THE BEGINNINGS OF CRESTED WHEATGRASS IN NORTH AMERICA

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The demand for wheat before and during the first World War brought about a marked change in the agriculture of the Great Plains. Several million acres of native grass lands in the Northern Great Plains area of the United States and Canada were broken up and seeded to wheat during the period of 1905 to 1920. There appeared to be no need for a new dry-land grass at that time. Finally, the dry years of the middle thirties came on and abandoned wheat lands were in urgent need of grass. One could hardly have foreseen the heroic role that crested wheatgrass was to play in this living drama of the dry plains. It was the only grass available that would adequately fulfill this role. Already its hardiness, productiveness, and longevity had been proved by experiments of the U. S. Dept. of Agriculture and the state agricultural experiment stations.

It was the privilege of the writer to make some of the early tests of this new grass, and to increase and distribute seed for experimental plantings that furnished the foundation seed for the later commercial production. The following is quoted from Bureau of Plant Industry Bulletin 196, published in 1910 (2):

"The grass botanically known as Agropyron cristatum, recently introduced from Siberia by the United States Department of Agriculture, gives evidence of being a very hardy grass. In cooperation with the Office of Forage-Crop Investigations, seed of six different lots, S.P.I. Nos. 19536 to 19541, inclusive, was planted in the grass nursery at Belle Fourche in 1908 (Fig. 1), and larger areas were planted again in 1909. It was observed that this species starts growth very early in the spring, and is not injured by severe frosts. In habit of growth it is like slender wheatgrass, being a 'bunchgrass' without creeping rootstocks, but in the character of its rather harsh foliage it somewhat resembles western wheatgrass. Further tests will be made of seed from several sources, and if the species proves to be valuable as a hay grass, selections of superior strains will be made."

The wheatgrasses, genus Agropyron, include some of the most im-

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2Associate Agronomist. From 1908 to 1921 the writer was employed by the Office of Alkali and Drought Resistant Plant Breeding Investigations (T. H. Kearney, in charge), Bureau of Plant Industry. The testing and selection of certain forage crops—millet, sorgo, alfalfa, brome grass, and crested wheatgrass—was done through informal cooperation with the Division of Forage Crops and Diseases. The work was conducted at the Belle Fourche (South Dakota) Field Station, Division of Western Irrigation Agriculture; and at the Dry Land Agriculture field stations at Akron, Colo.; Ardmore, S. Dak.; and Mandan, N. Dak. The writer wishes to acknowledge the generous assistance given by members of the Division of Forage Crops, by Johnson T. Sarvis, George A. Rogler, and Charles Ray, Jr., and by the several correspondents.

3Figures in parenthesis refer to "Literature Cited", p. 250.