Registration of ‘Quincy’ Pinto Bean

‘Quincy’ pinto bean (*Phaseolus vulgaris* L.) (Registration no. CV-256, PI 639175) was developed cooperatively by the Washington Agricultural Research Center and USDA-ARS and released in 2004. Quincy is a midseason maturity, virus resistant pinto bean and is adapted to the western states of the U.S.A.

Quincy is an F9 bulk derived from a single F6 plant from the cross RR-Othello//Othello/A-55 made in 1991. RR-Othello is a rust resistant pinto selected from Othello which was released in 1986 by Burke et al. (1995). A-55 is black-seeded, upright type IIA growth habit, developed by Singh et al. (2003). It has I gene resistance to *Bean common mosaic virus* (BCMV) and high tolerance to *Beet curly top virus* (BCTV). Quincy has the combined I and bc-2 genes, which together condition resistance to all known strains of BCMV and *Bean common mosaic necrosis virus* (BCMNV) and complete resistance to BCTV.

Quincy has a semi-upright Type III growth habit that varies from prostrate to more upright depending on the growing conditions (Singh, 1982). It also exhibits a high level of tolerance to root rot [caused by *Fusarium solani* (Mart.) Sacc. f. sp. *phaseoli* (Burkholder) W.C. Snyder & H.N. Hans]. Quincy yielded 14 and 33% higher than Othello and ‘Burke’, respectively, in 1999, 2002, and 2004 in Roza, WA, under multiple stress conditions of low residual soil N (~29 kg ha⁻¹) with no fertilizer applied, low soil moisture (irrigation water applied at ~50% of water use requirements based on evapotranspiration schedules), and heavy root rot pressure due mainly to *Fusarium solani* (Mart.) Sacc. f. sp. *phaseoli* (Burkholder) W.C. Snyder & H.N. Hans (Miklas, unpublished data, 1999, 2002).

Quincy is a medium maturity pinto that matures 4 to 7 d later than Othello, which is an early 83 to 85 d bean in Washington. The Type III growth habit of Quincy is generally more upright with a shorter vine than Othello pinto. Quincy is susceptible to bean rust [caused by *Uromyces appendiculatus* (Pers.:Pers) Unger]. Quincy (previously tested as LB2008 and USPT-73) has exhibited higher yield than Othello in National Cooperative Dry Bean nurseries. In a long-term average yield trial at six locations in Colorado from 1998 to 2002, Quincy produced 10 and 20% greater yield than Burke (Hang et al., 1998) and Othello, respectively, and was comparable to other high-yielding pintos when grown in Colorado (Johnson et al., 2004). At Othello, WA, Quincy and Othello averaged 3813 and 3905 kg ha⁻¹ respectively in 7 yr from 1996 to 2003. Seed of Quincy is slightly larger than Othello, 43.7 vs. 39.6 g per 100 seeds. Quincy is an acceptable canner as determined in canning trials conducted by USDA-ARS and the Michigan Agricultural Experiment Station in 1997 and 1998 and by the New York Agricultural Experiment Station in 2002 and 2003.

Quincy has been released as a nonexclusive public variety without Plant Variety Protection. Breeder and Foundation seed will be maintained by Washington State Crop Improvement Association, Department of Crop and Soil Sciences, WSU Seed House, Pullman, WA 99164–6420. Small quantities of seed may be obtained from the corresponding author for at least 5 yr.

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References


