Registration of 'Barichhola-5' Chickpea

'Barichhola-5' chickpea (Cicer arietinum L.) (Reg. no. CV-150, PI 596369) was developed by the Bangladesh Agricultural Research Institute (BARI), Pulses Research Centre (PRC), Ishurdi, Pabna, Bangladesh and was approved for cultivation in the country, by the National Seed Board of Bangladesh in August 1996.

Barichhola-5 was locally collected by a BARI-ICRISAT team in 1985 from a farmer’s field near Pabna in Bangladesh and numbered as RBH-228a. It was evaluated in 1991–1992 at the PRC, Ishurdi, Pabna.

When tested for 3 yr at the PRC, Ishurdi, and other locations in Bangladesh, Barichhola-5 yielded 14% more seed than the recently released cultivar Nabin. In large-scale demonstrations in farmers’ fields for 3 yr at four locations, Barichhola-5 produced a mean yield of 1.76 t ha⁻¹, compared with 1.57 t ha⁻¹ for the local cultivars used in the respective locations.

Barichhola-5 is resistant to fusarium wilt [caused by Fusarium oxysporum Schlechtend.:Fr. f. sp. ciceris (Padwick) Matuo & K. Sato] and showed field tolerance to botrytis gray mold (caused by Botrytis cinerea Pers.:Fr.), to which both Nabin and local cultivars are susceptible.

Barichhola-5 has a semispreading growth habit, and plants are about 50 cm tall. No anthocyanin pigmentation is observed at early stages of growth, but it occurs on the stem during maturity. It has small leaflets, and plants look pale green at the growing stage. Flowers are pink. Barichhola-5 is slightly earlier to mature (125 vs. 130 d) than the local control. Seeds are angular in shape and grayish brown in color, with a smooth testa and a deep brown prominent hilum; the 100-seed mass is 11.5 g. Its dhal recovery is 74%, protein content is 21.1%, and starch content is 54.4%; cooking time is 37 min (1).

Breeder seed of Barichhola-5 will be maintained by the Pulses Research Center of the Bangladesh Agricultural Research Institute (PRC-BARI) at Ishurdi, Pabna, Bangladesh. Foundation seed will be produced and distributed by the Bangladesh Agricultural Development Corporation, Dhaka, Bangladesh. Seed is also deposited with the U.S. National Seed Storage Laboratory, 1111 S. Mason St., Fort Collins, CO 80521-4500.

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References and Notes

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