

UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Research Service
and
Agricultural Experiment Station of the
University of Puerto Rico

ANNOUNCE

NAMING AND RELEASE OF THE BUSH BEANS
CULTIVAR 'VIOLETA'

The Agricultural Research Service, United States Department of Agriculture, and the Agricultural Experiment Station of the University of Puerto Rico (UPR) announce the release of the dry bean variety 'Violeta.'

A portion of the project carried out by USDA and UPR is supported in part by the Agency for International Development under a contract (AID/CM/TA-C-63-26) entitled "Improvement of Tropical Production of Beans and Cowpeas Through Disease and Insect Control."

Violeta resulted from repeated bulk selection of P.I. 209808 from Kenya, through screening for adaptability to a hot humid climate and field resistance to diseases. It was increased as 70-R-23-BK-A.

The variety Violeta is a bush bean with intermediate height (37 cm) and an upright, stiff, green stem. It has a strong root system, pods borne high off the ground, and is one of the highest yielding cultivars grown at the Lajas Valley, in southwestern Puerto Rico. It yields 2.85 metric tons of dry beans per hectare when planted in dry weather. The beans are large, 16.0 mm long, 7.4 mm wide and 5.6 mm thick, weighing 46.4 grams per hundred seed when planted in the dry winter season. However, in the summer rainy season, the weight loss per 100 seed is 22.5% of that obtained from the dry winter planting. Violeta is intermediate in maturity when planted in February (71 days to harvest), and early when planted in July (65 days to harvest). The beans have a pink base color which is densely speckled with purple. Upon a few minutes of cooking the purple speckle dissolves leaving the pink base color. The edible qualities of the cooked bean are excellent.

It has been screened in the greenhouse for common bean mosaic virus (CBMV) and cucumber mosaic virus (CMV). It has been screened in the field for whitefly (Bemisia tabaci) transmitted viruses such as golden yellow mosaic and rhynchosia mosaic; bacterial blight (Xanthomonas sp.); rust (Uromyces phaseoli); phyllosticta leaf spot (P. phaseolina); and soil-borne diseases such as rhizoctonia root rot (R. solani), charcoal rot (Macrophomina phaseoli) and southern blight (Sclerotium rolfsii).

This cultivar retains a good stand in the field, is moderately tolerant to bacterial blight and moderately resistant to rust. It is resistant to CBMV and CMV. It has been field tolerant to WFTV. This cultivar is characterized as high yielding, multiple disease tolerant and adaptable to warm humid tropical conditions.

Cultivar Violeta is suggested for use either as parental material for disease tolerance or as a commercial cultivar.

Seed will be available on a pro-rata basis to qualified persons who request it in writing on or before June 30, 1976 from Marcial Rico Ballester, Lajas Agricultural Experiment Substation, Lajas, Puerto Rico.

Approved:

Marcial Rico Ballester
Director
Agricultural Experiment
Station

Feb 23/76
Date

[Signature]
Administrator
Agricultural Research
Service

3/1/76
Date