to 1985 at two locations in Georgia, and nearly lost due to severe winterkill that destroyed oat yield trials in 1982, 1984, and 1985. GA-Mitchell was tested as GA-T81-1249 in Georgia from 1988 to 1990 and in the 1989-1990 Combined Central and Southern Uniform Winter Oat Yield Nursery.

GA-Mitchell has a winter growth habit with a low vernalization requirement. Juvenile plants are erect to semi-prostrate, and culms are midsized and glabrous. The flag leaf is midsized and drooping. GA-Mitchell has a moderately dense, equilateral, erect panicle with semierect spikelets and florets with short awns. Seed is short and moderately plump, with a white lemma.

GA-Mitchell is a high-yielding, medium-maturity, semidwarf oat line with stiff straw and excellent lodging resistance. In Georgia trials, its 3-yr average grain yield (3548 kg ha⁻¹) was similar to that of 'Florida 501' (3261 kg ha⁻¹), 'Florida 502' (3441 kg ha⁻¹), and 'Coker 227' (3405 kg ha⁻¹). Forage production of GA-Mitchell at three Georgia locations in 1989-90 was intermediate to Coker 227 (high) and Florida 501 (low). GA-Mitchell is 20 to 25 cm shorter than Coker 227 and 2 d later in maturity. Lodging resistance of GA-Mitchell (14%) in 10 trials was superior to that of Florida 502 (40%) and Coker 227 (60%). Test weight of this cultivar is intermediate (427 kg m⁻³) to Florida 502 (452 kg m⁻³) and Coker 227 (422 kg m⁻³). Cold tolerance is slightly better than that of Florida 501 but its adaptation probably is limited to southern Coastal Plain environments due to susceptibility to winter injury. In the 1989-1990 Uniform Winter Oat Nursery at 19 locations, average grain yield of GA-Mitchell was 8% greater than Florida 501 and equivalent to that of Coker 227. Lodging resistance of GA-Mitchell (21%) was superior to that of Coker 227 (52%) and Florida 501 (60%).

GA-Mitchell is moderately resistant to prevalent races of crown rust and moderately susceptible to barley yellow dwarf virus, Erysiphe graminis DC. f. sp. avenae Em. Marchal, and P. graminis Pers. Pers.

Breeder seed of GA-Mitchell will be distributed to foundation seed organizations in 1991. The Georgia Agricultural Experiment Station will be responsible for maintenance of breeder seed.

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References and Notes

1. P.L. Bruckner and D.D. Morey, Dep. of Agronomy, Univ. of Georgia, Coastal Plain Station, Tifton, GA 31933; B.M. Cunter, Dep. of Plant Pathology, and J.W. Johnson, Dep. of Agronomy, Univ. of Georgia, Georgia Station, Griffin, GA 30223. Contribution from the Georgia Agric. Exp. Stn. This research was supported by state and Hatch funds allocated to the Georgia Agric. Exp. Stn. Registration by CSSA. Accepted 31 May 1991. *Corresponding author.


REGISTRATION OF ‘GOLDAR’ BLUEBUNCH WHEATGRASS

‘GOLDAR’ bluebunch wheatgrass, Pseudoroegneria spicata (Pursh.) A. Löve subsp. spicata [synonyms include Agropyron spicatum (Pursh.) Scribn. & J.G. Smith and Elytrigia spicata (Pursh.) D.R. Dewey], (Reg no. CV-19, PI 539873) was released by the USDA Soil Conservation Service on 15 Dec. 1989, in cooperation with the Idaho Agricultural Experiment Station, Utah Agricultural Experiment Station, and the USDA Agricultural Research Service. Testing occurred under the identification numbers 9002950, 12950, P739, and BN9082. Goldar is superior to other blue-bunch wheatgrasses in stand establishment and in total production in the intermountain area.

Goldar was selected from a native plant collection made in the Umatilla National Forest, Asotin County, Washington, in 1934. It has been extensively tested in Idaho and Utah, with some additional evaluations in Washington, Oregon, Montana, Wyoming, Nevada, and Arizona.

Goldar bluebunch wheatgrass, a diploid (2n = 14), has been tested against ‘Whitmar’ beardless wheatgrass [P. spicata subsp. inermis (Scribn. & J.G. Smith) A. Löve], also a diploid (2n = 14), and ‘Secar’ Snake River wheatgrass (Elytrigia lanceolataus (Scribn. & Small) Gould; synonym A spicata (Pursh.) Scribn. & J.G. Smith), a tetraploid (2n = 4x = 28).

Goldar has proved superior in total forage production and crown area in the intermountain area of Idaho, Utah, and Nevada. Goldar is generally superior to Whitmar and Secar in stand and in plant vigor. Total production of Goldar averaged 2644 kg ha⁻¹ compared to 2245 kg ha⁻¹ for Whitmar beardless wheatgrass. Crown area averaged 61 and 42% for Goldar and Whitmar, respectively. Goldar rated superior for stand establishment in 38 evaluations, equal in 28 evaluations, and below in 10 of 34 different seedings, compared with Whitmar or Secar, where evaluations were made one or more years. Goldar rated superior for overall vigor in 31 evaluations, equal in 50 evaluations, and below in 5 evaluations on 44 different seedings, compared with Whitmar or Secar, where evaluations were made one or more years.

Seed production has averaged 436 kg ha⁻¹. Including all testing since 1934, Goldar has performed well against >1000 accessions in various studies.

Goldar is recommended for range forage and reclamation on bluebunch wheatgrass sites in the intermountain area of Idaho, Utah, and Nevada where mean average precipitation is >250 mm and elevations are >1000 m.

Recommended seeding rate for seed production is 4 kg ha⁻¹ in rows spaced 1 m apart. When drilling on rangeland, 13.4 kg ha⁻¹ is recommended, to obtain 80 seeds per linear meter of row, with rows spaced on 30.5-cm centers (207 230 seeds kg⁻¹).

Breeder seed will be maintained by the USDA-SCS, Plant Materials Center, at Aberdeen, ID. Foundation seed will also be produced by SCS, Aberdeen Plant Materials Center. Certification of two generations beyond foundation class will be permitted.

J. L. GIBBS, G. YOUNG,* AND J. R. CARLSON (1)

References and Notes

1. J.L. Gibbs, USDA-SCS, Boise State Office, 3244 Elder St., Room 124, Boise, ID 83705; G. Young, USDA-SCS, Plant Materials Ctr., P.O. Box 1000, Aberdeen, ID 83210; J.R. Carlson, USDA-SCS, Room 510, 511 N.W. Broadway, Portland, OR 97209. Registration by CSSA. Accepted 31 Mar. 1991. *Corresponding author.


REGISTRATION OF ‘UI 686’ CRANBERRY BEAN

‘UI 686’ cranberry bean (Phaseolus vulgaris L.) (Reg no. CV-92, PI 549089) was developed by the Idaho Agricultural Experiment Station at the Kimberly Research and Extension Center, Kimberly, ID, and was released in 1988. UI 686 is an F₇ selection made by John Kolar in 1983 from a 1977 cross between ‘UI 50’ and ‘Hi Lo’ bean. UI 50 is an upright bush cranberry bean with maturity and yield intermediate to other cranberry beans. It has J gene resistance to bean common mosaic virus (BCMV), is susceptible to beet curly-