

*Mitracarpus portoricensis* (Urban) Urban  
RUBIACEAE

Puerto Rico girdlepod

Synonyms: *Mitracarpus frigidus portoricensis* Urban



**General Description.**—Puerto Rico girdlepod (a name assigned by the Natural Resources Conservation Service) is a low, 20- to 60-cm tall evergreen shrub with basal diameters of 0.5 to 1.0 cm. It may have one or more gray stems from the root crown and a compact, rounded crown with bifurcate or trifurcate branching. The stems, branches, and roots are woody but flexible. Plants are supported by a tap and lateral root system of yellow or tan roots. The glabrous branches and twigs are four-striate and four-angled. The leaves, which are crowded on recent twig growth, are sessile, nearly linear, 30 to 60 mm long and 1 to 3 mm broad. The 2-cm broad, many-flowered heads are lateral or terminal on long peduncles. Tubular flowers are bright white, about 5 mm long. Capsules disperse their seeds when the tops come off releasing 1-mm long, ovate, brown seeds (Liogier 1997).

**Range.**—Puerto Rico girdlepod is endemic to Puerto Rico, particularly to the northern, western, and southwestern portions of the Island (Liogier

and Martorell 1982). The species is not known to have been planted or naturalized anywhere else.

**Ecology.**—Puerto Rico girdlepod is a low-statured, slow-growing plant that requires full or nearly full sunlight. It can compete with low herbs and grasses but cannot grow under a forest or shrub canopy. Consequently it must grow in areas with low competition, usually disturbed areas and areas of low fertility. It finds these conditions in eroded areas, dirt roads and road cuts, old fields, rocky hillsides, and coastal sands. Puerto Rico girdlepod may be found in areas of sedimentary (including limestone), igneous, and metamorphic (including ultramafic) rocks. It tolerates salt spray, low soil fertility, compacted soils, and moderate physical abuse. Elevations range from a little above sea level to about 400 m in areas with rainfall from about 900 to about 1800 mm of mean annual precipitation.

**Reproduction.**—Puerto Rico girdlepod blooms and produces seed throughout the year. A collection of seeds from the Susúa State Forest contained an average of 2,400 seeds/g. Placed on moist blotter paper, 29 percent of the seeds germinated between 4 and 90 days after sowing (author's observation). Seeds are dispersed by wind and water. Opening of the forest canopy and probably bare soil are necessary for establishment. Seedlings are not common.

**Growth and Management.**—Growth of Puerto Rico girdlepod is slow. Plants observed by the author appeared to have grown about 10 to 25 cm/year. Life span of the shrubs appears to range from about 2 to 6 years. No planting or management experience has been reported. The species is not common enough or aggressive enough to warrant control.

**Benefits.**—Puerto Rico girdlepod helps protect the soil, revegetates disturbed sites, adds to the aesthetics of wildland areas (because of its white flowers), and furnishes cover for wildlife.

## References

Liogier, H.A. 1997. Descriptive flora of Puerto Rico and adjacent islands. Vol. 5. Editorial de la Universidad de Puerto Rico, Río Piedras, PR. 436 p.

Liogier, H.A. and L.F. Martorell. 1982. Flora of Puerto Rico and adjacent islands: a systematic synopsis. Editorial de la Universidad de Puerto Rico, Río Piedras, PR. 342 p.

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