REGISTRATION OF PEAK WHEAT

D. W. Sunderland and Martin Wise

'Peak' hard red spring wheat (Triticum aestivum L. em. Thell.), C.I. 14888, was developed cooperatively by the Idaho Agricultural Experiment Station and the Plant Science Research Division, U.S. Department of Agriculture. It was harvested at Aberdeen in 1964. It was placed in yield trials so rust tests could be made at Aberdeen and Moscow, Idaho in 1961. The stripe and stem rust-resistant F2 line resulting in Peak was harvested at Aberdeen in 1964. It was placed in yield trials in 1965 at which time plants were selected for uniformity of height. The reselected bulk was released in 1971 by the Agricultural Experiment Stations of Idaho and Oregon and the Plant Science Research Division, Agricultural Research Service, U.S. Department of Agriculture, for use on the irrigated lands of Idaho and Oregon.

Peak is a semidwarf, stiff-strawed variety, of medium maturity. The average height of Peak grown under irrigation is 76 cm; however, it may vary from 55 to 101 cm, depending upon cultural practices and location. It is resistant to the prevalent races of leaf, stripe, and stem rusts found in Idaho. Average test weight of Peak is equal to that of 'Thatcher;' however, individual plants of Peak vary in seed plumpness. Under irrigation, Peak has outyielded presently grown varieties, but on dryland it yields no more than 'Moran.' The milling and baking quality of Peak grown under irrigation is satisfactory, but slightly inferior to that of Moran. Bread dough from Peak grown on dryland has a tendency to be buoyy.

Spikes of Peak are inclined, awned, fusiform to oblong and middense. Glumes are glabrous, white, long, and midwide; shoulders are midwide, oblique; beaks are midwide, acuminate; awns, 2 to 7 mm long. Awns are white, 1 to 6 cm long. Kernels are hard, red, ovate and midlong with a narrow middeep crease. Kernel cheeks are rounded and the midsized brush is short to midlong.

Breeder seed is maintained by the University of Idaho at the Tetonia Branch Experiment Station.

REGISTRATION OF SPRINGFIELD WHEAT

D. W. Sunderland and Martin Wise

'Springfield' soft white spring wheat (Triticum aestivum L. em. Thell.), C.I. 14589, was developed cooperatively by the Idaho Agricultural Research Service, U.S. Department of Agriculture and the University of Idaho. Approved by the Director of the Agricultural Experiment Station as Research Paper Number 860. Received Nov. 19, 1971.

'Springfield' is a semidwarf variety with moderately stiff straw. The average height of Springfield grown under irrigation is 84 centimeters; however, it may vary from 55 to 101 cm depending upon cultural practices and location. It is resistant to the prevalent races of stripe and stem rust found in Idaho, but it is susceptible to leaf rust and powdery mildew.

Spikes of Springfield are erect, awnleted, oblong to clavate and dense (lower ¼ of spike is middense). Glumes are glabrous, white, long, midwide. Shoulders are midwide, oblique to rounded and beaks are obtuse (approximately .5 mm long). The kernels are white, short, soft, oval to ovate with a midwide, deep crease. Kernel cheeks are rounded and the brush is midsized and midlong.

Breeder seed is maintained by the University of Idaho at the Tetonia Branch Experiment Station.

REGISTRATION OF TWIN WHEAT

D. W. Sunderland and Martin Wise

'Twin' soft white spring wheat (Triticum aestivum L. em. Thell.), C.I. 14588, was developed cooperatively by the Idaho Agricultural Experiment Station and the Plant Science Research Division, U.S. Department of Agriculture. A rust-susceptible, short-strawed 'Lemhi' type, 'Norin 10'/'Brevor'/'3*Lemhi 53/3/Lemhi 62,' was crossed with a stripe and stem rust-resistant line similar to 'Lemhi 66,' 5*Lemhi 53/2/7*Lee/'Chinese'/Aegilops umbellulata at the Aberdeen Branch of the Idaho Experiment Station in 1963. Stripe and stem rust-resistant lines were selected from the F2 and F3 progeny of this cross during 1965 and 1966. Twin, a sister selection of 'Springfield,' was released by Idaho, Oregon, and Washington Agricultural Experiment Stations and the U.S. Department of Agriculture in 1971 for use on irrigated and high rainfall dryland acreage in the Pacific Northwest.

Twin is a semidwarf moderately stiff-strawed variety with medium maturity. The average height of Twin grown under irrigation is 84 centimeters; however, it may vary from 55 to 101 cm depending upon cultural practices and location. It is resistant to the prevalent races of stripe and stem rust found in Idaho, but it is susceptible to leaf rust and powdery mildew.

Spikes of Twin are erect to inclined, awnless (rarely apically awnleted, awnless 2 to 6 mm long, oblong to clavate, dense (lower ¼ of head is middense). Glumes are glabrous, white, long and wide; shoulders are midwide, oblique to rounded and beaks are midwide, obtuse (approximately 5 mm long). The kernels are white, short, soft, oval to ovate with a midwide deep crease. Kernel cheeks are rounded and the brush is midsized and midlong.

Breeder seed is maintained by the University of Idaho at the Tetonia Branch Experiment Station.