

# DESERT GLOBEMALLOW

## *Sphaeralcea ambigua* A. Gray

Plant Symbol = SPAM2

**Common Names:** apricot mallow, roughleaf apricot mallow, desert mallow, sore-eye poppy, mal de ojo, Parish mallow, desert hollyhock

**Scientific Names: Subspecies**

*Sphaeralcea ambigua* subsp. *ambigua*

*Sphaeralcea ambigua* subsp. *rosacea*

*Sphaeralcea ambigua* subsp. *rugosa*

### Description

**General:** Desert globemallow is a native perennial sub-shrub with numerous, slightly woody stems. Each plant grows in a large, rounded clump to a height of 20-40 inches, and may have over a hundred stems growing from the same root. Desert globemallow is known for its brilliant apricot to orange colored flowers. A subspecies, *Sphaeralcea ambigua* subsp. *rosacea*, has petals that are lavender, pink, or white. Plants bloom most heavily in the spring, but continue to bloom throughout the year in response to precipitation. Desert globemallow is the largest-flowered globemallow. Each bowl-shaped flower has 5 petals that are up to 1.5" long. The flowers are arranged in clusters on the upper stems in an open panicle. The fruit is a brown, globe-shaped schizocarp that breaks into several segments, each containing 0-2 seeds. Leaves are simple, 3-lobed, 0.5 to 2 inches long, grayish green, and triangular, with a wavy margin. Star-like hairs covering the leaves give a grayish tone. Desert globemallow is the most xerophytic of the Southwest globemallows. (Kearney & Peebles, 1969; La Duke, 2016; Epple & Epple, 1995; Baldwin et al., 2002; Wall & McDonald, 2009)



*Desert globemallow, Photo by Heather Dial, USDA NRCS Tucson Plant Materials Center*

**Distribution:** Desert globemallow is found in southwest Utah to southern California, southern Nevada, Sonora, and Northern Baja, California. Please refer to the PLANTS Database for the most current map of species distribution.

**Habitat:** Desert globemallow is found in desert scrub below 3500 ft. on dry, rocky slopes, edges of sandy washes, roadsides, and disturbed areas.

### Adaptation

This plant is found in the Mojave Desert in creosote bush scrub and Joshua tree woodlands. In the Sonoran Desert and Colorado Plateau, it is common in desert scrub, interior chaparral, and semidesert grasslands. Associated plants include: Creosote bush (*Larrea tridentata*), Brittlebush (*Encelia* spp.), Yucca (*Yucca* spp.), Ocotillo (*Fouquieria splendens*), Paloverde (*Parkinsonia* spp.), Ironwood (*Olneya tesota*), and Pinyon pine (*Pinus monophylla*). (California Native Plant Society, 2016)

### Uses

**Range revegetation:** Desert globemallow is an early colonizing species, and can suppress invasive exotic species in areas affected by fires or other disturbance (Abella et al. 2009; Abella et al. 2012). Seeds can be used on construction sites where erosion control and plant community restoration are desired (James, 1998). Desert globemallow seedlings have been used to revegetate abandoned mines (Rodgers, 1994)

**Ornamental:** Desert globemallow is used as a landscape ornamental for xeriscape gardens. It is a low-maintenance plant that is easy to grow from seed and will re-seed itself. Desert globemallow requires full sun and is tolerant of various soil types, as long as there is adequate drainage. It will live on natural rainfall; however, supplemental water will increase flowering. Periodic cutting back will maintain the plant's appearance. Desert globemallow is hardy to -10°F (Phillips, 1995; Wasowski & Wasowski, 2000).

**Pollinator habitat:** Desert globemallow provides habitat for pollinator species, including native bees and common checkered skipper butterflies (*Pyrgus communis*) (Tucson Plant Materials Center and the Xerces Society, 2012; Chambers et al., 2004).

**Forage:** Desert globemallow provides browse for bighorn sheep and livestock (Epple & Epple 1995). Globemallow is a food source for the desert tortoise, *Gopherus agassizii* (Hansen et al. 1973). Arizona Game and Fish lists desert globemallow as a “favored native plant” for feeding to captive desert tortoises (Arizona Game and Fish, 2008).

**Ethnobotanical:** Desert globemallow stems were used by the Yavapai to make trays for drying saguaro fruit or slabs of pounded mescal (Gifford 1936). The Shoshoni had multiple medicinal uses for globemallow; however, it is not known if they distinguished between desert globemallow and other globemallows (Train et al. 1957). Medicinal uses included poultices applied to cuts, swellings or rheumatism; decoctions taken internally for upset stomach, colds, and as a treatment for infectious diseases; and decoctions used as an eyewash (Train et al. 1957). It is interesting to note that while globemallow was used by the Shoshoni as an eye medicine, the English and Spanish names “sore eye poppy” and “mal de ojo” are elsewhere attributed to eye irritation caused by contact with the leaf hairs (Epple & Epple 1995).



*Desert globemallow, Photo by Heather Dial, USDA NRCS Tucson Plant Materials Center*

#### **Status**

*Threatened or Endangered:* No

*Wetland Indicator:* UPL

**Weedy or Invasive:** This plant may become weedy or invasive in some regions or habitats and may displace desirable vegetation if not properly managed. Please consult with your local NRCS Field Office, Cooperative Extension Service office, state natural resource, or state agriculture department regarding its status and use.

Please consult the PLANTS Web site (<http://plants.usda.gov/>) and your state's Department of Natural Resources for this plant's current status (e.g., threatened or endangered species, state noxious status, and wetland indicator values).

#### **Planting Guidelines**

The recommended seeding rate for desert globemallow is 2.2 pure live seed (PLS) pounds per acre if planted with a drill and approximately 4.4 PLS pounds per acre if seed is broadcast. There are approximately 500,000 seeds of desert globemallow in a pound. For ornamental establishment, sow desert globemallow seed to a depth of ¼ inch. Fall-planted seed will usually germinate in the winter and grow rapidly in the spring. However, there may be poor germination due to the seed's impermeable seed coat. Mechanical scarification has been shown to improve germination (Dunn, 2011). For containerized production, sow globemallow seed to a depth of ¼ inch in a well-drained soil.

#### **Pests and Potential Problems**

Some species of *Sphaeralcea* have been reported to be a host of the fungus, *Phymatotrichum omnivorum*, which causes root rot of cotton and other cultivated plants (Kearney & Peebles, 1969).

#### **Environmental Concerns**

None

#### **Control**

Please contact your local agricultural extension specialist or county weed specialist to learn what works best in your area and how to use it safely. Always read label and safety instructions for each control method. Trade names and control measures appear in this document only to provide specific information. USDA NRCS does not guarantee or warranty the products and control methods named, and other products may be equally effective.

## Seeds and Plant Production

Desert globemallow should be planted in the early spring into a firm, weed free seedbed at a ½ inch depth with 24-40 inches within-row spacing. Row spacing can vary from 36-40 inches. The planting should be irrigated to maintain a moist soil surface and to avoid soil crusting. Appropriate pre-emergent herbicide may be used to control weeds after the plants have developed at least 3-5 leaves. Established fields should be irrigated approximately every four weeks during the growing season. Apply nutrients according to soil test results. Irrigated fields produce seed from spring to fall. Mechanical seed harvest is with a seed stripper or combine. Yields for irrigated production fields average 100-200 pounds per acre at the Tucson Plant Materials Center depending on harvesting equipment used. Harvested seed can be cleaned by processing with a brush machine or hammer mill and air screening equipment.



*Desert Globemallow in flower, Photo by Heather Dial, USDA NRCS Tucson Plant Materials Center*

## Cultivars, Improved, and Selected Materials

Globemallows are actively propagated in the horticultural trade. One available selection of desert globemallow is 'Louis Hamilton'™. Seed is readily available from commercial sources. Cultivars should be selected based on the local climate, resistance to local pests, and intended use. Consult with your local land grant university, local extension or local USDA NRCS office for recommendations on adapted cultivars for use in your area.

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### **Citation**

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