
Studies on Yam/Maize Intercropping

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ABSTRACT

Results of three studies on yam/maize intercropping spanning 1976 to 1980 are reviewed. In the 1976 experiment, yam planted sole in March, yam interplanted with maize in March, and yam planted in April through March-planted maize were compared under three yam population densities and three fertilizer levels. Fertilizer application significantly enhanced tuber yields. Intercropping with maize reduced yam yields by 31%, while delayed planting of yam (April) depressed yam yields by 35%. Maize yields were reduced at increasing yam density and enhanced by fertilizer application, but not significantly.

In 1977 and 1978, six yam population densities and five fertilizer levels were evaluated in sole yam and yam intercropped with maize. Higher yam population densities and fertilizer levels significantly increased tuber yield. Grain yield was enhanced significantly by fertilization, but was unaffected by yam density.

In 1979 and 1980, 24 combinations of 5 population densities of yam and maize each as intercrops were compared. Depressions of the yield of each crop at higher population densities of its companion crop were significant. So also were the increases in the yield of each crop as its population density was raised.