

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 'CONGO RICO'

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 'Congo Rico'.

The development of variety Congo Rico was 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."

Congo Rico was handled as selection 70-R-40-BK-A from P.I. 199043 which is a collection from Congo (Zaire).

The cultivar Congo Rico has a medium (35 centimeters) height, upright bush habit with stiff lodging resistant green stem and pods high off the ground. It is highly adaptable to the hot humid tropical climate of Puerto Rico and yields well. The attractive cranberry-type beans have a pink base streaked with purple.

The original P.I. accession was grown at Mayaguez in 1968 and 1969. Due to field hybridization by carpenter bees (Xylocopa brasiliatorum) the accession consisted of a number of segregants. In early 1970, a bulk selection was made of ten plants with high bush habit, cranberry seeds, and tolerance to hot and humid summer climate. Further selections were made for lodging resistance, high pod position and earliness.

Under severe rainy season conditions this cultivar suffers moderate incidence of rhizoctonia root rot (R. solani) and charcoal rot (Macrophomina phaseoli), but it retains a good stand in spite of the adverse conditions. It has a strong and well formed root system which when infected responds by producing profuse adventitious roots from the stem near the ground. It is susceptible to bacterial blight during the summer rainy season, but is moderately tolerant to this disease during the cool dry winter. It is highly susceptible to some races of rust (Uromyces phaseoli) in Puerto Rico. However, this cultivar is susceptible to a bacterial pathogen which during the rainy season invades the rust pustules killing the surrounding tissue, hence greatly reducing the

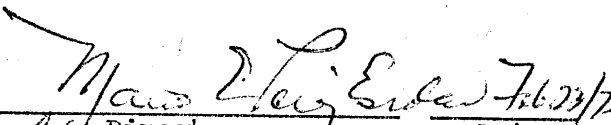
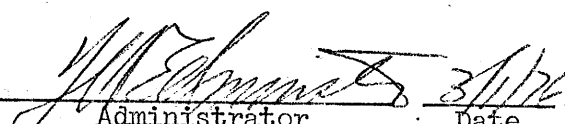
severity of rust incidence. It is also susceptible to angular leaf spot (Isoriopsis griseola). In field screenings, from 1969 to 1974, this cultivar has been tolerant to whitefly transmitted viruses such as golden yellow mosaic and rhynchosia mosaic. It is moderately resistant to cucumber mosaic virus and resistant to common bean mosaic virus.

Congo Rico is a high yielding cultivar, producing 2.31 tons per hectare when planted in dry weather at Lajas. It matures at 71 days when planted in February and 73 days when sown in July. It retains the same seed weight, 35 grams per 100, whether planted during the dry season or the wet season. The beans measure 12.8 mm long, 12.8 mm wide, and 7.7 mm thick, and have excellent edible qualities.

Cultivar Congo Rico 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 N. G. Vakili, Mayaguez Institute of Tropical Agriculture, SR., ARS, P. O. Box 70, Mayaguez, Puerto Rico 00708.

Approved:

 _____ Director Agricultural Experiment Station	7.6.23/76 _____ Date	 _____ Administrator Agricultural Research Service	3/1/76 _____ Date
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