Olathe cultivar (89–108 kg/100 g) when grown at the same sites. Sierra meets the canning standards of the commercial processors who routinely process this market class.

Sierra was released as a public, nonexclusive cultivar and a research fee will be assessed on each unit (cwt) of certified seed sold. Variety protection has been applied for under the Plant Variety Protection Act, Public Law 91-577, with the option that Sierra may be sold for seed by name only under the certified class. Breeder seed is maintained by the Michigan Agricultural Experiment Station, E. Lansing, MI 48824, in cooperation with the Michigan Foundation Seed Association.

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References and Notes


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REGISTRATION OF ‘ARROYO LORO’ WHITE BEAN

‘ARROYO LORO’ white bean (Phaseolus vulgaris L.) (Reg. no. 88, PI 536019) was developed and released by the Puerto Rico Agricultural Experiment Station and the USDA-ARS. Arroyo Loro was derived from a single backcross with ‘Bonita’ as the recurrent parent and ‘La Vega’ as the nonrecurrent parent. The line originated from a white-seeded single plant selection made in the F2 generation and advanced to the F4 generation as a bulk population with selection conducted each generation in the field for agronomic traits and disease resistance. Arroyo Loro was tested in replicated yield trials at three locations in Puerto Rico in 1978 and 1979 and was jointly released by the USDA-ARS and the Puerto Rico Agricultural Experiment Station in 1979 as breeding line 2W-33-2.

From 1982 to 1985 Arroyo Loro was tested in replicated yield trials at several locations in Puerto Rico and the Dominican Republic. A yield stability analysis of results obtained from replicated trials conducted on small farms and experiment stations in the Dominican Republic indicated that Arroyo Loro had desirable yield stability characteristics (1). The mean seed yield of Arroyo Loro in the Dominican Republic was 1.90 Mg ha-1 when averaged over 18 locations in 1982 and 1.73 Mg ha-1 when averaged over 10 locations in 1983. These yield levels were within the range of yields of the most productive black-seeded lines in the trials. In addition, the seed yield of Arroyo Loro was found to be more predictable than the yield of the recurrent and nonrecurrent parents. Arroyo Loro has a Type 2 growth habit with short vines and a plant height that ranges from 40 to 45 cm. In very productive environments Arroyo Loro is more erect and exhibits desirable agronomic traits that may contribute to its yield stability. It shows no appreciable photoperiod sensitivity, generally reaching harvest maturity within 90 d after planting. Arroyo Loro grows and yields well under hot (30–35 °C) and humid tropical conditions.

Arroyo Loro carries the single dominant hypersensitive I-gene resistance to most strains of bean common mosaic virus (BCMV). When exposed to the indigenous races of the rust pathogen [Uromyces appendiculatus (Pers.: Pers.) Unger], present in Puerto Rico and the Dominican Republic, the rust pustule size of Arroyo Loro is smaller than that of susceptible genotypes. As a consequence, the level of rust infection of Arroyo Loro tends to be low, generally with 10% or less of the leaf surface infected with rust. Arroyo Loro is susceptible to angular leaf spot [caused by Pseudopezis griseola (Sacc.) Ferraris] in Puerto Rico and the Dominican Republic.

The seeds of Arroyo Loro are slightly flat ranging in size from 17.4 to 20.0 g/100 seeds. Seed size and shape are acceptable to consumers in Puerto Rico. Breeder seed will be maintained by the Puerto Rico Agricultural Experiment Station, Rio Piedras, PR 00928.

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References and Notes


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REGISTRATION OF ‘SUNUP’ PROSO MILLET

‘SUNUP’ proso millet (Panicum miliaceum L.) (Reg. no. 124, PI 536011) was developed and released in June 1989 by the University of Nebraska Agricultural Experiment Station. It was released because of its superior yield potential over other cultivars in western Nebraska.

Sunup (79012-8-B-8) is an increase of an F1 derived proso line from the cross ‘Rise’ × ‘Dawn’ made in 1979. Sunup was identified as a line in 1981, grown in an observation block in 1982, and entered in preliminary yield trials in 1983. From 1984 to 1985 it was tested in yield trials in western Nebraska. Current breeder seed originated from a block grown in Sidney in 1987 and increased at Mead in 1988.

Sunup is a white seeded proso millet with seed size intermediate between Dawn and Rise. It has a head type that is compactum, but not as compact as Dawn. Sunup is five cm taller than Rise, but is not as tall as ‘Panhandle’. In five years of testing involving 25 locations, Sunup has yielded 100 kg ha-1 more than Rise and 300 kg ha-1 more than...