

REGISTRATION OF DOUBLECROP WHEAT¹

(Reg No. 602)

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'DOUBLECROP' wheat (*Triticum aestivum* L. em Thell.) is a soft red winter wheat cultivar released by the Arkansas Agricultural Experiment Station in 1975. Doublecrop was tested initially as Arthur-6 and Ark. Early Arthur Sel; later it was assigned CI 17349.

Doublecrop is a pure line selection from 'Arthur'. The selection was made in 1970 from one of several plant rows of Arthur which were being grown for the development of homozygous lines for a genetic study. This particular plant row was markedly earlier than the other plant rows of Arthur. Because there was a distinct need for earlier maturing wheat cultivars in Arkansas for the practice of doublecropping with soybeans (*Glycine max* L. Merr.), the selection was increased and placed in yield trials in 1972. It was entered into the state varietal tests in 1973 and into the Uniform Eastern Soft Red Winter Wheat and Uniform Southern Soft Wheat Nurseries in 1974.

Doublecrop closely resembles Arthur for most characteristics; however, it differs from Arthur by being about 4 days earlier in maturity when grown in Northeast Arkansas. The heads are more awnletted than Arthur. Doublecrop plants exhibit adult resistance to leaf rust (*Puccinia recondita* Rob. ex Dem. F. sp. *tritici*) under field conditions whereas the seedling reaction is the same as that of Arthur. In addition, the peduncle color at anthesis is blue-green for Doublecrop while Arthur peduncles are more of a green color. Kernel properties and milling and baking qualities of Doublecrop are similar to those of Arthur. The test weight of Doublecrop seed has been slightly heavier than that of Arthur.

Although Doublecrop has been equal to Arthur for yield in Arkansas, its area of adaptation appears to be somewhat limited. Since planting in early fall may cause Doublecrop to head early enough in the spring to be damaged by late frosts, its use is recommended for late plantings, such as following soybeans and cotton.

Breeder seed of Doublecrop will be maintained by the Arkansas Agricultural Experiment Station, Plant variety protection will not be sought.