

SCARLET GLOBEMALLOW

Sphaeralcea coccinea (Nutt.)
Rydb.
Plant Symbol = SPCO

Contributed by: USDA NRCS Aberdeen Plant
Materials Center and Idaho State Office



Joy Viola, Northeastern University, Bugwood.org

Alternate Names

Red false mallow, copper mallow, cowboy's delight

Uses

Scarlet globemallow provides good ground cover on disturbed sites. Although its value for erosion control is low to moderate, it is used in low rainfall area native seed mixtures to stabilize roadsides and other disturbed sites. Livestock commonly eat scarlet globemallow particularly when grasses are dormant. It provides important forage for pronghorn antelope; is rated as excellent forage for domestic sheep, deer, and bighorn sheep. Bison, prairie dogs, jack rabbits, and other small mammals utilize this species for forage. Some small birds eat scarlet globemallow

fruits. Palatability is rated poor to good depending on the animal species, location, and season of use. Palatability is generally rated fair for cattle and elk and poor for horses.

Status

Consult the PLANTS Website and your State Department of Natural Resources for this plant's current status (e.g. state noxious status).

Description

General: Mallow Family (Malvaceae).

Scarlet globemallow is a low-spreading, warm season, long-lived perennial forb to half-shrub. Stems emerge from a woody caudex located just under the soil surface and reach a height of 10-40 cm (4-16 inches). Plants are densely covered with stellate hairs. Leaves are alternate, palmately lobed, 1-3.7 cm long and 1-5cm wide. The deep orange to pinkish colored flowers are clustered in dense, short racemes. There are 5 distinct petals, 5 united sepals, and 5 to numerous styles. Stamens are joined by their stalks into a tube and several pistils united in a ring. The fruit is an indehiscent schizocarp with 1-seeded carpels. Plants are rhizomatous. The main taproot is woody and stout and may remain unbranched for 3 feet (90cm) before it divides into lateral roots. Growth begins in March and April, flowering in May to July and seed matures unevenly between July and August throughout much of its range. There are approximately 500,000 seeds per pound. The seed has a hard seed coat.



Jim Pisarowicz, USDI National Park Service

Distribution

Scarlet globemallow is most commonly found in the low rainfall areas of the Intermountain West, Great Basin, Rocky Mountains and Great Plains regions of the United States and Canada.

Habitat

Scarlet globemallow grows in desert, semi-desert, prairies, grasslands, scrub, pinyon-juniper, and sagebrush plant communities and also often on dry roadsides, disturbed areas and dry slopes. It is adapted to a wide range of soil types from sandy to clay loams to gravelly to alkaline and moderately saline soils, but it is not generally found on sodic soils. It is extremely drought tolerant and does not tolerate shady conditions. It grows at elevations from 3,500 to 9,000 feet (1,067-2,743 m).

Adaptation

This species is adapted to well-drained soils with a pH range of 5.0 to 8.0. For xeriscaping and low water-use gardening, the species is recommended for use in USDA hardiness zones 6-8 in areas receiving 6 to 10 inches or more annual precipitation.

Management

When planted in a native reclamation mix, scarlet globemallow should be a minor component of the mixture and establishing plant community. Therefore, management should be based on other key species in the established plant community. Grazing on seeded lands should be deferred for at least two growing seasons to allow full stand establishment.

Pests and Potential Problems

Information on pests and potential problems of scarlet globemallow is limited. Grasshoppers will eat scarlet globemallow but it is unpalatable to mormon crickets and appears to not be affected by army cutworm infestations on rangeland. In seed increase fields in western Colorado, two species of weevils were identified in the field. *Anthonomus sphaeralcea* (Sphaeralcea weevil) was the dominant species of weevil and an unidentified *Apion* sp. was also present. Weevils feed on developing seed pods and the potential for damage is high. Any insecticide applications should be carefully considered and precautions taken to protect pollinators. There are no known diseases that affect scarlet globemallow.

Seed and Plant Production

Fields for seed production can be established by transplanting greenhouse-grown containerized stock or from direct seeding. Direct seeding should take place in the fall to allow for natural stratification of the seed. Seed germination can be increased by acid

or mechanical scarification. The pure stand seeding rate is 2 pounds PLS per acre. When planting as part of a seed mix, adjust the rate to the percentage desired in the mix. Seed should not be planted approximately 1/8 inch deep and no deeper than 1/4 inch.

For seed production, the seeding rate is 20 to 50 PLS per linear foot of row. Row spacing should be 28-36 inches. Irrigation may be needed if planting in areas with less than 16 inches of annual precipitation. Two irrigation applications are usually needed; once in the spring and then during the seed ripening phase. Scarlet globemallow is pollinated by insects, so the use of insecticides should be limited especially during flowering. Bees of the genus *Diadysia* have been observed pollinating scarlet globemallow. Seed may be harvested mechanically or by hand stripping and seed yields range from 75-100 pounds per acre (34-45 kg/ha). Harvest seed when the lower capsules begin to dry. Care should be used when handling seed because the stellate hairs on the seed can be a severe eye irritant.



Scarlet globemallow seedling (USDI National Park Service)

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

Wildland harvested seed is available through commercial sources. The Agricultural Research Service released Pre-variety Selected Class ARS-2936 Scarlet Globemallow in 1993. The original collection was made in northern Idaho in 1987 and was selected for forage yield, spread from rhizomes

and relatively high palatability. Small seed samples are available for seed increase or research.

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