QUAILBUSH

Atriplex lentiformis (Torr.) S. Wats.

Plant Symbol = ATLE

Contributed By: USDA NRCS National Plant Data Center

Alternative Names
big saltbush

Uses
Ethnobotanic: The Native American Pima groups eat quailbush seeds. They grounded the seeds into a meal and used them as a thickener in soups or added them to flour for making bread. Most of this shrub is edible, young shoots are suitable for greens. Several tribes used this shrub for its salty taste. The crushed leaves and roots were used as soap for washing clothes (Moerman 1998).

Native Americans tribes grounded the roots and flowers and applied it to ant bites. The leaves were chewed to treat head colds. The crushed flowers and stems can be steamed and inhaled to treat nasal congestion (Moerman 1998).

Wildlife: Rabbits, lizards, rattlesnakes, coyotes, quails, and other birds use the seeds and foliage for food and habitat. The foliage and twigs provide shelter for many small mammals and livestock.

Status
Please consult the PLANTS Web site and your State Department of Natural Resources for this plant's current status, such as, state noxious status and wetland indicator values.

Description
General: Quailbush is a large, fast growing shrub. It occurs in river floodplains, on roadsides, and in the borders of drainage. The branches are widespread, slender, and flexible. The leaves are alternate, triangular or ovate to oblong, and are 1 ½ to 2 inches long. The plants are male or female and have the ability to alter their sex due to environmental conditions.

Distribution: It ranges from the Upper San Joaquin and Salinas Valley southward to lower California, in Lower and Upper Sonoran Life Zones (McMinn 1939). It extends eastward into Nevada, Utah, Colorado, and New Mexico. For current distribution, please consult the Plant profile page for this species on the PLANTS Web site

Adaptation
Quailbush grows best with full sunlight in any well-drained but not too fertile soil. It tolerates very alkaline soils and can succeed in hot and dry climates. This species is not often found in colder areas of the country but it can tolerate temperatures between -5 and -10º C.

Establishment
Propagation from Seed: The seed is best sown in April or May and placed in containers or seed trays containing a compost of peat and sand to which a slow-release fertilizer has been added. Firm the medium gently, sow the seed thinly and evenly on

top, and cover with its own depth of medium (Heuser 1997). Place the pots in a cold frame at 13º C and the seed should germinate between one to three weeks. The seedlings should be placed into individual pots and grown in a greenhouse for the first winter.

Management

Atriplex lentiformis will defoliate under extreme drought conditions. They need to be under some form of water stress, salt stress, or drought stress. The salt they accumulate in their leaves allows them to extract water from the soil. They tolerate and remove the excess salts by bladders in their leaves that act as salt sinks, keeping the salt from the plant cells.

Cultivars, Improved and Selected Materials (and area of origin)

'**Casa**' - Released 1979 by the Lockeford Plant Materials Center, CA, this cultivar has exhibited excellent performance as a conservation plant on various critical areas, for upland game cover and for environmental enhancement on deep, medium, or fine-textured soils that are well to poorly drained. It can be grown on slightly acidic to strongly alkaline soils (pH 6-8.5) and survive on an annual precipitation of 20-25 cm (8-10 inches) when irrigated for initial establishment. This species occurs from the upper San Joaquin and Salinas valleys south to lower California. It extends eastward into Nevada, Utah, and New Mexico.

Contact your local Natural Resources Conservation Service (formerly Soil Conservation Service) office for more information. Look in the phone book under "United States Government". The Natural Resources Conservation Service will be listed under the subheading "Department of Agriculture."

References

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For more information about this and other plants, please contact your local NRCS field office or Conservation District, and visit the PLANTS Web site<http://plants.usda.gov> or the Plant Materials Program Web site <http://Plant-Materials.nrcs.usda.gov>