

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 'PALMAREJO'

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 'Palmarejo.'

The development of Palmarejo 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."

The cultivar Palmarejo was carried as selection 3R411-A in 1969, and as selection 70-R-31 since 1970. Its origin is P.I. 207139 which was collected in Colombia under ALGARROBO-L-101.

The cultivar Palmarejo is a bush bean of medium height (38 centimeters), with stiff stem resistant to lodging, and stringless long pods. It produces a good yield of dry beans under lowland tropical conditions. The long kidney-shaped beans have a maroon and pink mottle color and have a pleasant flavor when cooked.

Palmarejo yields 2.32 tons per hectare of dry beans during the dry winter season under the lowland tropical conditions of Iajas, Puerto Rico. It produces a concentrated flower set at 35 days. The dry bean can be harvested at 73 days either when planted in February or in July. The weight of its large seeds is 56.2 grams per 100 for the winter cultivation and 45.5 grams per 100 for the summer rainy season cultivation. The 19% loss in seed weight was mainly due to bacterial and fungal rot of the seeds. Its seeds measure: 15.5 mm long, 8.2 mm wide and 6.2 mm thick.


Palmarejo maintains an excellent stand in the field and its leaves remain relatively disease-free even during the summer rainy season. This cultivar has been highly resistant to rust (Uromyces phaseoli) races endemic to Puerto Rico. It is also resistant to common bean mosaic virus. In some plantings it has shown a slight diffuse chlorosis which was not mechanically transmissible. The leaves of this cultivar have been free from bacterial (Xanthomonas sp.) lesions until pods begin

to mature, but from mature pod on, it is susceptible to bacterial blight. Under wet summer conditions it is affected by phyllosticta leaf spot (P. phaseolina) and the basidial stage of web blight (Thanatoptherus cucumeris). This cultivar is susceptible to white mold (Schlerotinia schlerotiorum). Under severe rainy conditions its roots are infected by rhizoctonia root rot (R. solani) and charcoal rot (Macrophomina phaseoli). However, neither of these diseases cause reduction in stand or in the lush growth of the plants. During the dry winter season it is affected by the whitefly (Bemisia tabaci) transmitted virus, golden yellow mosaic.

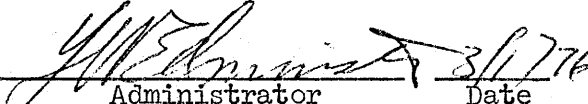
Cultivar Palmarejo is suggested either for snap bean or for dry bean cultivation in the lowland tropics.

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:

  
 Director  
 Agricultural Experiment  
 Station

Feb 23/76  
 Date

  
 Administrator  
 Agricultural Research  
 Service

3/1/76  
 Date