

## *Stachytarpheta jamaicensis*

**Family:** *Verbenaceae*



Each flower is small and opens for just one day



Flower spikes



The sprawling habit of the blue porterweed

**Blue porterweed; blue snakeweed; Brazilian tea; Jamaican porterweed; Jamaica vervain**

**Synonyms (discarded names):** *Stachytarpheta indica*; *S. urticifolia*; *Valerianoides jamaicensis*; *Verbena jamaicensis*

**Origin:** South Florida; throughout the Caribbean, Bahamas, Bermuda, Southern Mexico to Brazil and Ecuador

**U.S.D.A. Zone:** 9b-11 (25°F minimum)

**Plant Type:** Perennial

**Growth Rate:** Fast

**Light Requirements:** Full sun; light shade

**Flower Color:** Blue-violet to magenta

**Flowering Months:** All year but less from December through February

**Leaf Persistence:** Evergreen

**Soil Salt Tolerance:** High

**Salt Spray Tolerance:** High

**Drought Tolerance:** Medium

**Soil Requirements:** Wide

**Nutritional Requirements:** Low

**Major Pests:** None

**Typical Dimensions:** 1-3 feet tall by 3 feet wide

**Propagation:** Stem cuttings; will self-seed

**Human Hazards:** None

**Wildlife:** Butterfly attractant

**Uses:** Groundcover; hanging basket; butterfly garden; background plant for shorter stature plantings

### **Natural and Geographic Distribution**

Blue porterweed is considered native to the South Florida Counties of Miami-Dade, Monroe, Collier and Lee. It grows on dunes, shell middens, pine rocklands but more commonly on disturbed sites. Its native range also includes the Caribbean, the Bahamas, Bermuda and Mexico, and throughout Central America to Brazil and Ecuador. It is now a pantropical weed present in east and west Africa, Madagascar, the Ryukyu Islands of Japan, Taiwan, the Indian Subcontinent, Australia, Indonesia, Malaysia and on many Pacific Islands.





*S. jamaicensis*, foreground, amidst other weeds growing 30 feet from salt water of the Caribbean Sea, Jamaica



Roadside *S. jamaicensis*, St. Kitts, Eastern Caribbean

### Growth Habit

The plant is a low-growing, horizontally, sprawling, perennial, herbaceous or semi-woody shrub. The newer stems are green and four-sided. They are attached to short woody, gray-brown branches at the base of the plant. The height of the plant, not counting the bloom spikes, averages from 2 to 3 feet tall and up to 6 feet wide. When grown unencumbered, the plant is dense and usually circular in shape.



New plant



The circular and horizontal growth habit of *S. jamaicensis*



A natural unclipped hedge





Blue porterweed as a groundcover and foundation plant



At dusk, the flowers on the floral spikes have fallen.

Blue porterweed as a groundcover



### Leaves

The leaves are opposite, or subopposite, simple, and lanceolate to ovate. They have pinnate venation and curve slightly upward. Leaves are 1 to 4.5 inches long and 3/4 to 2.5 inches wide and have coarse teeth along the margins. The teeth generally point forward toward the tip of the leaf. The leaf base gradually tapers into a winged petiole. Leaf color is a dull dark green. The leaf blade is rugose, and quilted in appearance from above. Leaves of the youngest plants are characteristically larger and more subtle. In the warmest areas the plant is evergreen.

### Flowers

The plant blooms all year in South Florida, but usually less in July and from December through February. The flowers are held on the upper portion of long, stringy, terminal spikes that are up to 3 feet long. They are rough, green and horizontally upward curving. The spikes usually produce a cluster of one to seven tubular, five-lobed, 0.3 inches long and wide, blue-violet to magenta flowers. Each flower lasts one day. The next day's succession of flowers is a little bit higher on the inflorescence until the last flowers at the tip of the spike have bloomed. During flowering much of the flower spike remains without bloom. Coupled with small diminutive flowers, this is not a particularly showy bloomer. The spike does not flower at night or on very cloudy, overcast days.



Whole leaf



Toothed leaf margin



Opposite leaf arrangement



Terminal spikes



A cluster of flowers on a spike

## Wildlife

Blue porterweed makes an excellent addition to the butterfly garden. It is a larval host plant of the tropical buckeye caterpillar as well as a nectar source for a wide variety of butterflies including the Gulf fritillary, Julia, monarch and large orange sulphur. The plant also attracts bees, moths, beetles and hummingbird moths.

## Planting and Maintenance Guidelines

Blue porterweed is best used as a sprawling sub-shrub for informal gardens. It is frequently used in mass plantings, to create corridors, or as a single specimen to provide continuous color to the landscape. Plant it in a sunny location in a wide range of soils. Space plants about 3 to 5 feet apart. Irrigate frequently for establishment and less during extended dry periods usually in the winter and spring. The plant typically lives for 3 or 4 years and gets dense enough to keep out weedy plants. Blue porterweed usually maintains a nice sprawling shape for 6 or more months without pruning. The unclipped plants begin to open up as the stems droop to the ground. For this reason, they are usually cut back each year or any time the plant becomes too leggy. This allows for new growth to fill in and thicken the plant to again become a weed blocker. Old woody plants are best removed in the spring. This is the time of year when seedlings are most likely to emerge. Blue porterweed is heavily self seeding and weedy in favorable conditions.



New growth on a plant severely cut back 2 months earlier, mid April

## Problems

While the plant can be grown as a perennial to zone 9a, temperatures in the low 40's can cause leaf damage. This is expressed as purpling of leaves and leaf loss. The plant remains unattractive at these temperatures. Stem damage occurs with temperatures in the 30's but well established plants quickly recover even after temperatures dip into the 20's. In South Florida, wait until mid-February or after before pruning off cold damaged plant tissues.

During wet summer months leaf and spike spotting and twig dieback can occur due to the fungal disease Anthracnose (*Gloeosporium* sp./spp.). These fungi are quick to invade foliage stressed by such factors as pesticide burn, mechanical and insect damages, and weather stress including prolonged leaf wetness. When this occurs, prune and discard severely infested plant tissue as feasible. Avoid overhead irrigation. If overhead irrigation cannot be avoided, irrigate early in the morning to reduce the duration

of leaf wetness. Rake and dispose of fallen leaves and twigs to eliminate sources of new Anthracnose spores.. A soft scale (*Pulvinaria urbicola*) and a rust disease (*Puccinia urbaniana*) have been isolated on blue porterweeds in Lee County. However, these two pests have only been encountered once in each case in the author's 19 years in the county. An occasional stem borer problem has also been reported in the county.



Leaf reaction to temperatures in the low 40's



Leaf and spike spots caused by Anthracnose

#### Comparison of *S. jamaicensis* and *S. cayennensis*

There are approximately 60 species of herbs and subshrubs in the genus *Stachytarpheta* which are widely distributed. They are mostly of the New World tropics with others from southeast Asia and on Pacific Islands. The species are variable and readily hybridize, often making identification difficult. *S. cayennensis* (synonym *S. urticifolia*) whose flowers, like *S. jamaicensis*, only last a single day, is widely planted in South Florida and is often confused with the native species. *S. cayennensis* is native to the Caribbean and Central and South America. The non-native is also attractive to butterflies but it can spread more rapidly by seeds and is listed as a Category II invasive by Florida's Exotic Pest Council (FLEPPC). That is, it has increased in abundance but has not yet altered Florida plant communities to the extent as Category I invasive plants. The table below distinguishes between the two species. *S. x intercedens* is a hybrid of the two species and indeed many plants sold as the native blue porterweed may be this progeny. Other *Stachytarpheta* species having blue, red and pink flowers are sometimes erroneously sold as the native porterweed.

Characteristic	<i>S. jamaicensis</i>	<i>S. cayennensis</i>
<b>Growth Habit</b>	Low-growing, horizontal habit, shrubby, round spreading	Upright, shrubby, with distinct trunk
<b>Height</b>	2-3 feet tall (not including the spikes)	3-5 feet tall (not including the spikes)
<b>Leaf</b>	Coarsely toothed. Leaf teeth obtuse	More finely toothed. Leaf teeth acute
<b>Inflorescence</b>	Horizontally upward curving, thickened spike. Light blue flowers	Quickly upward curving, thin spike. Dark blue flowers



Comparison of *S. jamaicensis* and *S. cayennensis*



Native *S. jamaicensis* leaves and flower spike



Non-native *S. cayennensis* leaves and flower spike



Non-native porterweed and its upright habit



This 4 feet tall plant demonstrates the upright habit of *S. cayennensis*

## References

- Caldwell, Doug. 2005. [Cute Plants That Take Over Your Yard: Blue Porterweed](#). UF/IFAS Collier County Extension
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- Hammer, Roger L. 2004. Florida Keys Wildflowers. (A FALCON GUIDE). The Globe Pequot Press
- Hammer, Roger L. 1994. Plant Profile: [The So-Called Porterweed](#). Pinellas Chapter of the Native Plant Society
- Llamas, Kristen. 2003. Tropical Flowering Plants: A Guide to Identification and Cultivation. Timber Press, Portland, Oregon

## Useful Links

- [Native Plant Fact Sheets](#)
- [Bedding and Other Colorful Plants](#)
- [Guide for Real Florida Gardeners](#)
- [Native Plant and Service Directory](#)
- [Differences between Laurel and Live Oaks](#)

All pictures were taken by Stephen Brown except where indicated.

This fact sheet was reviewed by Peggy Cruz, Lee County Extension; Tom Becker, FYN and Master Gardener agent, Lee County Extension; John Sibley, Master Gardener and owner of [All Native Plant Nursery](#); Jenny Evans, [Sanibel-Captiva Conservation Foundation Nursery](#); Cathy Feser, Naples, Florida.

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