SUMMARY

An experiment was carried out in an attempt to demonstrate the effects of liming, and to investigate possible interactions between lime, nitrogen and potassium at standard levels on the yields and quality of Virginia flue-cured tobacco in Trinidad.

The marked soil variation within the unsuitable site caused high coefficients of variation throughout the experiment; however, significant treatment differences were recorded. Liming was found to significantly reduce the number of supplies needed after transplanting but had no other effect on the crop, despite raising the soil reaction to pH 7.1 - 7.5 in the top 6 ins. of soil. Nitrogen, while significantly contributing to the growth and development of the plants, and significantly increasing yields of harvested and cured leaf, induced potassium deficiency, reduced the curing out percentage of the leaf, generally lowered the grade index of the tobacco, and greatly reduced the returns per pound of the cured leaf. Potassium, although producing no significant results, tended to improve leaf quality and consequently returns.

The results of the experiment are discussed in conjunction with the environmental and management factors, and in relation to findings by other workers. Some tentative recommendations are given.