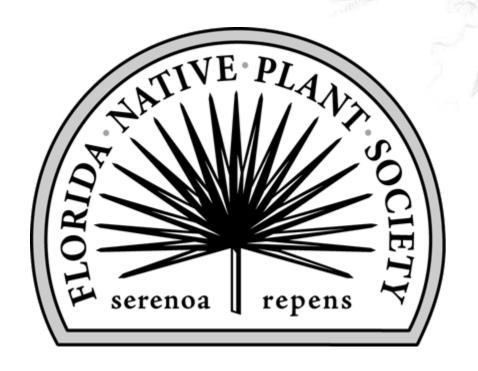
Florida Native Plant Society



Native Plant Owners Manual

Clematis baldwinii - Pine-hyacinth

Mark Hutchinson

Putting things in perspective

All seasonal references are applicable to the eastern panhandle of Hernando County where the plants portrayed in this presentation grow. This area happens to be a cold spot in central Florida due to the Brooksville Ridge and approximates a Hardiness Zone of 8a or 8b, average annual low temperatures ranging between 10 and 20 °F.

Any reference to medicinal or culinary use of plants or plant parts should in no way be considered an endorsement by the Florida Native Plant Society of any sort of experimentation or consumptive use.

Please do not attempt to rescue any native plants without first reviewing the <u>FNPS Policy on Transplanting Native Plants</u>

Special thanks to Lucille Lane, Shirley Denton, Kari Ruder and Brooke Martin



Pine-hyacinth

Buttercup family





What's in a Name?

Biological Classification - Tree of Life

Where does this plant grow?

• In Florida

What this plant needs to -

- Thrive
- Propagate
- Pollinate
- Live a long life

Life Cycle

References



Throughout this presentation, clicking this symbol will return you to this page.



Pine-hyacinth, pinewoods clematis, leather flower

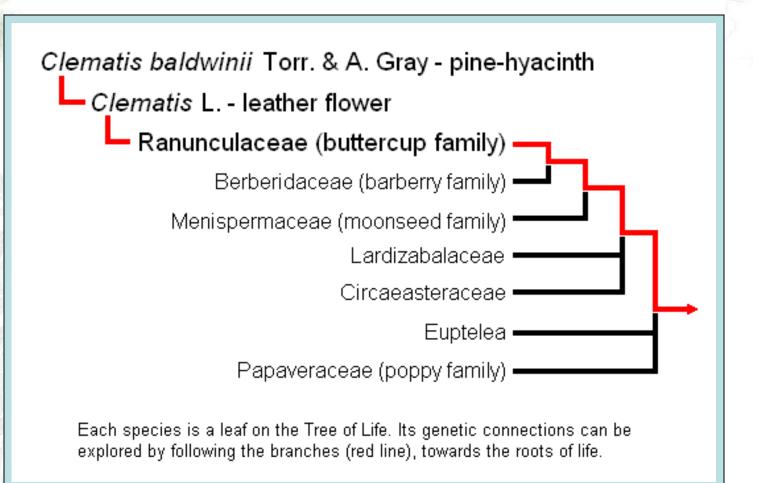
Clematis (KLEM - ah - tis)

Ancient Greek for vine, or climbing

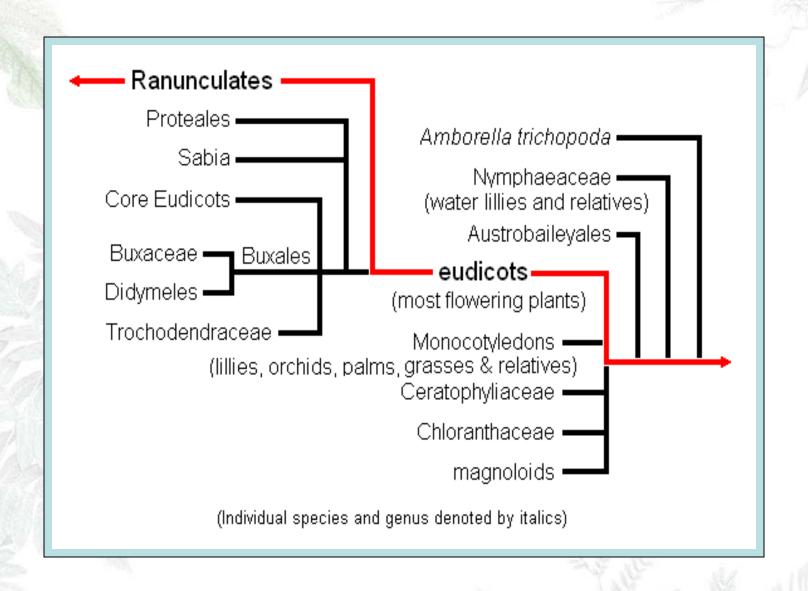
baldwinii (bald - WE - ee - eye)

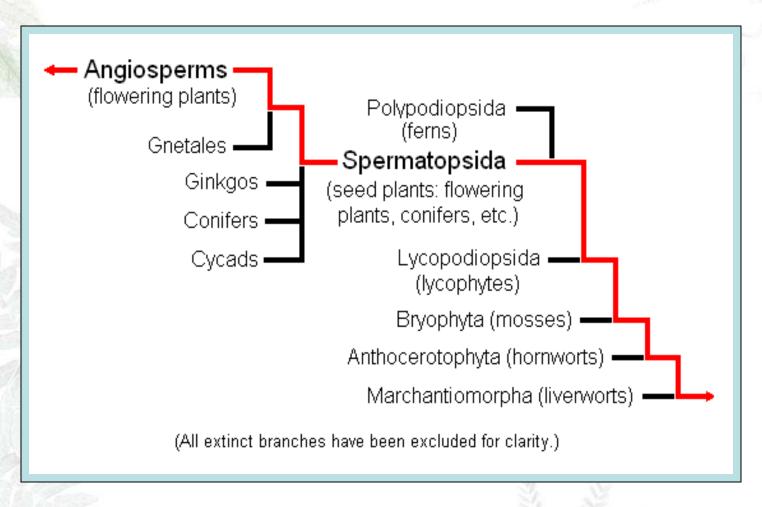
Named for William Baldwin (1779 – 1819), American physician and botanist. Joining Major Stephan Long's expedition to find the headwaters of the Missouri River, Baldwin died in 1819, before the expedition was completed. He left behind an extensive herbarium that influenced the works of Lewis David Schweintz – the "Father of North American Mycology", John Torrey and Asa Gray, both prominent botanist.

Biological and Genetic Relationships









Link to the University of Arizona's Tree of Life.

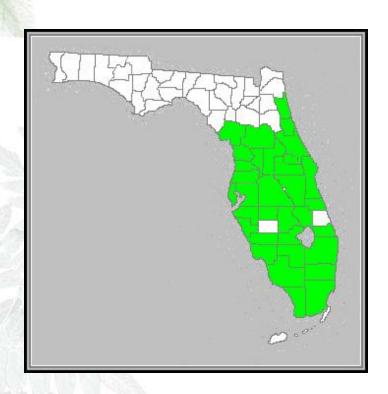




- The United States
 Department of
 Agriculture, NRCS, lists
 53 species of the genus
 Clematis L. in the U.S.A.
- The Atlas of Florida
 Vascular Plants
 identifies seven species
 in Florida, six being
 native, while only
 Clematis baldwinii is
 endemic only in Florida.

USF Herbarium #9625 Levy Co., 4/12/2007

Species Distribution within Florida



(*vouchered – indicates that a fully documented dried specimen has been deposited in an approved herbarium)

- A perennial, endemic to the south and central Florida peninsula, *Clematis baldwinii* is *vouchered in approximately thirty-three Florida counties.
- Pine-hyacinth prefers Sandy Flat Pinewoods and disturbed areas.





Plant Structure & Life Cycle



When the plant first emerges in spring, the smooth to slightly hairy stem is initially erect, unlike other *Clematis* species which are always vine-like.

The usually opposing leaves tend to be simple at this stage and vary from unlobed to 2-3 lobed. The leaves usually are sessile that is, growing directly from the stem with no petiole. Unlobed leaves vary from lanceolate to elliptical, while lobed leaves tend toward linear to narrowly ellipticlanceolate.



This Clematis baldwinii
has the first lateral root
extend from the primary
root about three inches
below the surface of the
ground, close to the same
distance this plant
extends above the ground.

Oftentimes, what appears to be a rather small plant may have quite an extensive root system. This root system carries Pine-hyacinth through drought and brush fire.



Initially erect, the weight of the upper plant inevitably causes Pine-hyacinth to fall over, usually crimping the stem.

Once prone, the plant begins to exhibit more vinelike behavior - crawling horizontally along the ground. New growth strives to extend itself vertically but once it has extended itself far enough, it falls to the ground in a never ending battle to stay erect.



Some leaf blades are occasionally divided into three to five leaflets and extend from the stem on a petiole, rather than directly from the stem

Leaf shape variety is extreme, seeming to be almost random with the same plant exhibiting both broad and narrow-leaves at various points in the its life span.











The lavender-to-violet, bell-shaped flower has a barely perceptible, acrid scent.

Various pollinators are attracted, including bumblebees, wasps, butterflies, and the occasional hummingbird.

When the fertilization process is complete, the flower drops its lavender to violet sepals and the stigma of the pistil extends itself outward into a starburst-like form as it creates seeds in a silky tailed fruit



.... that eventually will dry, fluff out, then separate, and fly with the wind, starting the cycle anew.







A true native and a wonderful wildflower, always a pleasure and sometimes . . .





..a surprise, or two!





Growing Conditions



to



- Sun-dappled understory, to nearly full sun
- Normally found in sandy well-drained soils
- Good drought tolerance
- Hardiness: USDA Zone 9a: to -6.6 °C (20 °F)
 USDA Zone 9b: to -3.8 °C (25 °F)
- Pine-hyacinth doesn't do particularly well when potted
- Growth and blooming are best in the spring and fall
- Height: 12 24 inches (30 60 cm.)



Seed Collection and Propagation

Clematis baldwinii may be propagated from cuttings or seeds. Rufino Osorio outlined a method of propagation, using seeds, in the summer 2006 edition of the *The Palmetto*, the quarterly journal of the Florida Native Plant Society. He notes that Pinehyacinth can take up to two years to germinate. There is a link to this article on the reference page of this presentation.

Propagating Pine-hyacinth from cuttings is very difficult. There are a couple of websites describing methodology on other members of the genus *Clematis*, but at this time none of these methods has been very successful with *Clematis baldwinii*.

Pollinators and Wildlife

Pollinators need to be fairly acrobatic to effectively fertilize Clematis baldwinii due to the positioning of the flowers. Hummingbirds and bumblebees are both attracted to the flowers and bumblebees in particular are a site to see squeezing themselves in to get at the nectar. Butterflies are not frequent pollinators, but they too can mange the task.





Maintenance and Care

Clematis baldwinii is a native wildflower that readily takes to a cultivated garden setting. Having evolved in sandy soils, pine-hyacinth will thrive in soil supplemented with organic additives.

Pine-hyacinth thrives best in understory areas, but does well in near direct sun. In areas where it is exposed to a considerable amount of direct sunlight, it may get dried up and rather scraggly in the summer. If your plants are looking poorly, come August, cut the stem back nearly to the ground. As fall progresses the plant will start anew as though it were again spring. Repeat this pruning for all plants at the end of winter.

Presentation References

Biological and genetic relationships

University of Arizona Tree of Life

Florida distribution

Atlas of Florida Vascular Plants

Seed collection & propagation

The Palmetto, The Wildflower Garden

Herbarium specimen

USF Herbarium

Growing conditions & general information

Dave's Garden



Presentation References (cont.)

Native American Ethnobotany

University of Michigan

FNPS – Natives for Landscaping

FNPS.org This Link will take you to the profile for this plant on the FNPS website

For more in-depth study:

A Gardener's Guide to Florida's Native Plants. Rufino Osorio. 2001. Gainesville: University Press of Florida. ISBN 0813018528.

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