REGISTRATION OF HARLAN II BARLEY
(Reg. No. 119)
A. D. Day, R. K. Thompson, E. B. Jackson, and F. M. Carasso

'Harlan II' barley (Hordeum vulgare L. emend Lam.), CI 15215, 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 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.

1 Registered by the Crop Science Society of America. Contribution from the Arizona Agricultural Experiment Station, University of Arizona, Tucson, Arizona 85721. Published as Arizona Agr. Exp. Sta. Journal Article No. 1736. Received April 2, 1971.

REGISTRATION OF PLAINS 1 BROOCORN
(Reg. No. 1)
D. C. H. Hsi, R. N. Malm, and R. E. Finkner

'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, which were resistant to leaf anthracnose, stalk rot, and root rot, all caused by Collectotrichum graminicola (Ces.) G. W. Wils, were bulked for variety evaluation. The variety was designated New Mexico 98L. The variety was released by the New Mexico Agricultural Experiment Station in 1968 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 49 cm on Plains 2, compared with 52 cm and 56 cm on Plains 1. An undesirable curling of the straws at the base of the brush occurred less in Plains 1 than in Rennells 11. The height of the plants on Plains 1 averaged 56 cm compared with 52 cm for Rennells 11. An undesirable curling of the straws at the base of the brush occurred less in Plains 1 than in Rennells 11. The height of the plants on Plains 1 averaged 56 cm compared with 52 cm on Rennells 11. 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 49 cm on Plains 2, compared with 52 cm and 56 cm on Plains 1. An undesirable curling of the straws at the base of the brush occurred less in Plains 1 than in Rennells 11. The height of the plants on Plains 1 averaged 56 cm compared with 52 cm on Rennells 11.

1 Registered by Crop Science Society, Approval as journal Article No. 377 by the Director of the New Mexico Agricultural Experiment Station, Las Cruces, New Mexico, 1971.

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REGISTRATION OF INTERSTATE SERICEA LESPEDEZA
(Reg. No. 2)
D. C. H. Hsi, R. N. Malm, and R. E. Finkner

'Interstate' sericea lespedeza, a multi-purpose legume. The variety originated from the cross ('Rennells 11' × 'Illinois No. 1') made in Illinois in 1956. Progenies of a single head, which were resistant to leaf anthracnose, stalk rot, and root rot, all caused by Collectotrichum graminicola (Ces.) G. W. Wils, were bulked for variety evaluation. The variety was designated New Mexico 98D. The variety was released by the New Mexico Agricultural Experiment Station in 1968 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 can be grazed comparably with Rennells 11 for yield and quality even in the absence of the disease. Plains 2 has tan plant color but is taller than Plains 1. Plains 2 has more full-tipped brush (hurl type, with most of the brush length 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 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 tend to be a few centimeters shorter than those of Plains 1 and bloom a few days earlier.

Plains 2 is adapted to the broomcorn producing areas of New Mexico, Texas, Oklahoma, Colorado and other areas of the world where 'Interstate' sericea lespedeza is grown. Plains 2 is adapted to the broomcorn producing areas of New Mexico, Texas, Oklahoma, Colorado and other areas of the world where 'Interstate' sericea lespedeza is grown.

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