

TOPDRESSING STUDIES ON GREENS

A new study on topdressing of a Penncross creeping bentgrass green was initiated in 1986 utilizing sand and sand/peat mixes prepared by the Great Lakes Minerals Co. The objective is to determine if the addition of peat or peat and soil into the mix will result in an improved soil medium for greens. The treatments applied are given in Table 9. The TDS-50 is the sand used in the study. The 80:20 mix is 80% TDS-50 sand and 20% peat on a volume basis while the 60:20:20 mix is 60% sand, 20% peat and 20% soil. The hypothesis is that the 80:20 or the 60:20:20 mixes will result in equal quality turf (or improved) with a soil medium that will be easier to manage than sand alone because of increased water and nutrient holding capacities. Of necessity this is a long term study to allow a buildup of the topdressing material. Data taken this first year indicate there were few consistent, major differences, although there seems to be an improved turf quality following topdressing applications. Note particularly the improved turf ratings after the heavier topdressings applied in the fall compared to the ratings on the light and frequent (every 3 weeks) topdressing treatments. Since this study has just begun, we cannot yet make a recommendation based on results.

The long-term sand topdressing study which has several frequencies and rates of sand topdressing and two nitrogen rates was continued. This has been reported on in past years so no new data will be presented here. Golf course superintendents are strongly encouraged to follow their sand topdressing program faithfully to prevent any development of layers in the growing medium.

Table 9. Effect of topdressing a Penncross creeping bentgrass green mowed at 3/16 inch with Great Lakes Minerals topdressing mixes. Study initiated Spring, 1986. Hancock Turfgrass Research Center. Averages of 3 replications.

mix	Treatment		Quality rating (9=best)		
	Rate cu ft/m	Frequency	Jul 7	Sept. 21	Nov 3
TDS-50	3	3 weeks	5.7 bd	5.7 bc	6.2 c
	12	Spr, Fall	6.3 b	5.7 bc	7.0 b
80:20	3	3 weeks	5.3 cd	7.3 a	6.2 c
	12	Spr, Fall	7.2 a	5.7 bc	7.8 a
60:20:20	3	3 weeks	5.5 cd	7.5 a	6.2 c
	12	Spr, Fall	7.5 a	5.7 bc	7.8 a
Check	-	-	5.2 d	5.5 c	6.0 c
TDS-50 (Cored)	12	Spr, Fall	6.0 bc	6.0 b	7.0 b