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**TrDR US Stewart Cultivar Source: North Dakota Agricultural Experiment Station,
Fargo (North Dakota) US CID:4941 SID:1**

J Allen Clark. Registration of improved wheat varieties XVI: Stewart. *J. American Society of
Agronomy* 36 (5): 449-451 (1944)

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STEWART, REG. No. 334

Stewart (Ld. 111, C.I. 12066) was developed in cooperative experiments by the Division of Cereal Crops and Diseases, Bureau of Plant Industry, Soils, and Agricultural Engineering, U. S. Department of Agriculture, and the North Dakota Agricultural Experiment Station. It is a product of the same backcrossing program which produced Carleton. Stewart resulted from a selected progeny of Mindum × Vernal emmer backcrossed to Mindum. A selected F₄ progeny of the

TABLE 2.—Annual and average yields in field plots of Carleton, Stewart, and Mindum wheats at Langdon, N. Dak., and other cooperating stations, and test weights at Langdon.

Variety	Yield in bu. per acre					Percentage of Mindum
	1940	1941	1942	1943	Average	
Langdon, N. Dak.						
Stewart.....	26.8	36.9	39.4	45.9	37.2	103.0
Mindum.....	25.1	34.9	39.1	45.4	36.1	100.0
Carleton.....	25.9	37.2	34.4	40.8	34.6	95.9
Fargo, N. Dak.						
Mindum.....	15.1	27.9	54.3	20.3	29.4	100.0
Stewart.....	15.1	26.6	54.1	19.8	28.9	98.3
Carleton.....	14.9	23.9	47.3	16.4	25.6	87.1
St. Paul, Minn.						
Mindum.....	—	27.5	43.0	30.3	33.6	100.0
Stewart.....	—	24.3	42.7	29.9	32.3	96.1
Carleton.....	—	19.0	40.8	23.7	27.8	82.7
Crookston, Minn.						
Carleton.....	—	30.7	33.7	37.1	33.8	100.6
Mindum.....	—	30.4	35.1	35.4	33.6	100.0
Stewart.....	—	36.3	26.9	35.7	33.0	98.2
Morris, Minn.						
Stewart.....	—	—	—	27.4	27.4	110.5
Mindum.....	—	—	—	24.8	24.8	100.0
Carleton.....	—	—	—	24.7	24.7	99.6
Brookings, S. Dak.						
Stewart.....	—	—	—	24.5	24.5	124.4
Mindum.....	—	—	—	19.7	19.7	100.0
Carleton.....	—	—	—	16.1	16.1	81.7
Av. Six Stations, 16 Tests						
Stewart.....	21.0	31.0	40.8	30.5	32.0	100.6
Mindum.....	20.1	30.2	42.9	29.3	31.8	100.0
Carleton.....	20.4	27.7	39.1	26.5	29.2	91.8
Test Weights at Langdon, N. Dak.						
Carleton.....	64.0	60.0	62.0	64.0	62.5	100.6
Stewart.....	63.0	59.8	62.0	64.5	62.3	100.3
Mindum.....	63.5	58.5	62.0	64.5	62.1	100.0

first cross was crossed to Mindum in 1933, giving the first backcrossed hybrid. A selected F_4 progeny of this backcross was again crossed to Mindum in 1936 and an F_4 row from this second backcross progeny was selected in 1938 and increased as Ld. III and later named Stewart.

Stewart is superior to Mindum or Kubanka in stem-rust resistance, being resistant to the prevailing races of stem rust. It is equal to Mindum in yield, test weight, and macaroni quality, and is similar to Mindum in strength of straw. Stewart is slightly more difficult to thresh and less likely to shatter, a characteristic obtained from the emmer parent.

Although inferior to Carleton in strength of straw, Stewart appeals to many growers because it has been rather consistently higher in

yield. The annual and average plot yields of Stewart in comparison with Mindum and Carleton at Langdon and other cooperating stations are shown in Table 2.

Stewart was released for distribution in 1943. For further information on Carleton and Stewart durum wheats, see Smith.⁶

⁶SMITH, GLENN S. Two new durum wheat varieties. N. Dak. Agr. Exp. Sta. Bimo. Bul., 5: No. 4, 2-5. 1943.