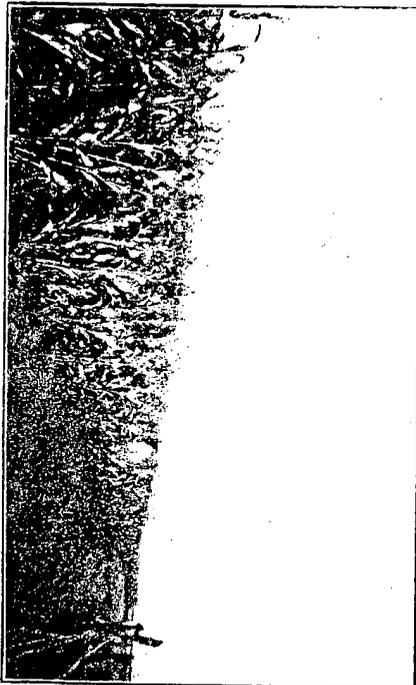


University of Arizona

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A field of Early Amber sorghum grown by a Salsbur Spring Valley settler in 1908 without irrigation.

Dry-Farming in the Arid
Southwest

By R. W. Clothier

Tucson, Arizona, February 1, 1913

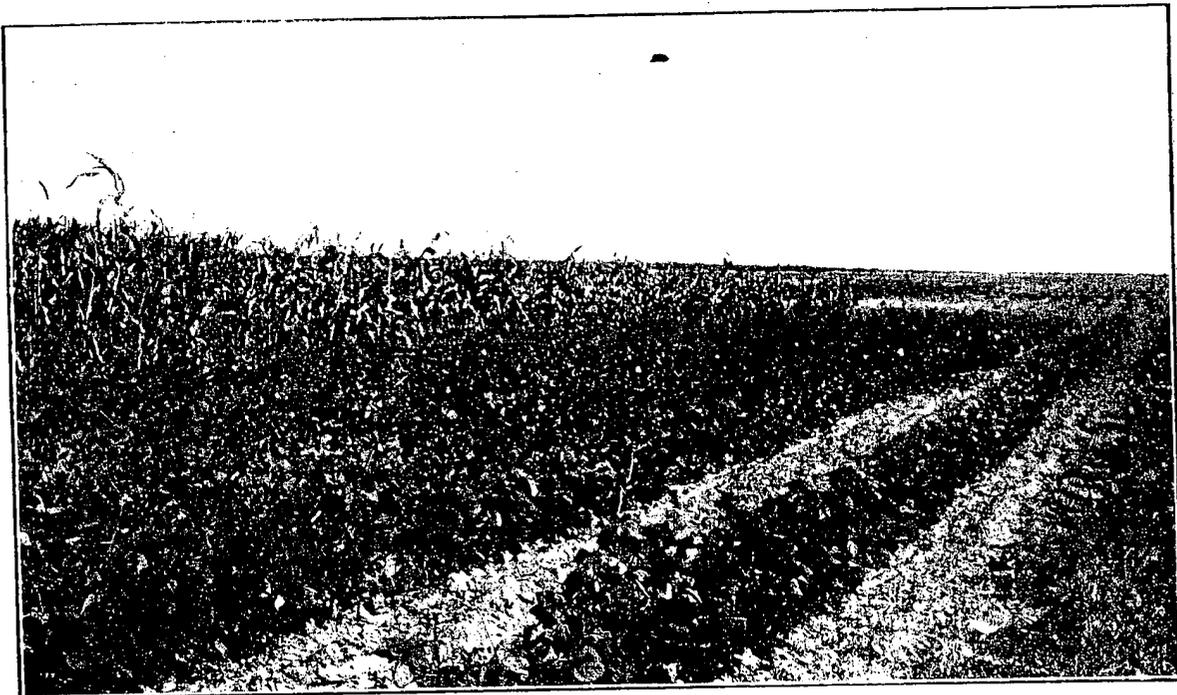


Plate 1.—A plot of Pink beans, August 20, 1910, at the McNeal dry-farm. Planted June 9 after 4 inches of supplemental irrigation.

DRY-FARMING IN THE ARID SOUTHWEST

By R. W. Clabrier

INTRODUCTION

Dry-farming is not a new system of farming. Rather, it is a new name for practices which, probably since ancient times, have been employed by certain of the Old World peoples in the cultivation of their semi-desert empires. In the United States, however, it is of comparatively recent development. It was employed as early as 1865 by the farmers of Bear River Valley, Utah,* in growing wheat on higher lands after their fields had been ruined by over-irrigation. Later, H. W. Campbell, a farmer of North Dakota, began experiments in accumulating and conserving moisture by methods of tillage; and he invented an implement called a subsurface packer. This work brought him before the public, and the Santa Fe Railroad made arrangements with him for investigations on a much larger scale in western Kansas and western Nebraska. The results of these investigations, together with his invention, have now identified his name with dry-farming wherever it is practiced. Since the beginning of Campbell's work, investigations have been made and publications on various phases of the subject have been issued by the Experiment Stations of many western states and by the United States Department of Agriculture.

Dry-farming is not farming without water, as has been supposed by many persons not conversant with the system, but who have heard of the results obtained by it. Briefly defined, dry-farming consists in accumulating and retaining in the soil as much as possible of a limited rainfall, until sufficient water is stored to mature a crop. The most economical use possible is then made of the stored water by growing early, quickly maturing, and drought resistant crops, and by giving such crops thorough intertillage while growing, provided their habits of growth allow such intertillage.

TECHNIQUE OF DRY-FARMING

Water is accumulated in the soil by means of deep plowing, or subsoiling, thus providing a large amount of loose soil into which the

*Utah Sta. Bull. 112, p. 95.