

Common Name: GRANITE STONECROP

Scientific Name: Sedum pusillum Michaux

Other Commonly Used Names: dwarf stonecrop, puck's orpine, granite rock stonecrop

Previously Used Scientific Names: none

Family: Crassulaceae (stonecrop)

Rarity Ranks: G3/S3

State Legal Status: Threatened

Federal Legal Status: none

Federal Wetland Status: none

Description: Annual **herb** with succulent stems up to 3 inches (4 - 8 cm) tall, pale bluish-green, often tinged with red; usually in small tufts or patches. **Leaves** less than ½ inch (4 - 12 mm) long and $^{1}/_{16}$ inch (2 mm) thick, pointed, more or less round in cross-section, succulent, alternate. **Flowers** less than $^{3}/_{8}$ inch (6 - 8 mm) wide, with 4 white, spreading petals; 4 green sepals; 8 redtipped stamens; and 4 erect or spreading carpels. **Fruit** about $^{3}/_{8}$ inch (6 - 10 mm) wide, cross-shaped, with 4 segments that split open on the **upper** surface to release seeds.

Similar Species: Elf-orpine (*Diamorpha smallii*) has bright red leaves and stems, and its fruit segments split open on the lower surface. It occurs on granite and sandstone outcrops, where it flowers April–May.

Related Rare Species: See Nevius's stonecrop (Sedum nevii) on this website.

Habitat: Piedmont granite outcrops, usually in mats of moss (*Hedwigia ciliata*) beneath red cedar trees.

Life History: Granite stonecrop is a winter annual; its seeds germinate in the fall and the plants overwinter as tiny rosettes. Its flowers open in very early spring and are pollinated by a variety of flies, ants, and small bees which are attracted to the flowers' fragrance and the nectar produced by nectaries at the center of the flowers. Cross-pollination is encouraged by the fact that the anthers of a given flower mature and produce pollen before that flower's stigma becomes receptive. The flowers are also capable of self-pollination, a strategy that promotes fertilization in flowers that open in early spring before insects arrive. Both cross- and self-pollinated plants produce fruit and viable seed. Plants wither and disappear soon after their fruits reach maturity in late spring.

Survey Recommendations: Surveys are best conducted during flowering (March–April) and fruiting (April–May). Plants wither and disappear by late spring.

Range: Georgia, North Carolina, and South Carolina.

Threats: Quarrying of outcrops, trash dumping, off-road vehicle traffic, removal of red cedar trees from outcrops, trampling.

Georgia Conservation Status: Approximately 50 populations have survived with fewer than 10 protected on conservation lands.

Conservation and Management Recommendations: Protect granite outcrops from quarrying, trash dumping, vehicle traffic, and removal of red cedar trees. Direct foot traffic away from populations.

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Author of Species Account: Linda G. Chafin

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