

TINY POLYGALA

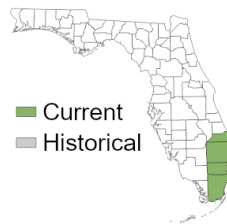
Polygala smallii R.R. Sm. & Ward

Synonyms: *Polygala arenicola* Small; *Senega smallii* (R.R. Smith & D.B. Ward) J.F.B. Pastore & J.R. Abbott.

Family: Polygalaceae (milkwort)

FNAI Ranks: G1/S1

Legal Status: US-Endangered FL-Endangered



Yellow-green flowers and narrowly oblanceolate leaves. Photo by Robert Gundy.

Field Description: Perennial **herb**, usually single-stemmed and up to 5 cm tall; if branches are present, they are often buried in sand and the plants appear tufted. **Leaves** up to 1.4 cm wide and 4 cm long, often taller than the flower heads, lance-shaped and slightly wider toward the tip, alternate, succulent, crowded on the stem in a persistent basal rosette. **Flowers** small, numerous in a crowded head at the top of the stem, yellow-green, with 2 wing-like sepals, 3 small sepals, and petals fused into a keel with a projecting fringe. **Fruit** is an ellipsoid capsule with seeds up to 2.3 mm long and pubescent.

Similar Species: Tiny polygala can be easily confused with the more common and wide-spread candyroot (*Polygala nana*). These two species can be differentiated both by flower and vegetative characteristics. Tiny polygala has a green or greenish-yellow flower while candyroot has a bright yellow or greenish-yellow flower. Tiny polygala is also smaller growing only 2-5cm (up to 8 cm) tall, while candyroot is generally 3-18 cm tall. The leaves of candyroots are distinctly wider at the tip than that of tiny polygala as well.

Related Rare Species: Lewton's polygala (*Polygala lewtonii*) occurs in scrub and sandhill in central Florida and has pink flowers in a showy loose spike.

Habitat: Pine rocklands, scrub, sandhills, and open coastal spoil piles.

Best Survey Season: Spring; March - May.

Range-wide Distribution: Endemic to the Atlantic Coast Ridge of SE FL from Martin County south to Miami-Dade County.

Conservation Status: This species is a narrow endemic, occurring only within fragmented pine rockland habitat at about five sites. Nearly all populations are very small and further declining. Several populations have been destroyed by conversion of its habitat to commercial and residential developments. Even those that are protected on managed lands suffer from inadequate fire management, presence of invasive plant species, and in some cases herbivory.

Protection and Management: Purchase and protect intact habitats on the Atlantic Coast Ridge. Use prescribed fire to create and maintain sandy openings. Eradicate exotic pest plants. Monitor known populations.

References: Bradley and Gann 1995, Coile 2000, IRC 1999, USFWS 1998, Smith and Ward 1976, USFWS 2021, Ward 1979, Wunderlin 1998, Wunderlin and Hansen 2000a., Weakley 2022.