REPORT FROM THE SMALL GRAIN VARIETY REVIEW BOARD

VARIETY	BREEDER	SPONSORING INSTITUTION
Bonanza	D. [*] E. Glenn J. A. Wilson	DeKalb AgResearch, Inc.

Information pertinent to certifying agencies which was requested on the application, and the information submitted by the applicant, is given below. The applicant should be contacted if additional information is desired.

1. State how the variety differs from all prior varieties of public knowledge.

Distinct by virtue of its breeding and semidwarfism. It is 10^{11} shorter than Chris and similar varieties.

2. Describe origin, breeding procedure, and time sequence used to develop the variety.

Bonanza resulted from pedigree selection and traces back to an \mathbb{F}_8 bulked row. The selection began on \mathbb{F}_5 segregating stocks from a Mexican-originated cross that involved Mexican and N. American spring wheats.

3. State area of probable adaptation, primary use of the variety, and market subclass.

Mainly adapted to the high rainfall spring wheat area of the North-Central Plains and Minnesota. Performs well in Western areas under irrigation. Can be cultured as dark Northern spring.

4. Information required to establish identity and uniqueness including information of value to certification agencies.

Lax spike; white glumes; long awns; kernels midlong to short; cheeks rounded to angular crease midwide; semidwarf height. Very uniform. Spring growth habit. Maturing similar to Chris, day length insensitive. Highly resistant to leaf rust in Northern Plains. Excellent adult plant resistance to prevalent races of stem rust in the Northern Plains. Good seedling and adult plant resistant to the prevalent Mexican races of stem and stripe rust. Applicant's data shows Bonanza yielded 20.4% above Chris and 10% above Ped River 62. Overall quality rated good in applicants's tests. Protein tended to be low, flour yield satisfactory, gluten strong, absorption tended to be low, loaf volume adequate considering protein content. Resistant to shattering. Isolation shall be 10 rods from other wheat or rye. Seed plots are rogued closely, several times: land not in wheat 2 years, weed free, and free from volunteer wheat.

- 5. Only one generation each of foundation, registered and certified.
- 5. Shall be offered for sale in 1970, and will be the registered class.