WHEAT SEEDBED PREPARATION

(Abstract)

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The farmer holds within his own control the two most important factors that assure a fair yield of wheat, namely, (i) rotation and (2) summer tillage. During a 15-year study of wheat production at the Kansas experiment station the average yields showed that the best crop insurance is to grow wheat in a rotation and to prepare the seedbed by plowing in July, subsequently cultivating when necessary to destroy weed growth.

When wheat is grown continuously upon the same land, even with the best known methods of seedbed preparation, the crop is subject to plant diseases such as foot-rot, and is more likely to be damaged by insect attack. Where wheat has been grown in rotation, there has not been any indication of the foot-rot disease, though the disease may be present on adjoining fields that are cropped continuously to wheat. Chinch bugs always do more damage to wheat grown on land continuously cropped to wheat than to wheat cropped in a rotation. If wheat is to be grown successfully in the future, better methods of wheat culture are necessary. This means growing wheat in rotation and adopting timely tillage methods.

The difference in yield between July and September plowing has averaged from 10 to 14 bushels per acre in three different tillage experiments conducted on the agronomy farm at Manhattan. If plowing cannot be done in July or early August, double discing in July and plowing the fore part of September will result in greater yields than late plowing without the previous discing. In the experiments under consideration wheat on the ground double disc ed early produced, on the average, 8 bushels per acre more than wheat sown on late plowed ground without previous discing.

Land can be listed more rapidly than it can be plowed. Single listing in July has given an average yield that is 2 bushels per acre under that for plowing on the same date. Though early plowing is preferable, it is better to list early than to plow late.

Four-inch July plowing in preparing a wheat seedbed has produced as high yields as 7-inch plowing at the same date. In the case of a...