REGISTRATION OF CROP CULTIVARS

survival of 64%, compared with 65, 58, and 66% for Maury, Wong, and 'Kentucky 1', respectively. In 31 yield trials conducted in Virginia over a 5-year period, Monroe yielded 2% less than Maury and 10 and 17% more than 'Rapidan' and 'Jefferson', respectively. It is similar in height to Rapidan and similar to Jefferson in maturity and resistance to lodging.

Monroe is resistant to the causal organisms for powdery mildew (Erysiphe graminis D.C. f. sp. hordei Marchal) and leaf rust (Puccinia hordei Oth.), having the Cebada Capa gene for resistance to the latter. It has the gene for resistance to scald [caused by Rhynchosporium secalis (Oud.) Davis] from the awnleted Hudson selection, but did not receive additional factors for resistance from the Harrison parent. Therefore, it is similar to Rapidan in reaction to scald, but is superior to Rapidan in tolerance to net blotch [caused by Pyrenophora teres (Died.) Drechs.] and the barley yellow dwarf virus.

Monroe is a feed barley of winter growth habit. Early growth is semi-prostrate. The spike is six-rowed, dense, erect, and awnleted, with very short, rough awns occurring primarily on the central spikelets. It is short to midtall, midseason to late, and has relatively short flag leaves which tend to be upright. Auricles are white to faintly purple. The distance from the flagleaf to the spike ranges from 6 to 15 cm. The kernels are moderately slender with long rachilla hairs.

In Virginia, Monroe is recommended for the northern Piedmont and areas west of the Blue Ridge Mountains. Breeder seed will be maintained by the Agronomy Department, Virginia Agricultural Experiment Station, Blacksburg, VA 24061.

REGISTRATION OF MAURY BARLEY

T. M. Starling, H. M. Camper, Jr., and C. W. Roane

'Maury' barley (Hordeum vulgare L.), CI 15692, was developed by the Virginia Agricultural Experiment Station and released in 1977. It was selected in the F3 generation from the cross 'Harrison'/3/Cebada Capa'/Wong'/2/awnleted 'Hudson' selection. The awnleted Hudson, selected from a farmer's field of Hudson near Orange, Va., appeared similar to Hudson in all respects except for the awnleted spike.

Maury was evaluated initially as Va. 70-44-213. It was an entry in the Uniform Hardy Barley Nursery for a 6-year period (1973-78) and ranked among the top three entries in average yield each year. Hudson, 'Schuyler', and 'Monroe' were common entries with Maury in this nursery for 6, 5, and 3-year periods, respectively, with Maury outyielding them by 10, 8, and 5%, respectively. During the 2 years (1975 and 1976) it was an entry in the barley Winter Hardiness Nursery. Maury had an average yield of 65%, compared with 58 and 66% for Wong and 'Kentucky 1', respectively.

In 36 yield comparisons conducted in Virginia over a 6-year period, Maury outyielded 'Rapidan' and 'Jefferson' by 11 and 22%, respectively. It is slightly better in test weight than Rapidan. Flowering date is similar to Jefferson, being about 3 days later than Rapidan. It is slightly taller than Rapidan and slightly shorter than Jefferson. Resistance to lodging has been similar to that of Jefferson. Maury has resistance to the causal organism for powdery mildew (Erysiphe graminis D.C. f. sp. hordei Marchal) and most races of scald (Rhynchosporium secalis (Oud.) Davis), combining factors for resistance to the latter from the awnleted Hudson parent and Harrison. It has tolerance to leaf spot caused by Pyrenophora teres (Died.) Drechs.

Maury is recommended for use throughout Virginia. Breeder seed will be maintained by the Agronomy Department, Virginia Agricultural Experiment Station, Blacksburg, VA 24061.

REGISTRATION OF CIMARRON BLUESTEM

J. A. Dickerson, F. L. Barnett, J. W. Nash, and T. M. Starling

'CIMARRON' little bluestem [Schizachyrium scoparium (Michx.) Nash.] was released in 1979 by the SCS, USDA, in cooperation with the Kansas Agricultural Experiment Station.

Cimarron (PMK-152) is a composite of 45 collections for leafiness, freedom from disease, and seed production. Original collections were made in Kansas, southern Nebraska, northeastern New Mexico, Oklahoma, and the Texas panhandle. The Cimarron River watershed was the geographical center of the collections.

Cimarron exhibits variability due to the strains that comprise the strain. However, replicated plots in Kansas City, Kans., were observed from 1972 through 1977. Cimarron to be significantly higher in dry matter production than 'Aldous', 'Blaze', and 'Pastura'. The foliage height was also greater than the other strains (except in 1974). Cimarron was intermediate in mature plant height to Blaze (late) and Pastura (early). Over 4 years, the color of Cimarron was blue to blue-green, while Blaze and Pastura became increasingly green in the study period. Seed head production was intermediate between Pastura (best seed producers) and Blaze-Aldous group. During 1976, on nonirrigated plots, Cimarron had higher protein content and dry matter yield than Blaze, Aldous, PM-NB-129, PM-NB-130, and PMK-1265 at Alliance, Nebr.

Cimarron is well adapted to western Kansas, Nebraska, southeastern Colorado, and the Oklahoma and Texas panhandles. It was evaluated in the 1979 SCS. Cimarron is well suited for erosion control, rangeland areas and forage production on rangeland.

Foundation seed is available at the SCS, Manhattan Plant Materials Center, Route 2, Box 314, Manhattan, KS 66502. Selections for Cimarron little bluestem is limited to the following, one each of foundation and certified: 1

1 Registered by the Crop Sci. Soc. Am. Received cooperative development of the SCS-USDA and Kansas Agric. Exp. Stns. Accepted 29 Nov. 1979.

2 Former manager, Manhattan Plant Materials Center, Kansas State Univ.; associate professor grass breeding, Kansas State Univ.; plant materials specialist, SCS, Salina, Kans.

3 The writers extend recognition to R. D. Jones, former plant materials specialist; K. L. Anderson, previous manager, Manhattan Plant Materials Ctr., for care of original collections and in evaluating Cimarron.

REGISTRATION OF DUFFERIN FLAX