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REGISTRATION OF 'ICMV 2' PEARL MILLET

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'ICMV 2' grain cultivar of pearl millet [*Pennisetum glaucum* (L.) R. & Br] (Reg. no. CV-4, PI 543749), was developed by recombining three entries: a line resistant to downy mildew (700516) from Nigeria, a composite (Serere 2A) from Uganda, and a Cassady dwarf population from Kansas acquired from Uganda. Equal quantities of seed of all the three paired crosses among three parents were bulked to constitute ICMV 2. ICMV 2 was multiplied in isolation plots from 1981 to 1984, and 20% uniform high-yielding plants were selected in each cycle following gridded mass selection. The three parental germplasm sources were identified as the best general combiners in a 5×5 diallel cross study jointly conducted by International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) and the Institut Senegalais de Recherches Agricoles (ISRA) in 1979 at the Centre National de Recherches Agronomiques (CNRA), Bambey, Senegal. ICMV 2 was tested in Senegal, Mali, Niger, Gambia, and Cameroon. ICMV 2 was released to farmers in Senegal in 1982 (1) and approved by ICRISAT for registration in 1984 (2). ICMV 2 was multiplied in Mali and distributed to extension agencies for seed production and distribution to farmers (3).

ICMV 2 was tested in a total of 111 replicated yield tests in 19 environments (three to four locations per year) jointly by ICRISAT and ISRA millet improvement programs in Senegal for 5 yr from 1980 to 1984. The average yield of ICMV 2 was 119% of the released grain cultivar Souna III in Senegal. ICMV 2 is of medium height (1.8–2.8 m) with robust stems. It flowers in 47 to 68 d and matures in 85 to 100 d. Anther color is mixed, and heads are medium long (30–41 cm), cylindrical, and nonbristled. The cultivar has good resistance to downy mildew disease caused by *Sclerospora graminicola* (Sacc.) J. Schröt. and smut disease caused by *Moesziomyces bullatus* (J. Schröt.) K. Vánky. The ear heads are very compact, which makes the variety tolerant to raghuva moth (*Raghuva albipunctella*). Grain is medium size (6.0 to 9.4 g 1000⁻¹ seed), obovate, slate gray in color, with a vitreous endosperm. Seed dormancy and tolerance to mold damage when ripening in humid conditions are adequate.

Breeder seed has been made available to the Seed Service of ISRA and to the Genetic Resources Unit of ICRISAT. It will be maintained and supplied by ISRA at B.P. 51, Bambey, Senegal, and by ICRISAT at Bulawayo, Zimbabwe.

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References and Notes

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4. S.C. Gupta, SADCC/ICRISAT Sorghum and Millets Improvement Program, Bulawayo, P.O.B. 776, Zimbabwe; A. Lambert, Semences Nickerson, Zone Industrielle, 49160 Longue, France; A.T. Ndoeye, Direction Generale de l'ISRA, Rue de Thiong X Valmeij, B.P. 3120, Dakar, Senegal. Cooperative contribution from ICRISAT and ISRA-CNRA and Journal Paper no. J.A. 1026 of ICRISAT, Patancheru A.P. 502 324, India. Registration by CSSA. Accepted 31 Mar. 1991. *Corresponding author.