EFFECT OF FERTILIZERS ON THE FRUITING ACTIVITIES OF COTTON PLANTS

J. D. WARNER

INTRODUCTION

During the past few years detailed fruiting studies have been made on a large number of representative plants on some of the leading varieties of cotton; also the effect of various cultural treatments, spacing, pruning, time of planting, seed treatment and other practices have been rather carefully studied. However, behind all of this, there is perhaps a controlling influence that, in so far as the writer has been able to ascertain, has not received very careful and systematic study by any workers in the South.

One of the most desirable characters in the production of cotton under boll weevil conditions is earliness. It is the early bloom that makes the boll. One bloom during the first two weeks of blooming is worth from five to ten late in the season. Therefore, any practice that will increase the earliness of the crop and hasten its maturity is to be regarded with favor, provided total yield and quality are not sacrificed.

Earliness may be measured in a number of different ways. Early squaring, rapidity of squaring, early blooming, percentage of blooms developing into bolls early in the season, short boll period and other factors which determine the earliness of the cotton crop. Each element in a complete fertilizer may exert a considerable influence on any one or all of these different factors. It may cause the plant to develop in a shorter time and begin fruiting earlier, or cause it to set fruit more rapidly, or perhaps it may have some influence on the length of time required for a boll to develop and open. The work here reported was undertaken with a view of determining the relative value of various fertilizer treatments on these factors.

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