APPROXIMATELY one-third of the Kansas wheat acreage in the decade ending with 1939 was planted with varieties developed by Earl G. Clark, a private wheat breeder and farmer living near Sedgwick, Kans. He became interested in wheat improvement when, as a boy of 15, he found three black heads of wheat in a field of Turkey. The seeds from these were increased and distributed as Blackhull wheat in 1917. This represented the foundation of Mr. Clark's wheat improvement work, and since that time he has distributed five other varieties related to Blackhull, viz., Superhard (Blackhull), Clarkan, Kanhull, Chiefkan, and Red Chief. Blackhull, the most widely distributed variety of this group, was grown also in other states. The estimated acreage of this variety in the United States in 1939 was more than 8 million acres (7). Early Blackhull also belongs in this group of varieties and is a selection out of Blackhull made by A. P. Haeberle, a farmer of Clearwater, Kans. Early Blackhull is grown at the present time on a considerable acreage in southwest Kansas and in parts of Oklahoma and Texas. It is the purpose of this paper to trace the development and to indicate the merits and weaknesses of each variety of the group.

Mr. Clark's methods are of interest because of the results obtained with limited material and equipment. Plant breeding has been referred to as an art as well as a science, and Mr. Clark apparently has used artistic talent effectively. All Blackhull wheats are visually attractive because of such characteristics as strong straw, bright plump grain, and attractive chaff color. He has depended on variations that occurred naturally due, presumably, in most cases, to natural hybridization. Spaced plantings have been used to some extent, but much of the actual selection work has been from field-planted material. This has been accompanied and followed by careful selection of large dark hard kernels by cleaning devices and by hand. Test plots have been maintained from which preliminary yield data were obtained. These, for the most part, consisted of single long rows.

Descriptions and some data have been published about this group of varieties, especially Blackhull (4, 17). Mr. Clark yearly has issued circulars describing his wheats. Technical descriptions of them, except Red Chief, have been published by Clark and Bayles (5, 6). However, most of the information concerning them is scattered through many publications, some of which are not generally available. For that reason a few statements concerning the origin and time of distribution of each variety will be given here.

1Contribution from the Division of Cereal Crops and Diseases, Bureau of Plant Industry, Soils, and Agricultural Engineering, Agricultural Research Administration, U. S. Dept. of Agriculture, and the Department of Agronomy, Kansas Agricultural Experiment Station, Manhattan, Kans. Contribution No. 359 from the Department of Agronomy. Received for publication May 24, 1944.
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3Figures in parenthesis refer to "Literature Cited", p. 777.