INTRODUCTION

Methods of controlling the quality of crops through the use of rotations, fertilizers, and legumes, and by proper dates of seeding and harvesting are becoming known. It is important to determine and apply methods of controlling the quality of crop products through environment, but the make-up of the plants themselves also must be considered. By improvement in the inherent characteristics of crop varieties so that we secure a significant increase in yield and quality for each environment evolutionary progress is made, and only when a maximum for each environment results complete success will have been attained.

Marked improvement in production through the use of better varieties frequently occurs. There are also significant differences in the quality of varieties. With wheat, one need go no further than the Marquis variety for an outstanding example of improvement in both quality and production. While engaged in the important problems of maintaining and improving the quality of crop products by cultural and other practices, therefore, we should also concern ourselves with improving the inherent quality of the crop itself.

The term quality is relative and involves many factors. In milling and baking experiments with wheat conducted by the United States Department of Agriculture 20 characteristics are studied. Each of these and probably several more are important quality factors. There is no one determination to be applied to wheat or flour which will accurately reveal its quality. Of all those used to indicate the

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4. BREEDING WHEAT FOR HIGH PROTEIN CONTENT\(^1\)

J. Allen Clark\(^2\)

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\(^1\)Paper read as a part of the symposium on "Controlling the Quality of Crops" at the meeting of the Society held in Chicago, Ill., November 17, 1925.

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