Registration of ‘Chañaritos S-156’ Chickpea

‘Chañaritos S-156’ is a kabuli type chickpea (Cicer aritinum L.) cultivar (Reg. no. CV-236, PI 636327) that was developed and released by the chickpea breeding program of the National University of Córdoba located at Córdoba, Argentina (INASE, 1992). The cultivar is widely adapted with high yield potential and suitable for cultivation in semi-arid regions.

Chañaritos S-156 was selected from ‘Sauco’, a local landrace that is believed to have been introduced from Spain. Twenty lines derived from selection among 500 individual plants of the homozygous and heterozygous Sauco population were selected for superior performance over 2 yr of evaluation at Córdoba, Argentina. The 20 lines were evaluated for growth habit, height of pod formation, pod production, seed size, and tolerance to stresses. The 20 lines were also compared in yield trials at four Argentina locations (Tucumán 26° S, 65° W; Jujuy 24° S, 65° W; Salta 24° S, 65° W; and Córdoba 31° S, 64° W) (Biderbost and Carreras, 1991; IBPGR-ICARDA-ICRISAT, 1985). Three lines (S-93, S-156, and S-159) were selected for taller growth habit when compared with Sauco. From these three lines, S-156 was chosen on the basis of visual assessments of seed size, color, plant height, and maturity and was designated as Chañaritos S-156.

Chañaritos S-156 is 20% taller than Sauco and has a 100-seed weight that is 18% heavier than Sauco. Chañaritos S-156 is more uniform when compared with Sauco for size, weight and color of the seed, and also for plant height and maturity. Plants have a semispreading growth habit from emergence to the late vegetative stage and are semierect from flowering to maturity. Chañaritos S-156 has an average of three primary and 10 secondary branches per plant. Stems are woody and lack anthocyanin pigmentation, and the leaves are dark green (Biderbost and Carreras, 1991; IBPGR-ICARDA-ICRISAT, 1985).

Chañaritos S-156 flowers approximately 96 d after sowing and approximately a week earlier than Sauco. Leaflets are large (15.0 by 7.5 mm) and the plants produce large white flowers with long standards (vexillum). Pods are approximately 26 mm long and average 1.09 seeds per pod. Seeds are large (49 g/100 seed) and the yellow seed coat has a wrinkled surface. It is easily harvested by combine, which is an important attribute in the Argentine region (Biderbost and Carreras, 1991; IBPGR-ICARDA-ICRISAT, 1985).

Chañaritos S-156 is tolerant to local isolates of Fusarium oxysporum Schlechtend. Fr. f. sp. ciceris (Padwick) (scored on a 0-to-4 scale) (Conci et al., 1985). It is cold hardy in the early vegetative stage when sown at Córdoba, which has a minimum temperature of 5°C. The cultivar had a positive response to Rhizobium spp. inoculation (Abril et al., 1997).

Seed of Chañaritos S-156 is maintained by the chickpea breeding program of the National University of Córdoba, Argentina. Plant variety protection will not be sought for this cultivar.

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References


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