ROOT CUTTING AS AN AID IN HARVESTING GRAIN SORGHUMS WITH A "COMBINE"

JOHN P. CONRAD

INTRODUCTION

That the difficulty of harvesting the grain sorghums is one of the most important reasons why this excellent crop is not more largely grown seems evident from a knowledge of its superior advantages. The ability of the sorghums to produce large yields on a limited amount of moisture, their deep-rooting habit, their drought resistance, their heat tolerance, and ease of cultivation—all proclaim their advantages for warm arid regions. The ability to remain alive though practically dormant when moisture seems lacking, and to resume growth again when moisture is applied, demonstrates the vitality of this plant. This very vitality, the ability to keep the moisture of life within itself under trying conditions, while a great advantage during the growth of the crop, is a disadvantage when it comes to its harvest. Even though the crop has been produced and the grain has filled, the plants still take advantage of any favorable conditions which are presented to keep on growing. Consequently, at harvest the farmer has on his hands a crop which contains too great an amount of moisture to gather safely in the condition it is in. During the advancing fall months, at best, conditions are but poor for drying out the excess moisture to secure safety in storing the final product.

In the fall of 1923, by comparing foot by foot the moisture in the soil under a crop of grain sorghums grown without irrigation with the theoretical wilting coefficient (Briggs and Shantz) of the soil, it...