RELATIONSHIPS between carotene and crude protein content have been noted by various workers.

Studies on grasses may be divided into those in which the grass was cut completely at intervals, as in lawn mowing, and maturity studies where the grass was cut at different stages of growth. In the lawn mower type of sampling, Thomas and Moon\textsuperscript{1} reported a correlation coefficient for carotene with crude protein of plus 0.530 for 46 samples. Moon\textsuperscript{2} in a further study obtained an r value of plus 0.543 where no fertilization was used, plus 0.233 for nitrate of soda treatment, and plus 0.332 for sulfate of ammonia treatment. Moon\textsuperscript{3} also gives an r value of plus 0.89 in a maturity study on mixed herbage. Smith and Wang\textsuperscript{4} gave an r value of plus 0.85 for 63 samples of rye grass, white clover, cocksfoot, and timothy.

The correlation coefficient (r) has been computed for buffalo grass, *Buchloe dactyloides*, and blue grama, *Bouteloua gracilis*, using the