WL 600 is equal to Moapa in nondormancy. It can be utilized in much of the southwestern United States for hay, soilage, and dehydralization. WL 600’s high yielding capability can be partly attributed to its greater persistence and higher levels of resistance than Moapa to downy mildew and to anthracnose. WL 600 is upright and moderately uniform in growth habit. The flowers are purple and stems demonstrate frequent axillary branching.

WL 450, WL 451, WL 501R, and WL 600 seed are increased on a three generation basis; breeder, foundation, and certified. Breeder seed of these varieties were produced in isolation in Kern County, Calif. Reserve breeder seed for all four cultivars is maintained in temperature-humidity controlled storage by the Waterman-Loomis company. Foundation seed is produced in the San Joaquin Valley of California from fields planted with breeder seed. Certified seed is produced from either foundation or breeder seed. No other class or generation of seed will be recognized.

WL 450, WL 451, WL 501-R, and WL 600 were favorably reviewed by the New Certified Alfalfa Variety Review Board in Dec. 1972 and subsequently approved for certification.

REGISTRATION OF BONNIEBLUE KENTUCKY BLUEGRASS

(Reg. No. 10)

C. R. Funk, R. E. Engel, G. W. Pepin, A. M. Radko, and R. J. Peterson*

'BONNIEBLUE' Kentucky bluegrass (Poa pratensis L.) was developed cooperatively by the New Jersey Agricultural Experiment Station, the United States Golf Association Green Section, and E. F. Burlingham and Sons. The first commercial seed was harvested in 1972. NJE P-106 was the experimental designation for this variety. Bonnieblue is a highly apomictic first generation hybrid developed by crossing 'Bellevue' Kentucky bluegrass with 'Penstar' Kentucky bluegrass. An unreduced egg of Bellevue was fertilized by a reduced gamete from Penstar, resulting in a hybrid possessing approximately 94 chromosomes. The mode of reproduction was established by examination of field grown progenies.

Bonnieblue is a moderately low-growing, leafy, turf-type bluegrass with good density and vigor, medium texture, and an attractive moderately dark green color which is apparent in early spring and maintained well into late fall. The variety has good resistance to the leaf spot and crown rust disease induced by Helminthosporium sanguis Drechsler, and stripe rust caused by Ustilago striiformis (Westend.) Niesl. It has shown moderately good resistance to leaf rust caused by Puccinia poae-nemoralis Orth. and snow mold caused by Typhula itoana Inoue.

Bonnieblue is well suited as a component of bluegrass blends for quality lawns, parks, athletic fields, and golf course fairways in regions where Kentucky bluegrass is well adapted for these purposes. It appears to be best adapted in regions where summer stress conditions are not too severe. Bonnieblue is compatible in blends with most other bluegrass varieties and in mixtures with fine fescues and the improved, fine-textured ryegrasses.

Seed propagation is limited to two generations of increase from breeder seed, one each of foundation and certified. Breeder seed is maintained by E. F. Burlingham and Sons under the provisions of the U.S. Plant Variety Protection Act, Public Law 91-577, in accordance with the certified seed option.

REGISTRATION OF STOUT OATS

(Reg. No. 259)

H. W. Ohm, F. L. Patterson, J. J. Roberts, and G. E. Shaner*

'Stout' spring oats (Avena sativa L.), Purdue 6215A2-1-2, CI 9194, was developed cooperatively by the Purdue University Agricultural Experiment Station and the ARS, USDA.

Stout is the result of a series of 12 crosses involving 11 different parents. It derives important characteristics from 'Midford,' 'Clintland 64,' 'Shield' sb, P.I. 174544-3, and 'Ukraine.' The new variety was selected by the modified pedigree method. The final selection was made in the F5 generation after the final cross, which was made in 1969. Breeder seed distributed to other North Central States for planting in the spring of 1973 was in the F3 generation. Stout has been tested in replicated yield trials in Indiana since 1967 and in the Regional Uniform Midseason Out Performance Nursery since 1969.

Stout has unique, short, stiff straw and a compact panicle. Its yielding ability is equal to or better than that of 'Clintford.' It produces plump grain with good test weight. The grain protein content is usually 12.0 to 18.0%, subject to fertility level and environment. Reaction of Stout suggests it has the B and D genes for resistance to stem rust. Stout has resistance to crown rust from P.I. 174544-3, and is resistant to races of loose smut currently prevalent in Indiana. It is moderately susceptible to yellow dwarf virus. Stout is similar in flowering date to Clintford and is 7 to 8 cm shorter.

The coleoptile is white (lacks pigments). Culms are erect (do not bow at base) throughout plant development. Leaves are a medium green and are generally upright. Leaf margins and culm internodes are glabrous. Culms are yellow. Ligules are present. The panicle form is equalateral; branches are short and ascending and arise at the lower rachis node. The rachis is flexuous. Awns are generally absent. Outer glumes are slightly lighter green in color than the leaves. After flowering, the glumes appear light green in the sunlight, resulting in a distinctly whitish-green canopy. Infrequently an outer glume is missing. Lemma and palea are very light brown to white and are fluorescent. The glume is 16.5 mm long, and extends just beyond the glume, but covers the tip of the glume well. The second floret rachilla is glabrous and mid-long, being 1.5 to 2.5 mm in length.

Acre yield in the Midseason Oat Performance Nursery since 1969.

Stout seed will be maintained by the Purdue University Agricultural Experiment Station, West Lafayette, Indiana.

Variety protection has been applied for under the Plant Variety Protection Act, Public Law 91-577, in accordance with the certified seed option.

REGISTRATION OF NOBLE OATS

(Reg. No. 260)

H. W. Ohm, F. L. Patterson, J. J. Roberts, and G. E. Shaner*

'Noble' spring oats (Avena sativa L.), Purdue 6215A2-1-2, CI 9194, was developed cooperatively by the Purdue University Agricultural Experiment Station and the ARS, USDA.

Breeder seed of Noble was shared with other North Central States for planting in the spring of 1973.

Noble is the result of a combination of 10 different parents in a series of 14 crosses. It derives important characteristics from...