Blue porterweed, *Stachytarpheta jamaicensis*

Introduction

The native, blue porterweed, *Stachytarpheta jamaicensis,* is a low growing, sprawling wildflower that can be found throughout coastal south Florida and much of the Caribbean. It is one of the best plants for attracting butterflies and other pollinators, including hummingbirds. It is a versatile plant that blooms throughout the year and can be used in container gardening, as a groundcover for border plantings, as a specimen plant or in mass plantings.

S. jamaicensis is studied extensively for its antioxidant, anti-inflammatory, and antibacterial properties. Ololade et. al. (2007) found the leaf extract of *S. jamaicensis* to be rich in phytochemicals with proven antimicrobial and antioxidant activities.

General Information

Origin: Monroe, Dade, Collier and Lee counties, West Indies, Mexico, and Central America.

U.S.D.A. Zone: 9a to 11

Stachytarpheta jamaicensis flower spike and leaf blade. Notice toothed leaf edges point toward leaf tip. Credit: M. Leonard-Mularz, UF/IFAS

Description

Plant Type: Perennial, semi-woody groundcover. Spreads horizontally.

Typical Dimensions: 1-2 feet tall by 2-3 feet wide.

Growth Rate: Fast

Trunk/Stem: Short central stem, becoming brown and woody with age. Many stems arise from the base of the plant.

Leaf Characteristics: Opposite or subopposite, somewhat oval shaped, tapering to a point. Dark green and smooth leaf surface with pinnate venation and a slight upcurve from the center vein. The leaves are 1 to 4” long and ¾ to 2” wide. Leaf margins are coarsely serrate with teeth pointing towards the leaf tip.

Flowers: Small blue to violet flowers with white centers on 12” long thickened spikes. Several individual, 3/8” flowers produced each day, only lasting one day; may not bloom in overcast weather conditions.

Flowering Months in Monroe County: All year with slight decline in winter.

Fruit/Seed and Availability in Monroe County: The seed can be harvested from the dried-out, brown spikes year-round; seeds are retained within the bracts and can be mechanically removed by hand or allowed to release naturally. Self-seeding is common.

Cultural Requirements

Light Requirements: Full sun to light shade. Will not bloom in dense shade.

Salt Tolerance: Moderate tolerance to windborne salt but low tolerance to long term flooding of salt and brackish water.

Drought Tolerance: High once established.

Wind Tolerance: Moderate.

Soil Requirements: Prefers well-drained, sandy, or limestone-based soils, but will grow in most types. Tolerates soil compaction and light foot traffic.

Nutritional Requirements: Low, does not require supplemental fertilization.

Michelle Leonard-Mularz
Environmental Horticulture Agent
UF/IFAS - Monroe County Extension Services

Propagation: By seed or softwood cuttings. Allow flower spike to dry and brown before harvesting the seeds. Sow seeds in a well-draining potting mix; barely covering seeds with soil media. The entire, dried spike may also be harvested and planted in a community pot, then thinned out after germination.

Hazards: Can become a serious weed in pastures. It is listed as an invasive plant in Kenya and Tanzania.

Problems: A rust disease, *Puccinia urbaniana*, has been reported in Monroe County, but is not common. Some foliar damage is noticed in periods of extended cold temperatures below 50 degrees; leaves will turn a deep purple color. Not known to be preferred by iguanas. No other pests of concern.

Wildlife: Larval host plant for the Tropical buckeye butterfly, though not a common butterfly in the Florida Keys. Nectar source for a variety of butterflies including the Gulf fritillary, Julia, and Mangrove skipper. Other pollinators include bees, beetles, moths, and hummingbirds.

Warning

The non-native, nettleleaf vervain, *Stachytarpheta cayennensis* (syn. *S. urticifolia*), is often sold as the native blue porterweed. It is native to tropical Asia and is considered a Category II invasive plant by the Florida Exotic Pest Plant Council (FLEPPC). It has an upright, shrubby growth habit and will grow to 5 feet tall. *S. cayennensis* leaves have a raised, quilted appearance on the upper surface and more finely toothed leaf margins than our native porterweed. It will hybridize with our native porterweed in areas where they are grown in close proximity. The hybrid will look like *S. jamaicensis* but have a more upright growth habit. They hybrid is listed as *S.* x *intercedens.*

Comparison of *S. jamaicensis* (left) and *S. cayennensis* (right). Notice quilted appearance on leaf surface of *S. cayennensis.* Credit: M. Leonard-Mularz, UF/IFAS

Written by
Michelle Leonard-Mularz, Environmental Horticulture Agent and Susie Reutling, Master Gardener Volunteer, UF/IFAS, Monroe County Extension Service. Reviewed by Sandra Wilson, Ph.D., Professor, Environmental Horticulture, University of Florida, IFAS. Original publication date: May 2021.

Selected References

Brown, Stephen H. *Stachytarpheta jamaicensis*. Lee County, University of Florida, Institute of Food Agricultural Sciences.

CABI. 2021. *Stachytarpheta jamaicensis* (Jamaica vervain). In: Invasive Species Compendium. Wallingford, UK: CAB International. https://www.cabi.org/isc/datasheet/51364#:~:text=Distribution,-Top%20of%20page&text=Stachytarpheta%20species%20are%20generally%20agreed,occurs%20less%20frequently%20in%20Africa.

Hammer, Roger L. 2004. Florida Keys Wildflowers: A Field Guide to Wildflowers, Trees, Shrubs, and Woody Vines of the Florida Keys. The Globe Pequot Press. pp. 31.

Hammer, Roger L. 2013. *Porterweeds Revisited.* The Tillandsia Newsletter. Florida Native Plant Society, Pinellas Chapter. https://pinellas.fnpschapters.org/native-plant-profiles/porterweeds/

Gann GD, Stocking CG, Brennan KM, Hines KN and Collaborators. 2005-2021. *Natives for Your Neighborhood. The Institute for Regional Conservation.* Delray Beach, Florida. Blue porterweed, Stachytarpheta jamaicensis. https://www.regionalconservation.org/beta/nfyn/plantdetail.asp?tx=Stacjama

Ololade, Z., & Abiona, O. 2017. *Stachytarpheta jamaicensis leaf extract: Chemical composition, antioxidant, anti-arthritic, anti-inflammatory and bactericidal potentials.* Journal of Scientific and Innovative Research. 6(4): 119-125.

Scurlock, J. P. 1996. Native Trees and Shrubs of the Florida Keys. Halftime Enterprises.