The ongoing study evaluating carriers, rates, and timing of nitrogen on Penncross creeping bentgrass has produced mixed results this season (Table 12). Color response to spring nitrogen applications was very poor. The response, regardless of the carrier (Table 13), was very non-uniform and produced a "blotchy" appearance. The treatments receiving a late-fall application of nitrogen displayed a uniform color response throughout the spring.

EFFECT OF PHOSPHORUS FERTILIZATION
ON PENNCROSS CREEPING BENTGRASS

Two studies were initiated on Penncross creeping bentgrass to evaluate the effect of phosphorus when applied to a phosphorus deficient soil. Identical studies, outlined in Table 14, were established on a Purr-Wick (dune sand) green and a sand-peat mix green.

These studies were initiated following soil tests which revealed a serious lack of potassium, magnesium and phosphorus in both soils. While tests for potassium and magnesium showed a deficiency in these soils there was no apparent response after application of these nutrients in a trial study. Applications of phosphorus gave the only response on these two soils.

This study will be continued to evaluate the long term effects of varying rates of phosphorus on soils with low CEC's and initially low test levels of phosphorus.