



Common Name: GRIT PORTULACA

Scientific Name: *Portulaca biloba* Urban

Other Commonly Used Names: grit purslane

Previously Used Scientific Names: *Portulaca teretifolia* ssp. *cubensis* (Urban) Ortega

Family: Portulacaceae (purslane)

Rarity Ranks: G1G2/S1

State Legal Status: Special Concern

Federal Legal Status: none

Federal Wetland Status: none

Description: Annual **herb** with sprawling and semi-erect stems. **Stems** fleshy, slightly woody at the base, with branches up to 10 inches long; nodes with only a few, tiny hairs. **Leaves** about ½ inch long and less than ⅛ inch wide, fleshy, round in cross-section, with pointed (occasionally

blunt) tips. **Flower clusters** at the tips of branches with 1 - 3 buds or, occasionally, open flowers; flower buds rarely open but they self-fertilize and produce fruits with abundant seed. **Flowers** (when open) about 1 inch wide, dark pink, with 5 deeply notched petals and more than 40 stamens. **Fruit** a round capsule less than ¼ inch long with a pointed cap that opens to reveal a “nest” of black seeds.

Similar Species: Grit portulaca occurs with two other succulent herbs: wingpod purslane (*Portulaca umbraticola* ssp. *coronata*, see below) and fameflower (*Talinum teretifolium* or *Phemeranthus teretifolius*). Fameflower also has narrow, pointed, fleshy leaves and dark pink flowers but it grows as a single, erect plant about 4 inches (10 cm) tall and the flower cluster is at the top of a long stalk. Pink purslane (*Portulaca pilosa*) petals are not notched or lobed, its pink-purple flowers usually have 5 - 12 stamens, and the stem nodes are hairy; it occurs in disturbed areas with thin or sandy soils. Small’s purslane (*P. smallii*) has white to pink flowers and the stem nodes are hairy; it occurs on Piedmont granite outcrops.

Related Rare Species: Wingpod purslane (*Portulaca umbraticola* ssp. *coronata*, Special Concern) occurs on granite outcrops and Altamaha Grit outcrops, where it grows with grit portulaca. It has fleshy, sprawling stems and flattened, oval leaves with rounded tips. Its flowers have 5 yellow petals, and its fruit is surrounded by a circular wing or flange.

Habitat: Patches of thin, bare soil on Altamaha Grit outcrops.

Life History: Grit portulaca is an annual herb that produces abundant seed from closed (cleistogamous), self-pollinating flowers; open flowers, presumably cross-pollinated, are rarely seen. Its unusual disjunct distribution – Georgia and Cuba – may be due to the migration patterns of nighthawks. These birds nest on the surface of grit outcrops and eat grasshoppers that may have grit portulaca seeds in their guts; the seeds could then be transported to Cuba when the nighthawks migrate. Another theory attributes the disjunct distribution to tropical storms which may have carried seeds of Cuban plants to southeast Georgia.

Survey Recommendations: Surveys are best conducted during flowering (late July–August), but plants are also recognizable by sprawling habit, fleshy stems, leaf shape, and fruit type.

Range: Georgia and Cuba.

Threats: Fire suppression in surrounding pinelands and on outcrops, off-road vehicle traffic, and mechanical clearing.

Georgia Conservation Status: Four populations are known, only one on conservation lands.

Conservation and Management Recommendations: Protect Altamaha Grit outcrops from mechanical disturbances. Apply prescribed fire to surrounding pinelands every 2 - 3 years, allowing fire to burn across outcrops. Exclude off-road vehicles from outcrops. Purchase land or acquire conservation easements for Grit outcrops.

Selected References:

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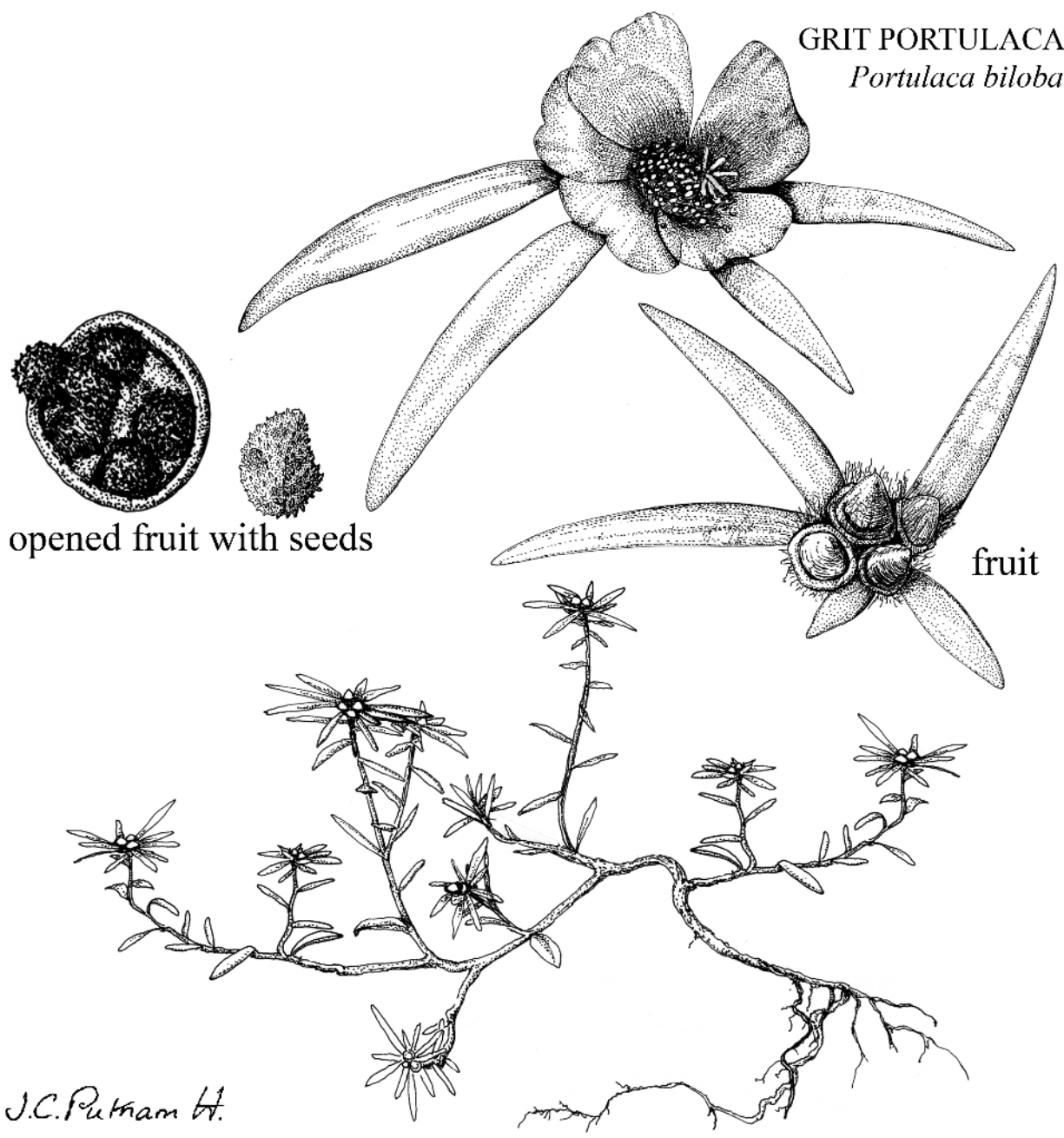
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Date Compiled or Updated:

L. Chafin, Sept. 2008: original account

K. Owers, Feb. 2010: added pictures

GRIT PORTULACA
Portulaca biloba



opened fruit with seeds

fruit

J.C. Putnam H.

