

INTRODUCTION

Sorghum has not been grown to any extent in Trinidad, and the purpose of these preliminary investigations was to determine whether growing sorghum is an economic and feasible project in Trinidad. Some East Indian peasant farmers used to grow small amounts of grain sorghum in their gardens, but this practice has declined. On the sugar estate at Usine Ste. Madeleine small quantities of a forage sorghum are grown for feeding to stock.

This report was divided into three convenient sections. Section I deals with a botanical description of the varieties, pests and diseases which attacked the crop, a description of probable hybrids and some observations on flowering. Section II is concerned with the variety trial which was laid down, and the last Section, III, deals with some varieties obtained from Northern Nigeria and Barbados.

Ten varieties were available in sufficient amounts to permit a small scale statistically designed trial. The selection of varieties available covered a wide range of types, which meant that observations could be kept on these various kinds to determine which may be successful in Trinidad.

Four of these varieties were grain sorghums, i.e. Alpha, Early Kalo, Caprock and Hegar Hegarie. The first three are dwarf types specially selected for combine harvesting on a large scale in America and Australia. Hegarie is a mid-tall variety that is also popular in the U.S.A. and Australia, but is too tall for combine harvesting.

The five forage varieties included Italian, Red Hull Sumac, Sugardrip, Atlas and Imphee. Of these Atlas is an interesting variety as it produces a good crop of grain and forage and is really a dual purpose sorghum. Sumac and Sugardrip were once grown extensively in the U.S.A. for syrup production besides

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being used for forage. Imphee is rather a unique variety and a fuller description of it, and the other varieties, can be found in Section I.

The remaining variety, Allum, was obtained from Venezuela and is a grass variety usually grown for hay making.

The usual method of conducting general preliminary investigations is to put down a 3 or 4 fold replicated trial with as many treatments as possible to pick out the best ones. In this type of study, observations and yield, in particular, are considered more important than many developmental studies as the problems to be met are usually unknown. These principles were applied to this first report. It was decided to place all the varieties in a simple replicated yield trial. Owing to lack of time it was not possible to conduct investigations on forage production, as the yield of grain was considered to be more important in view of the author's future work on grain sorghums.

The varieties obtained from Nigeria and Barbados were placed in observation plots with a view to determining their possible importance.

HISTORY AND ORIGIN

Sorghum was probably one of the earliest plants to be domesticated and utilized by man. It has been cultivated now for many centuries in Africa and parts of Asia. A fresco on the tomb of Amenemhat, built in 2,200 B.C., depicting a harvest scene is said to represent sorghum, but considerable doubt has been attached to this statement (Vinall, 1936). However, a carving on the palace of Sennacherib, built at Nineveh in 700 B.C., shows a clear picture of a field of sorghum. Other records show that sorghum was grown in India and China in the first and third centuries A.D. respectively.

Tropical Africa has the greatest number of species and the most variation, so it is reasonable to suggest that this continent was the centre of origin of sorghum (Snowden, 1936). There is a possibility that some forms may have originated

independently ...