Data not included indicate that screened cinders provide a more drouth tolerant mix than crushed brick and tile. Fine vermiculite is slightly better than coarse vermiculite. No attempt has been made to subject these plots to traffic or compaction. This will be done in future studies.

There is no apparent difference between Turface and Terragreen. The mixtures which include these calcined clays are too coarse to compare against existing soil mixes in this experiment.

STOP 14

John King

Sod Rooting Studies. The purpose of these studies is to investigate the potential rooting capability of sod grown on mineral and organic soil. Four tests have been completed. The fifth test was initiated on June 29. Clipping weight, number of roots observed on the glass front, and root organic matter data were collected. Part of the root organic matter data are summarized in Table 14.

TABLE 14. ROOT ORGANIC MATTER PRODUCTION (IN GRAMS) UNDER SELECTED MANAGEMENT TREATMENT

Treatments	Test Period			
	July 22 to Aug. 9	Aug. 14 to Aug. 30	Sept. 19 to Oct. 10	May 29 to June19
Mineral Sod	0.95**	0.46**	0.96	0.58
Organic Sod	2.72	1.30	1.11	0.77
Sandy Loam Topsoil	2.43*			
Clay Subsoil	1.24			
1:1 S. Loam-Clay Mix		0.96*		0.75
Clay Subsoil		0.79		0.60

*Significant at the 5% level.
**Significant at the 1% level.

The organic sod produced more roots than mineral sod in all tests. The sod rooted as well during the summer as in the fall and spring. Sod roots better over topsoil or topsoil incorporated into the subsoil than over subsoil alone.

Proper watering is a key factor in good sod rooting. In general watering at 0.2 inch daily has given the best rooting. Either overwatering or underwatering is detrimental. Rate of watering is more critical with either mineral sod or clay subsoil. More data are being gathered on watering practices. Fertilizer placement and sod cutting depth have also been studied, but the results are inconclusive.