REGISTRATION OF HARLAN II BARLEY1
(Reg. No. 119)

A. D. Day, R. K. Thompson, E. B. Jackson, and F. M. Carasso2

'Harlan II' barley (Hordeum vulgare L. emend Lam.), CI 12315, was released in 1970 by the Arizona Agricultural Experiment Station. Harlan II is a six-row, spring barley that originated as a plant selection from the cultivar 'Harlan' (CI 7008) made at Mesa, Arizona in 1962. The selection was designated Arizona 6251. Yield tests for forage and grain were conducted at Mesa, Tucson, and Yuma, Arizona.

Harlan II primarily is a forage barley adapted to the irrigated areas of the Southwest and may be of value in other areas of the world where Harlan is grown. Harlan II has the high tillering capacity of Harlan and exceeded the forage yield of Harlan by 5%, in nine simulated pasture yield tests at Mesa and Yuma from 1964 through 1969. During the same period Harlan II produced more hay at the same locations.

Harlan II is a barley with upright spikes, light-blue aleurone, rough awns, and it stands well, particularly when seeded at low rates. It is more uniform in growth with fewer sterile florets, is two days earlier in maturity, and has produced an average of 5% more grain than Harlan at Mesa and Yuma in seven conventional yield tests from 1965 through 1969.

When planted in October, Harlan II, like Harlan, can be grazed until late January and still produce high yields of quality grain. Controlled grazing until late January will reduce plant height and lodging, without jeopardizing grain yields.

Breeder seed will be maintained by the Arizona Agricultural Experiment Station, Tucson, Ariz. 85721.


REGISTRATION OF PLAINS 1 BROOMCORN1
(Reg. No. 1)

D. C. H. Hsi, R. N. Malm, and R. E. Finkner8

'Plains 1' broomcorn (Sorghum bicolor (L.) Moench) was developed by the New Mexico Agricultural Experiment Station. The variety originated from the cross ('Rennells 11 × 'Illinois No. 1') made in Illinois in 1956. Progenies of a single head, after being found resistant to leaf anthracnose, stalk rot, and root rot, all caused by Collectotrichum graminicola (Ces.) G. W. Wils, were bulked for variety evaluation. While under test, the variety was designated New Mexico 98L. The variety was released by the New Mexico and Illinois Agricultural Experiment Stations in 1968a as Plains 1.

Plains 1 demonstrated a high degree of resistance to anthracnose stalk rot under natural epidemic conditions in New Mexico and Oklahoma when grown beside disease susceptible Rennells 11. Lodging has not been a problem. Plains 1 compares favorably with Rennells 11 for yield and quality even in the absence of the disease. Plains 1 has tan plant color and light brown glumes which often cling to the seed. The brush length for the 4-year period averaged 56 cm compared with 52 cm on Rennells 11 and 56 cm on Plains 1. An undesirable curling of the straws at the base of the brush occurred less in Plains 2 than in Rennells 11 in all four years of comparisons. Plains 2 plants tend to be a few centimeters shorter than those of Rennells 11 and bloom a few days earlier.

Plains 2 is adapted to the broomcorn producing areas of New Mexico, Texas, Oklahoma, Colorado and other areas where Collectotrichum graminicola (Ces.) G. W. Wils is a problem.

Breeder seed of Plains 2 will be maintained by the Plains Branch Station, New Mexico Agricultural Experiment Station, Clovis, New Mex. 88101.

1 Registered by Crop Science Society. Approved for publication as Journal Article No. 377 by the Director of the New Mexico Agricultural Experiment Station, Las Cruces, N.M. Received April 2, 1971.

REGISTRATION OF PLAINS 2 BROOMCORN1
(Reg. No. 2)

D. C. H. Hsi, R. N. Malm, and R. E. Finkner8

'Plains 2' broomcorn (Sorghum bicolor (L.) Moench) was developed by the New Mexico Agricultural Experiment Station. The variety originated from the cross ('Rennells 11 × 'Illinois No. 1') made in Illinois in 1956. Progenies of a single head, after being found resistant to leaf anthracnose, stalk rot, and root rot, all caused by Collectotrichum graminicola (Ces.) G. W. Wils, were bulked for variety evaluation. While under test, the variety was designated New Mexico 88D. The variety was released by the New Mexico and Illinois Agricultural Experiment Stations in 1968a as Plains 2.

Plains 2 demonstrated a high degree of resistance to anthracnose stalk rot under natural epidemic conditions in New Mexico and Oklahoma when grown beside disease susceptible Rennells 11. Lodging has not been a problem. Plains 2 compares favorably with Rennells 11 for yield and quality even in the absence of the disease. Plains 2 has tan plant color but differs from Rennells 11 and Plains 1 by having dark brown glumes and more full-tipped brush (hurl type, with most of the seed at the end of the brush). The brush length for the 4-year period averaged 49 cm on Plains 2, compared with 52 cm on Rennells 11 and 56 cm on Plains 1. An undesirable curling of the straws at the base of the brush occurred less in Plains 2 than in Rennells 11 in all four years of comparisons. Plains 2 plants tend to be a few centimeters shorter than those of Rennells 11 and bloom a few days earlier.

Plains 2 is adapted to the broomcorn producing areas of New Mexico, Texas, Oklahoma, Colorado and other areas where Collectotrichum graminicola (Ces.) G. W. Wils is a problem.

Breeder seed of Plains 2 will be maintained by the Plains Branch Station, New Mexico Agricultural Experiment Station, Clovis, New Mex. 88101.

1 Registered by Crop Science Society. Approved for publication as Journal Article No. 377 by the Director of the New Mexico Agricultural Experiment Station, Las Cruces, N.M. Received April 2, 1971.

REGISTRATION OF INTERSTATE SERICEA LESPEDEZA1
(Reg. No. 6)

E. D. Donnelly9

'Interstate' sericea lespedeza, Lespedeza cuneata [Dumont] G. Don, tested under the name Hi-way, was released in 1969 by the Auburn University Agricultural Experiment Station. It was developed specifically to meet growth requirements on highway rights of way and similar conservation uses. It also appears to

1 Registered by Crop Science Society of America. Received Jan. 21, 1971.

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