Sciences, and from the USDA-SCS, Plant Materials Center, Brooksville. The Florida Foundation Seed Producers, Inc., P.O. Box 309, Greenwood, Florida 32433, maintains a list of growers who obtained initial planting material in 1982.


References and Notes


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REGISTRATION OF ‘SANTA RITA’ FOURWING SALTBUSH

‘SANTA RITA’ (Reg. no. 1, PI 508551) fourwing saltbush [Atriplex canescens, (Pursh.) Nutt.] was selected by the USDA-SCS, Tucson, AZ, and cooperatively released with the Arizona Agricultural Experiment Station and the USDA-ARS in June 1987. Fourwing saltbush is a deep-rooted, drought-tolerant evergreen, dioecious shrub ranging from 1.5 to 2.0 m tall. It has excellent salt tolerance and grows on a wide range of soil textures, from sands to clay loam.

The collection that led to the release of Santa Rita was from a native stand on the Santa Rita Experimental Range, Pima County, Arizona, in 1962. Since first collected, it has been evaluated for use in mine-land reclamation, range improvement, wildlife habitat improvement, critical-area stabilization, and highway beautification, as well as for controlling wind erosion on abandoned cropland in the Sonoran desert. Field identification numbers used during field tests were P-15644, T-3553, A-16805, BN-15412-63; the permanent number 9003553 was assigned by the National Plant Materials Center. Santa Rita is adapted for use in the Sonoran, Mohave, and Chihuahuan deserts of western Texas and southern portions of New Mexico, Arizona, and California at elevations from 61 to 1220 m and rainfall from 200 to 410 mm. Its leaves, stems, and fruit provide browse in all seasons for livestock and wildlife.

Santa Rita has been field tested at 25 sites in southern Arizona, California, New Mexico, and Texas. Shrub Initial Evaluation Plantings (SIEP) were conducted at the Tucson Plant Materials Center starting in 1966 and 1969. In the 1966 SIEP, Santa Rita was compared with 8 other accessions of fourwing saltbush, and in the 1969 SIEP with 35 other accessions. Santa Rita was selected because it has higher seedling vigor, more herbage, and higher seed yields than other accessions (including the cultivars ‘Marana’, ‘Rincon’, and ‘Wyattana’).

Santa Rita is readily established from seed or rooted cuttings. Optimum planting dates for seeding or transplanting rooted cuttings in the lower desert area are 1 November to 1 December, to take advantage of winter moisture. There are 49 000 de-winged seeds kg⁻¹. A seeding rate of 1 kg live seed ha⁻¹ will provide 27 live seeds m⁻².

Best seed yields have been obtained from space-planted rooted cuttings. A ratio of 1:5 male/female plants space-planted with 1.5 m within the row and 4.6 m between rows, have averaged « 400 kg ha⁻¹ of de-winged seed.

Breeder and foundation generations will be maintained by the USDA-SCS Plant Materials Center, Tucson, Arizona. Breeder and foundation seed and plants will be available to growers through the Arizona Crop Improvement Association or the Arizona Natural Resource Conservation District.

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References and Notes

1. USDA-SCS, Plant Materials Center, 3241 N. 33rd Ave., 85705. Registration by CSSA. Accepted 31 March 1990 by corresponding author.

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