

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 'ORO 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 'Oro Rico.'

The development of Oro Rico was carried out with partial support from 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."

Oro Rico was increased as 70-R-108-BK-A and screened for adaptability to tropical lowland environment and diseases.

The cultivar Oro Rico has a bush habit, the height of which is affected by daylength. During the winter growing season it is a medium to tall upright bush with 43 centimeters height, while during the summer it is a tall upright bush bordering on semi-vine habit. Pod set is concentrated and high off the ground. It has green stems and pods. Beans are medium in size: 10.0 mm long and 6.4 mm wide, and 5.2 mm thick; and have a pink color with a golden ring bordering the hilum.

Oro Rico originated from two bush plants selected from the semi-vine P.I. 207180 which was collected in Colombia under the name of "Feijao Pico de Oro." The generic name "Feijao" (meaning beans) suggests its country of origin as Brazil.

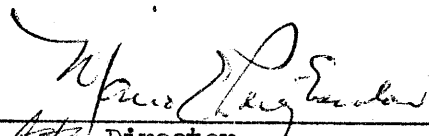
This cultivar is high yielding, producing 2.86 tons per hectare. The dry seed weight of 100 beans is 21.0 grams during the dry season and 12.5 grams during the wet summer season. This 41% loss in weight occurs in spite of the excellent stand of this cultivar during the severe summer climate. The dry beans are ready for harvest at 75 days after sowing in February and 73 days after sowing in early July. It flowers 38 days after sowing. The concentrated flowers set among the many branches and culminate by terminal flowers at branch tips. The stiff and strong stem retains the pods off the ground and may lodge moderately.

Oro Rico is resistant to common bean mosaic virus and rhizoctonia root rot (R. solani), moderately resistant to powdery mildew (Erysiphe polygoni). It is moderately resistant to leaf miner (Liriomyza sp.) and susceptible to root knot nematode (Meloidogyne incognita). It is susceptible to charcoal rot (Macrophomina phaseoli) and phyllosticta leaf spot (P. phaseolina). It is moderately susceptible to rust (Uromyces phaseoli) (Response: grade 3, intensity 30-50%). During the wet summer season it is susceptible to bacterial blight, but has displayed a high degree of tolerance to this disease during the winter dry season. It has field tolerance to whitefly transmitted virus diseases. This cultivar could be characterized as a high yielding, disease tolerant and adaptable to warm humid tropical conditions.


Cultivar Oro 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
 University of Puerto Rico

Feb. 23/76
 Date


 Administrator
 Agricultural Research
 Service

3/1/76
 Date