

AN EXAMINATION OF THE INFLUENCE OF A SOIL  
INSECTICIDE AND A NITROGENOUS FERTILIZER  
ON GROWTH AND YIELD OF MAIZE.

S U M M A R Y

The mole cricket (*Scapteriscus vicinus*) is considered to be one of the most destructive pests of maize in Trinidad.

A factorial experiment was designed, therefore, to test the comparative effects of aldrin and sulphate of ammonia, either separately or in admixture, in combating this pest. The experiment was also designed to test the effects of nitrogen in assisting the recovery of partially damaged plants; or, in the absence of aldrin, in ensuring rapid growth through the early period when plants are most vulnerable to attack.

A brief study was made of foliar diagnosis, conducted by modern methods of rapid chemical analysis, with the object of demonstrating fluctuations of nitrate nitrogen, phosphorus, potassium, magnesium and calcium, both within plants and between treatments.

No significant results were obtained at any stage of growth, nor in the final yield. Unfortunately, the crop was not attacked by mole crickets, whilst nitrogen showed only a small, non-significant increase in yield. The foliar diagnosis, terminated after the first analysis, resulted similarly; nitrogen showing a small but non-significant increase in nitrate nitrogen, whilst differences within the remaining elements were not significant.

The mean control yield of 3050 lbs. shelled grain/acre was above average for the College Farm. The non-occurrence of a significant increase in yield is considered due to an insufficient nitrogen application.