SEED CERTIFICATION IN THE UNITED STATES
AND CANADA¹

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TODAY, as agricultural scientists look in retrospect upon their work to see what they have accomplished that is of value to the war effort, they can justifiably focus their attention upon a particularly significant contribution—seed certification. For, as a part of the broad program of the plant breeder, seed certification is helping to accomplish the purpose for which it was initiated, the improvement of the major and many of the minor crop varieties grown on American farms.

WHAT IS SEED CERTIFICATION?

Certified seed is generally recognized to be seed of known superior heredity and quality verified by and traceable through the periodic inspection and records of an impartial and officially recognized agency. It is the “known superior heredity” factor that chiefly distinguishes certified from other types of seed. Seed certification sponsors and identifies a product which is superior not only in physical characteristics but fundamentally in the germ plasm of the seed.

Were it not for this highly significant factor of known heredity, there would be little, if any, justification for programs of seed certification. For the purpose of ordinary protection there are in operation state and federal laws and regulations in the United States and Canada covering the sale, testing and labeling of farm seeds. These laws and regulations safeguard the buyer to a considerable extent, especially if he is sufficiently interested to avail himself of the assistance provided. Hence, from the standpoint of mechanical purity and quality, present seed regulations take care of the situation fairly well.

Mere laws and regulations, however, do not help the farmer much in securing the inheritance he requires of the seed he is buying. One cannot determine through analysis the true production potentialities of seed and, for the most part, varieties cannot be distinguished by seed characteristics. Inspection of the growing seed crop sheds considerably more light on varietal identification and purity than does mere examination of the seed. Even field inspection may not be adequate. Some varieties are not easily distinguished from other varieties in any stage of development. An example of this is the newly-developed wilt-resistant Ranger alfalfa. On the basis of morphologic characteristics, it cannot be distinguished in the field from several other varieties. Therefore, to be certain of the identity of Ranger alfalfa, seed and field inspection must be combined with carefully kept records which refer any lot of certified seed to the original stocks of the plant breeder.

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