

I N T R O D U C T I O N

Maize (Zea mays L) is grown as a staple food in many parts of the world. Its remarkable diversity of vegetative type makes it adaptable to a wide range of environmental conditions. As a seed producer it is superior to other cereals grown under the same climatic conditions. Providing as it does a valuable carbohydrate in the seed for man and stock and for various household and industrial uses, maize yields stover which may be returned to the soil, supplied as feed or bedding to stock and which can be used in the manufacture of cellulose products including plastic panels. In peasant communities, the stover may provide material for roofing. In the young state the succulent stems provide material for silage. While the germinating seed can be used in preparing beer, large quantities of damaged maize are annually used for the manufacture of industrial alcohol.

The study of a crop with such varied uses is very important, and it is not surprising that various experiments have been, and are being laid out principally in the United States but also in other parts of the tropical and sub-tropical countries to find out the best way of planting and cultivating the crop with a view to increasing yield. In Trinidad, when a spacing trial with maize was conducted at the Imperial College in 1931, it was to vindicate the then farm practice of planting at an interplant spacing of 12" (17). Fair yields have justified the continuation of this farm practice. As the 1931 trial did not include inter-row spacing closer nor indeed wider than the normal farm practice of 3', it was proposed to find out, in the present experiment, the effect on yield of combinations of different inter-row and interplant spacing, and also the effect of an application of a nitrogenous fertilizer.