REGISTRATION OF LEW WHEAT1
(Reg. No. 582)
F. H. McNeal and M. A. Berg2

'Lew' wheat (Triticum aestivum L. em. Thell.), CI 17429, Montana selection MT 711, is a hard red spring wheat cultivar that is resistant to the wheat stem sawfly (Cephus cinctus Norton). It was developed cooperatively by the Montana Agricultural Experiment Station, the North Dakota Agricultural Experiment Station, and the ARS, USDA. Lew was selected at Minot, N. D. in 1969, from the cross 'Fortuna'/S6285. S6285 is a selection from the cross ND4/‘Rescue’//11-50-17/513349, and includes the cultivars 'Thatcher', 'Kenya Farmer 385 4c', 'Rescue', 'Chinook', 'Fortuna', 'Kenya 58', and 'Newthatch' in its pedigree.

The cross from which Lew was selected was made in 1964. An F3 seed bulks were subsequently harvested from an F2 head row at Minot, N. D. in 1969, and this seed was then used for planting in a single row yield nursery at Bozeman, Mont. in 1970. This selection was advanced to the Montana Yield Nursery in 1971 when it was assigned Montana Selection number MT 711. MT 711 was then grown in the Montana Advanced Yield Nursery at six research centers, 1972-1973. It was also included in the International Sawfly Yield Nursery 1972-1975 and the Uniform Regional Hard Red Spring Wheat Nursery 1974-1975.

Lew has a solid stem that provides resistance to the wheat stem sawfly, an insect pest found in wheat producing areas of Montana and North Dakota. The cultivar has white straw and chaff and is midseason in maturity. The spike is awned, midseason to late in maturity. The awns are white and the glumes are glabrous. Kernels are red, hard, and midlong; the brush is mid sized.

Montana data suggest that Lew has a yield and test weight advantage over 'Tioga', a sister selection released in North Dakota and Montana in 1974. Lew is resistant to stripe rust (Puccinia striiformis, West) and leaf rust (Puccinia graminis f. sp. tritici (DC.) Wint. f. sp. tritici (Eriks) Carl.), while Tioga is susceptible to both. Lew is also resistant to stem rust (Puccinia graminis f. sp. tritici Eriks. & E. Henn.). The Montana Cereal Quality Laboratory rates Lew superior to Tioga in both milling and baking quality, and superior to Fortuna in baking quality.

Approximately 21,400 kg (785 bu) of breeder seed was released to Montana certified seed growers in the spring of 1976. Breeder and foundation seed will be maintained by the Plant and Soil Science Department, Montana State University, Bozeman, MT 59715.

2 Research agronomists, ARS, USDA, Plant and Soil Science Dep., Montana State Univ., Bozeman, MT 59715.

REGISTRATION OF DAW'S WHEAT1
(Reg. No. 584)
C. J. Peterson, Jr., O. A. Vogel, D. W. George, and R. E. Allan2

'Daw's' wheat (Triticum aestivum L. em. Thell.), CI 17430, Montana selection MT 7156, is a hard red spring wheat cultivar developed cooperatively by the Montana Agricultural Experiment Station and the ARS, USDA. Daw's was selected at Minot, N. D. in 1969, from the cross 'Fortuna'/S6285. S6285 is a selection from the cross ND4/‘Rescue’//11-50-17/513349, and includes the cultivars 'Thatcher', 'Kenya Farmer 385 4c', 'Rescue', 'Chinook', 'Fortuna', 'Kenya 58', and 'Newthatch' in its pedigree.

The cross from which Daw's was selected was made in 1964. An F3 seed bulks were subsequently harvested from an F2 head row at Minot, N. D. in 1969, and this seed was then used for planting in a single row yield nursery at Bozeman, Mont. in 1970. This selection was advanced to the Montana Yield Nursery in 1971 when it was assigned Montana Selection number MT 711. MT 711 was then grown in the Montana Advanced Yield Nursery at six research centers, 1972-1973. It was also included in the International Sawfly Yield Nursery 1972-1975 and the Uniform Regional Hard Red Spring Wheat Nursery 1974-1975.

Daw's has a solid stem that provides resistance to the wheat stem sawfly, an insect pest found in wheat producing areas of Montana and North Dakota. The cultivar has white straw and chaff and is midseason in maturity. The spike is awned, fusing to lax, and has a tendency to nod at maturity. The awns are white and the glumes are glabrous. Kernels are red, hard, and midlong; the brush is mid sized.

Montana data suggest that Daw's has a yield and test weight advantage over 'Tioga', a sister selection released in North Dakota and Montana in 1974. Daw's is resistant to stripe rust (Puccinia striiformis, West) and leaf rust (Puccinia graminis f. sp. tritici (DC.) Wint. f. sp. tritici (Eriks) Carl.), while Tioga is susceptible to both. Daw's is also resistant to stem rust (Puccinia graminis f. sp. tritici Eriks. & E. Henn.). The Montana Cereal Quality Laboratory rates Daw's superior to Tioga in both milling and baking quality, and superior to Fortuna in baking quality.

Approximately 21,400 kg (785 bu) of breeder seed was released to Montana certified seed growers in the spring of 1976. Breeder and foundation seed will be maintained by the Plant and Soil Science Department, Montana State University, Bozeman, MT 59715.

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