REGISTRATION OF PEAK WHEAT

D. W. Sunderman and Martin Wise

'Peak' hard red spring wheat (Triticum aestivum L. em. Thell.), C.I. 14587, resulted from seed of F4 lines of Tezanos Pinto Premiere/Sonora 64 sent by the Rockefeller Foundation in Mexico to the University of Idaho in 1953. Seed was divided so rust tests could be made at Aberdeen and Moscow, Idaho in 1954. It was placed in yield trials so rust tests could be made at Aberdeen and Moscow, Idaho in 1964. The stripe and stem rust-resistant F4 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 Station, 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 53 to 101 cm, depending upon cultural practices and location. It is resistant to the prevalent races of leaf, stem, and stem rust found in Idaho. Average test weight of Peak is equal to that of 'Thatcher,' however, individual plants of Peak vary in stem rust resistance. Peak has outyielded presently grown varieties, but on dryland it yields no more than 'Thatcher.' The milling and baking quality of Peak grown under irrigation is satisfactory, but slightly inferior to that of 'Thatcher.' Bread dough from Peak grown on dryland has a tendency to be sticky.

Spikes of Peak are inclined, awned, fusiform to oblong and midlong. Glumes are glabrous, white, long, and midwide; shoulders are midwide, obtuse (approximately .5 cm long). The kernels are white, short, soft, oval to ovate with a middeep crease. Kernel checks are rounded and the midwide 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. Sunderman and Martin Wise

'Springfield' soft white spring wheat (Triticum aestivum L. em. Thell.), C.I. 14589, was developed cooperatively by the Idaho Agricultural Experiment Station and the Plant Science Research Division, Agricultural Research Service, U.S. Department of Agriculture. A rust-susceptible, short-strawed 'Lemhi' type, 'Norin 10'/Brevor'/3*Lemhi 53/2/7*Lemhi 53/2/7*Lee'//'Chinese'/Aegilops umbellulata at the Aberdeen Branch of the Idaho Experiment Station in 1963. Stipe and stem rust-resistant lines were selected from the F2 and F3 progeny of this cross during 1965 and 1966. Springfield, 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.

Spikes of Springfield are erect, awnleted, oblong to clavate and dense (approximately .5 cm long). The kernels are white, short, soft, oval to ovate with a midwide, deep crease. Kernel checks are rounded and the midsize brush is short to midlong.

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

REGISTRATION OF TWIN WHEAT

D. W. Sunderman 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, Agricultural Research Service, U.S. Department of Agriculture. A rust-susceptible, short-strawed 'Lemhi' type, 'Norin 10'/Brevor'/3*Lemhi 53/2/7*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. Stipe 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.

Spikes of Twin are erect to inclined, awnleted, awnless 2 to 6 mm long, oblong to clavate, dense (lower 1/4 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 checks are rounded and the brush is midsize and midlong.

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