Pearl Millet Variety ICMV 2



- Medium height (2.0-2.5 m)
- · Matures in 80-85 days
- · Resists downy mildew and smut diseases
- · Particularly recommended for: Senegal



Plant Material Description no. 2

International Crops Research Institute for the Semi-Arid Tropics Patancheru P.O., Andhra Pradesh 502 324, India

Purpose of Description

ICMV 2 was prereleased for cultivation in Senegal in June 1982 as IBV 8001 by the Institut Senegalaise de Recherches Agricoles (ISRA).

Origin and Development

ICMV 2 was formed by recombining a line resistant to downy mildew (700516) from Nigeria and two populations (Serere 2A and Cassady) from Uganda. These three entries were identified as the best general combiners in a diallel cross analysis in 1979 at the Centre National de Recherches Agronomiques, Bambey, Senegal, by staff of the ICRISAT/ISRA cooperative program. Syn₁ seed was generated by mixing equal quantities of seed of all possible crosses among the three parents. Mass selection was practiced in the subsequent generations in the seed increase plots, which were grown in isolation. The resultant variety was tested as IBV 8001.

Synonym. IBV 8001.

Performance

As IBV 8001 it was tested in 75 replicated yield tests conducted jointly by ICRISAT and ISRA millet improvement programs in Senegal from 1980 to 1983. It yielded 120% of the released grain variety in Senegal, Souna III, as shown in the table below.

Mean grain yields (kg ha⁻¹) of ICMV 2, Souna III, and the local check in multilocational trials in Senegal, 1980-83.

						Yield as % of
Cultivar	1980	1981	1982	1983	Mean	Souna III
ICMV 2	2270	2330	2600	2030	2310	120
Souna III	1730	2120	2020	1840	1930	100
Local	nd	2200	2300	1800	2100	105

Plant Characters

ICMV 2 is of medium height (2.0-2.5 m) with robust stems. It flowers in 49-54 days and matures in 80-85 days. Anther color is mixed, and heads are medium-long (32-35 cm), cylindrical, and nonbristled. The variety has good resistance to downy mildew and smut.

Seed Characters

The grain is bold, 8.3-9.5 g 1000⁻¹, obovate, slate gray in color, with a vitreous endosperm. Seed dormancy and tolerance of mold damage when ripening in humid conditions are adequate.

Plant Material Descriptions from ICRISAT

Leaflets in this series provide brief descriptions of crop genotypes identified or developed by ICRISAT, including:

- · germplasm accessions with important agronomic or resistance attributes;
- breeding materials, both segregating and stabilized, with unique character combinations; and
- · cultivars that have been released for cultivation.

These descriptions announce the availability of plant material, primarily for the benefit of the Institute's cooperators. Their purpose is to facilitate the identification of cultivars and lines and promote their wide utilization. Requests should be addressed to the Director General, ICRISAT, or to appropriate seed suppliers. Stocks for research use issued by ICRISAT are sent to cooperators and other users free of charge.

ICRISAT is a nonprofit scientific educational institute receiving support from donors through the Consultative Group on International Agricultural Research. Its major mandate is to serve as a world center for the improvement of grain yield and quality of sorghum, millet, chickpea, pigeonpea, and groundnut, and to act as a world repository for the genetic resources of these crops. The plant materials announced in these leaflets are end-products of this work, which is aimed at enhancing the agricultural productivity of resource-poor farmers throughout the semi-arid tropics.

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