

UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Research Service
Washington, D.C. 20250
and
Agricultural Experiment Station
University of Puerto Rico
Mayaguez, Puerto Rico 00708

RELEASE OF DRY BEAN VARIETY, LA VEGA

The Agricultural Research Service, United States Department of Agriculture, and Agricultural Experiment Station of the University of Puerto Rico announce the release of the dry bean variety, La Vega.

The portion of the project carried out by USDA is supported in part by the Agency for International Development under a contract (PASA AJ 3-00) entitled "Regional Food Legume Improvement."

The variety La Vega is semi-vine, high yielding and intermediate in maturing. Its stiff and upright stem branches moderately and becomes maroon to purple at maturity while bearing dark green foliage. The dull black beans are intermediate in size, slightly flattened, and weigh 27.0 grams per one hundred seeds. Flowering starts from 30 to 32 days after sowing and purple pods mature into a brown color at 70 to 72 days.

La Vega resulted from a bulk selection of five plants from a line of PI 287536 accession (country of origin, Holland) which was cultivated at Isabela, Puerto Rico, during 1970. The five plants were free from any virus disease symptoms while the rest of the plants in the same row were affected. Due to frequent visitation of the flowers by a carpenter bee (Xylocopa brasiliatorum L.) in the bean fields, it is possible that the five selected plants were putative hybrids of the accession PI 287536, their material parent. In 1971 further field selection was made under high disease pressure of Rhynchosia mosaic virus. The bulk seed from this selection was designated as R-19. Seedlings of R-19 were further screened in an insect proof greenhouse with large populations of viruliferous whiteflies (Bemisia tabaci Genn.) transmitting Rhynchosia mosaic virus from the adjacent severely affected R. minima (L.) DC. plants which were used as virus reservoir.

This variety besides having resistance to Rhynchosia mosaic virus (known in Latin America as "Enanismo" or "Achaparamiento") is also highly resistant to common bean mosaic virus an aphid transmitted virus disease, and the cowpea mosaic virus, a beetle transmitted

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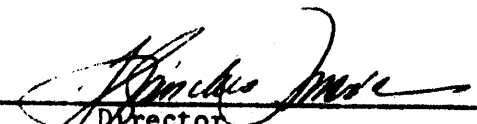
virus. In the field it indicates some tolerance to Golden Yellow mosaic virus which is another agent transmitted by Bemisia tabaci.

Variety La Vega has been a "slow rust" in the field and has displayed type "2" pustule reaction to the races of rust (Uromyces phaseoli (Pers.) Wint. var. typica Arth.) present in Puerto Rico. It has shown a high degree of tolerance to the complex of soil borne diseases endemic in tropical soils and consistently has produced excellent seedling stand and root system under the humid weather conditions. La Vega is highly susceptible to the "Tropical Halo Blight" which is caused by Xanthomonas vignicola Burk., and susceptible to common bacterial blight (X. phaseoli (F. F. Smith) Dows.). It is also susceptible to web blight (Thanatephorus cucumeris (Frank) Donk.), angular leaf spot (Isariopsis griseola Sacc.), and cucumber mosaic virus.

The variety La Vega is highly adapted to tropical climate and should be an appropriate dry bean variety for cultivation at "La Postrera" planting season, when beans are sown at the end of the rainy season, mid-October, and harvested in early dry season, mid-January. For the latter part of the rainy season, it has root rot resistance and for the dry weather, with its high insect population, it has resistance to a number of virus diseases which are transmitted by whiteflies, aphids and beetles.

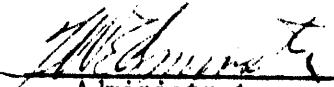
Seed will be available on a pro-rata basis to qualified persons who request it in writing on or before June 30, 1974 from N. G. Vakili, Federal Experiment Station, Post Office Box 70, Mayaguez, Puerto Rico 00708.

Approved:



Director
Agricultural Experiment Station
University of Puerto Rico

11/21/73
Date



Administrator
Agricultural Research Serv.
12/16/73
Date