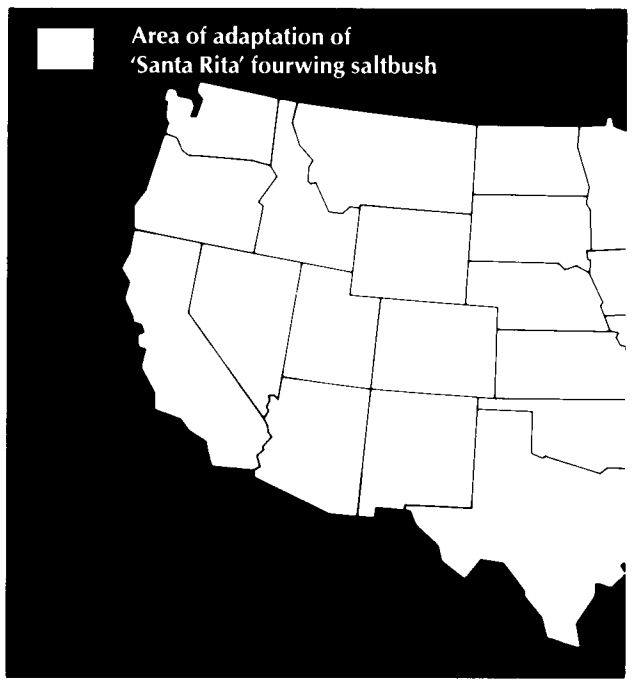
Availability

The SCS Plant Materials Center, 3241 N. Romero Road, Tucson, AZ 85705, maintains breeder and foundation stock for Santa Rita fourwing saltbush.

For more information on availability and use of Santa Rita, contact your local SCS office. All programs of the Soil Conservation Service are offered on a nondiscriminatory basis without regard to race, color, national origin, religion, sex, age, marital status, or handicap.



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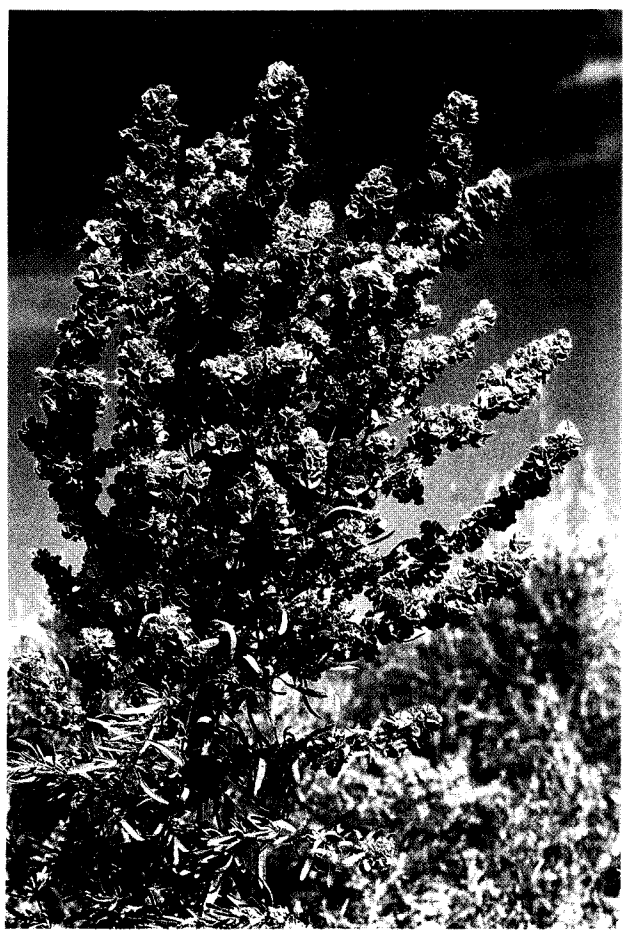

'Santa Rita' fourwing saltbush

'Santa Rita' fourwing saltbush (*Atriplex canescens* Pursh. Nutt.) is an erect, evergreen, freely branching native shrub. It is highly recommended for use in critical area stabilization, shelterbelts, erosion control on rangeland, and improvement of the vegetative components of wildlife habitat. Its leaves, stems, and fruit provide browse in all seasons for livestock and wildlife.

Santa Rita was released in 1987 by the Soil Conservation Service (SCS) in cooperation with the University of Arizona Agricultural Experiment Station and the Agricultural Research Service of the U.S. Department of Agriculture. It was selected for release over other strains because of its overall vigor and ability to provide ground cover.

Description

Santa Rita ranges from 4.5 to 7.7 feet tall. Stems are smooth and gray-scurfy, with older bark gray and exfoliating in thin layers. Leaves are numerous, alternate, mostly sessile or short petioled, linear or oblong, and one-half inch to 2 inches long. Plants of Santa Rita are dioecious. Male flowers occur in dense, long terminal panicles. Female flowers are in dense leafy and bracted spikes and panicles. The fruiting bracts are sessile or short-stalked and conspicuously four-winged. The margins of the wings are entire.

Seed yields of up to 350 pounds of dewinged seed per acre per year have been achieved with specified orchard design. There are about 60,000 dewinged seeds per pound. Newly harvested seed requires 10 months after ripening before accurate germination tests can be made.

Adaptation

Santa Rita is well adapted to a wide range of soil textures from sandy loams to clay loams. It appears to have salt tolerance similar to that of other native fourwing saltbush species. It is best adapted for use in the Chihauhuan desert zones but is also adapted to the Sonoran and Mohave deserts. Seed production has been good to excellent most years at Tucson, Arizona.

Santa Rita fourwing saltbush: (1) Male flowering branch. (2) Female flowering branch with characteristic leaf arrangement. (3) Seed with four wings.

Used with permission from *Trees and Shrubs of the Southwestern Deserts* by Benson and Darrow, Tucson. University of Arizona Press, 1981.

Establishment

Santa Rita is easy to establish from direct seeding or as containerized plants. Containerized plants can be propagated with seed or by hardwood cuttings, which root easily. Harvested seeds should be dewinged so that they will feed through a drill. Germination normally occurs during the winter in the lower desert areas. Fall seeding between November 1 and December 31 is recommended. Drill the seed one-half to three-fourths of an inch deep in a firm, weed-free seedbed.

Seed orchards

Seed orchards of Santa Rita should be established using rooted cuttings from known male and female plants from the Tucson plant materials center. Because the dioecious plants of Santa Rita are wind pollinated, use one male to six female plants in a uniformly spacing planting. A square design is recommended; that is, the length of the planting is equal to its width. Spacing should be 6 feet apart in the row, and rows should be 15 feet apart. Santa Rita is woody, and its seeds are hand harvested.

In Tucson, seeds mature between December 1 and December 15.

Management

In seed orchards, shelterbelts, and critical area plantings, Santa Rita should be clipped approximately every 3 years to maintain a healthy and vigorous stand. Clipping causes the plants to initiate new growth that is more productive than if they are not clipped. In range plantings, harvest no more than 50 percent of the current year's growth.