genotypes with the AB genes for stem rust resistance. Gem has been susceptible to loose smut (caused by Ustilago avenae (Pers.) Rostr.) in Wisconsin and Minnesota tests. It has been moderately resistant to barley yellow dwarf virus in screening tests at Urbana, IL, and has demonstrated good field tolerance in nurseries and commercial fields in Wisconsin.

Designated classes of certified seed of Gem are Breeder, Foundation, and Certified. Breeder seed of Gem is maintained by the Horticulture Department, University of Wisconsin–Madison. U.S. plant variety protection, with the Wisconsin Agricultural Research Station as owner, is pending (PVP Certificate no. 97-00186). Limited quantities of seed for research are available upon request from the corresponding author. Recipients of seed are asked to make appropriate recognition of the source of Gem if it is used in the development of a new cultivar, germplasm, parental line, or genetic stock.

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References and Notes


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Registration of ‘Batán F96’ Wheat

Batán F96 (Reg. no. CV-867, PI 603213) is a spring wheat (*Triticum aestivum* L.) cultivar developed cooperatively by the National Research Institute for Forestry, Agriculture and Animal sciences (INIFAP) and the International Maize and Wheat Improvement Center (CIMMYT). It was released by INIFAP with registration number 779-TRI-011-140296. The name was chosen in recognition of the cooperation between the two programs and to honor the CIMMYT’s experimental station El Batan; the F stands for strong gluten (*fuerte*) and 96 stands for the year of release.

Batán F96 originated from the cross ‘CIANO 67’/MFD//MNONCHO/3/SERI M82’ made at Cd. Obregón, Sonora, by the CIMMYT program. The F1 was grown at Toluca, México, and the F2 was grown at Cd. Obregón under optimal conditions. The bulk F3 and F4 were grown by INIFAP under drought conditions at Yanhuitlan, Oaxaca, and Las Pirámides, México, respectively. The F5-derived lines were evaluated at Roque Guanajuato under optimal conditions, resulting in a selected line with designation CM81355-0A10Y-011X-1P-0R.

Batán F96 is awned, and has white glumes; stems are yellowish-white when mature. The spike is yellowish-white and tapering. The light red, midsize kernels weigh 36 g 1000 kernel”-1. Batán F96 is a midheight cultivar (90 cm), intermediate flowering (64 d to anthesis), and early maturing (106 d). The short filling period enables Batán F96 to avoid drought, early-season frosts, and increased pathogen incidence. Batán F96 is resistant to races GFC, MCC, QFC, RKQ, RTQ, and RTR of stem rust (caused by *Puccinia graminis* Pers.:Pers.), moderately resistant to races TCB/TBD, TBD/TM, CBJ/QL, and CBJ/QB of leaf rust (caused by *Puccinia recondita* Robere ex Desmaz.), and tolerant to foliar diseases caused by *Septoria* spp., *Cochliobolus sativus* (Ito & Kuribayashi) Drechs. ex Dutur, *Pyrenophora trichostoma* (Fr.) Fuikel, and *Fusarium* spp.

Batán F96 was tested as Biznaga S under rainfed conditions by INIFAP from 1988 to 1996 (58 environments across 11 states). Rainfall ranged from 700 mm yr”1 (favorable) to 400 mm yr”1 (drought). Batán F96 averaged 4166 kg ha”1, 7.8% greater than the average yield of five control cultivars. Batán F96 was more productive than the early to intermediate cultivars Gálvez M87 (3726 kg ha”1), Zacatecas VT74 (3713 kg ha”1), and Verano S91 (3929 kg ha”1) in all the environmental conditions, with a greater difference in better environments. Under favorable conditions (720 mm rain) Batán F96 had a yield of 6092 kg ha”1, while the best controls in these environments (‘Pavón F76’ and ‘Temporera M87’) yielded 5813 and 6134 kg ha”1, respectively. Batán F96 performed better under environments ranging from drought conditions (400 mm) to midproductivity (600 mm). Batán F96 was identified as high-yielding in less favorable environments, and responsive to environmental improvements as defined by Eberhart and Russell (1).

Milling and baking quality was determined from 18 rainfed environments by the Wheat Quality Laboratory of INIFAP. The average grain volume weight of Batán F96 was 73 kg hl”1, similar to the values from Verano S91 (73 kg hl”1) and Gálvez M87 (74 kg hl”1). The average flour protein (107 g kg”1) is similar to the protein content from Zacatecas VT74 (107 g kg”1) and Temporera M87 (108 g kg”1). The flour yield (172 g kg”1) is similar to the values from Verano S91 (171 g kg”1) and Gálvez M87 (173 g kg”1). The average loaf volume was 314 x 10”4 J. The average loaf volume was 884 cm3, which was greater than that of all check cultivars except Gálvez M87 (917 cm3). Breeder seed of Batán F96 will be maintained by the INIFAP wheat breeding program. Foundation, registered and certified seed will be commercially available.

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References and Notes


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Registration of ‘AC Avonlea’ Durum Wheat

‘AC Avonlea’ durum wheat (*Triticum turgidum* L. var. *durum* Desf.) (Reg. no. CV-866, PI 599033) was developed at the Semiarid Prairie Agricultural Research Centre, Agriculture and Agri-Food Canada, Swift Current, SK, and received the registration number 4617 from the Canadian Food Inspection Agency on 18 July 1997.

AC Avonlea was selected from the cross DT379/DT367/DT367/Medora (2,3). DT379 is a breeding line from the cross D6676/Quilafen. AC Avonlea was developed using a modified pedigree technique. The F2 was grown in 1988 as individual plants...