REGISTRATION OF 'ICTP 8203' PEARL MILLET

'ICTP 8203' PEARL MILLET [*Pennisetum glaucum* (L.) R. Br.] grain cultivar (Reg. no. 2; PI 537113) was developed by the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), Patancheru, Andhra Pradesh, India, from Togo germplasm. ICTP 8203 was first released in March 1988 by the Government of Maharashtra, and in December 1988 it was released as MP 124 (ICTP 8203) for cultivation in Maharashtra and Andhra Pradesh by the Central Variety Release Committee, Ministry of Agriculture, Government of India.

ICTP 8203 was produced by random mating five S_2 progenies of an Iniari (early-maturing) landrace originating from northern Togo. In the 1980 rainy season, 37 open-pollinated heads were selected from this landrace, which had been planted as border rows of late-maturing breeding lines in the ICRISAT cooperative nursery at Kamboinse, Burkina Faso. Seeds from these heads were grown as half-sib progenies at ICRISAT, and advanced by selfing to produce S_2 progenies, with visual selection for yielding ability and agronomic traits at each selfing generation. Ninety-nine S_2 progenies were evaluated in a replicated yield trial planted at Bhavanisagar (11° N Lat), Patancheru (18° N Lat), and Hisar (29° N Lat), India, in the 1982 rainy season. Five S_2 progenies were visually selected for high grain yield, and for similarity of plant height, maturity and head type. These five progenies were crossed in a diallel fashion in the 1983 dry season, and aliquots of seed from the 10 crosses were bulked to make Togo-P8203.

Togo-P8203 was first evaluated in replicated yield trials conducted by ICRISAT at Patancheru (three tests), Hisar, and Bhavanisagar in the 1983 rainy season. It yielded 2.6 t ha^{-1} of grain (18% more than 'WC-C75', the leading commercial open-pollinated cultivar in India). It was further multiplied by full-sib mating in the 1984 dry season. We selected 350 full-sib crosses on the basis of the parental plants which were visually evaluated for phenotypic similarity for plant height, grain size, and head length, girth, and shape. The crossed heads were harvested, threshed separately, and aliquots of grain bulked to reconstitute the cultivar. This cultivar, now named as ICTP 8203, was tested by the All India Coordinated Pearl Millet Improvement Project (AICPMIP) in 79 replicated trials for 3 yr (1984–1986), where it yielded 1.6 t ha^{-1} of grain (4% less than WC-C75). However, in the 19 tests in Maharashtra it yielded 2.1 t ha^{-1}, 7% more than WC-C75; and in the 11 tests in Andhra Pradesh it yielded 1.5 t ha^{-1}, 11% more than WC-C75.

ICTP 8203 has large grain size (>12 g 1000^{-1}) which is at least 50% higher than any open-pollinated cultivar previously released in India. It has a plant height of 1.5 to 1.6 m, and takes about 50 to 52 days to 50% flowering in Maharashtra and Andra Pradesh. Its heads are of medium length (16–18 cm), compact to semicompact, and cylindrical to lanceolate with a slight tapering towards the tip. Glume color and anther color are mixed, with green or purple glume and cream or purple anthers. Grain color is dark gray, but the outer surfaces, which are exposed to the sunlight, attain a light-gray and shiny appearance. It has good resistance to downy mildew caused by *Sclerospora graminicola* (Sacc.) Schroet. In disease nurseries in 1984 to 1986, it had a 2.5% incidence of disease (compared with 1.2% for the resistant variety WC-C75) in Maharashtra, and a 1.8% incidence (compared with 2.1% for WC-C75) in Andhra Pradesh. ICTP 8203 tends to escape terminal drought, owing to its rapid grain filling and early maturity.

Breeder seed of ICTP 8203 will be maintained by the Cereals Program, ICRISAT, and has been made available to the National Seeds Corporation and several public and private seed agencies in India.

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References and Notes

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REGISTRATION OF ICGV 87128 PEANUT CULTIVAR

ICGV 87128, A SPANISH-TYPE PEANUT cultivar (*Arachis hypogaea* L. ssp. *fastigiata* var. *vulgaris*) (Reg. no. 37; PI 537112), was released in 1988 by the Central Sub-Committee on Crop Standards, Notification, and Release of Varieties, Department of Agriculture and Cooperation, Ministry of Agriculture, Government of India, for post-rainy season cultivation in Gujarat, India. In on-farm trials conducted in Gujarat, it showed an average of 26% pod-yield advantage over local cultivar GG 2(2).

ICGV 87128 was bred at the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), Patancheru P.O., Andhra Pradesh 502 324, India. It was designated ICGS 44 during testing.

ICGV 87128 is also registered with the National Seed Registration Department, National Agriculture Research Center, Islamabad, Pakistan. Together with ICGV 87187, another ICRISAT peanut selection, it forms a component line of a peanut cultivar, BARD-699, recently released in Pakistan.

ICGV 87128 originated from a single plant selection in a natural hybrid population of the Indian cultivar Robut 33-1 (also known as Kadiri 3) in 1977–1978 (3). Its pedigree is (Robut 33-1)-1-5-B_1-B_1-B_1-B_1-B_1.

ICGV 87128 has Decumbent 2 to Decumbent 3 growth habit (1), with dark green, medium to small, elliptic leaflets. The number of primary branches ranges between four and six and of secondary branches, between two and four. It matures in ~120 days and has 70% meat. It has two-seeded, small to medium-sized, smooth pods with none or slight beak and slight to moderate constriction. Its seed are tan in color, weigh 60 g per 100 seed, and contain 49% oil and 25% protein.

ICGV 87128 has field tolerance to bud necrosis disease caused by Tomato Spotted Wilt Virus. It is relatively photoperiod insensitive, has good recovery from mid-season drought and is average in its response to end-of-season drought (2).

The ICRISAT Center, Patancheru, maintains the breeder seed.

S.N. NIGAM, S.L. DWIVEDI,* Y.L.C. RAO, AND R.W. GIBBONS (4).

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