLife gave slightly better turf quality than 19-0-19 without SoilLife and the two 15-0-15 products were similar in providing comparable turf quality.

At the time of application, the fertilizer products with SoilLife were difficult to apply with the broadcast spreader when the products did not flow evenly. The products were compacted and required frequent pounding, hammering, or beating on the sides of the hopper to allow flow through the bottom openings. The fertilizers without SoilLife did not require any agitation and flowed smoothly and uniformly.

In summary, the fertilizer products with SoilLife did not significantly improve the performance of fertilizers that lower rates of application would be equivalent to higher rates of application of fertilizers without SoilLife.

Table. Comparison of fertilizers with and without SoilLife

Treatment	Turf quality				
	20 Jan	21 Jan	21 Feb	09 Mar	20 Apr
Untreated check	4.0	3.0	3.3	3.3	5.8
19-0-19	7.3	6.8	6.5	5.0	6.5
15-0-15	7.0	5.8	6.0	4.3	6.8
11-0-11	6.3	5.0	4.8	4.0	6.8
19-0-19 plus SoilLife	6.5	6.0	5.3	4.0	7.0
15-0-15 plus SoilLife	6.3	5.5	4.8	4.5	6.8
11-0-11 plus SoilLife	6.3	4.3	4.0	3.8	6.5
LSD (p=0.05)	0.63	0.72	0.76	0.75	0.63

Quality ratings: 1=poor, 9 = best.
Treatments applied on 05 January 2006