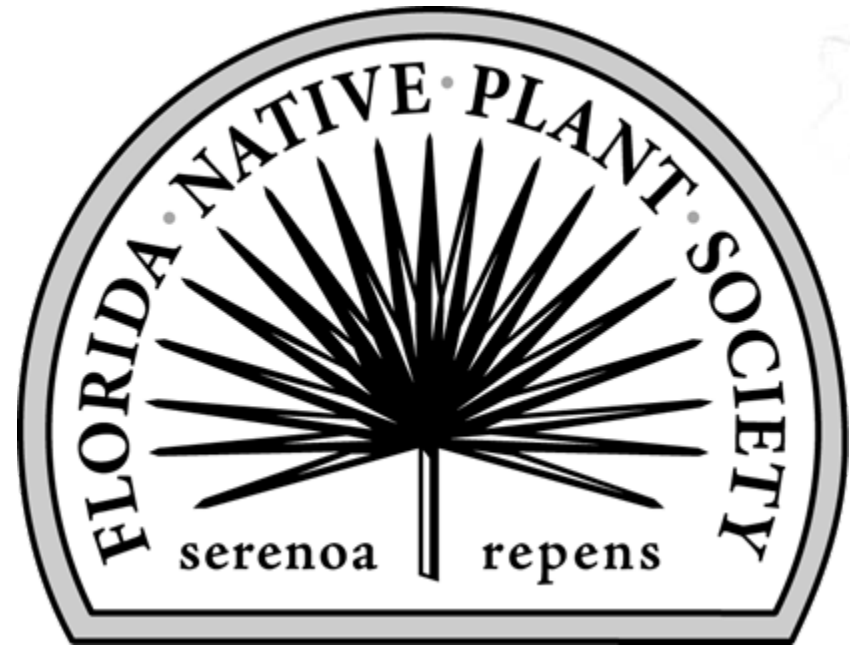


Florida Native Plant Society



Native Plant Owners Manual

Viola affinis – Sand Violet

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 [FNPS Policy on Transplanting Native Plants](#)

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

A close-up photograph of several purple Sand Violet flowers. The flowers are in various stages of bloom, with some showing the characteristic five-petaled structure. The petals are a vibrant purple color, and the center of the flowers is white with dark purple veins. The background is filled with green leaves and stems, which are slightly out of focus. The lighting is bright, highlighting the texture of the petals.

Sand Violet

Violet family



Viola affinis



Navigation Links

(for use in open discussion)

[What's in a Name?](#)

[Biological Classification – Tree of Life](#)

Where does this plant grow?

- [In North America](#)
- [In Florida](#)

What this plant needs to -

- [Thrive](#)
- [Propagate](#)

[Life Cycle](#)

[References](#)

‘View/Full Screen Mode’
recommended

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



Sand Violet, common blue violet

Viola (vy - OH - la)

Latin, referring to
the Violet genus

affinis (uh - FEE - niss)

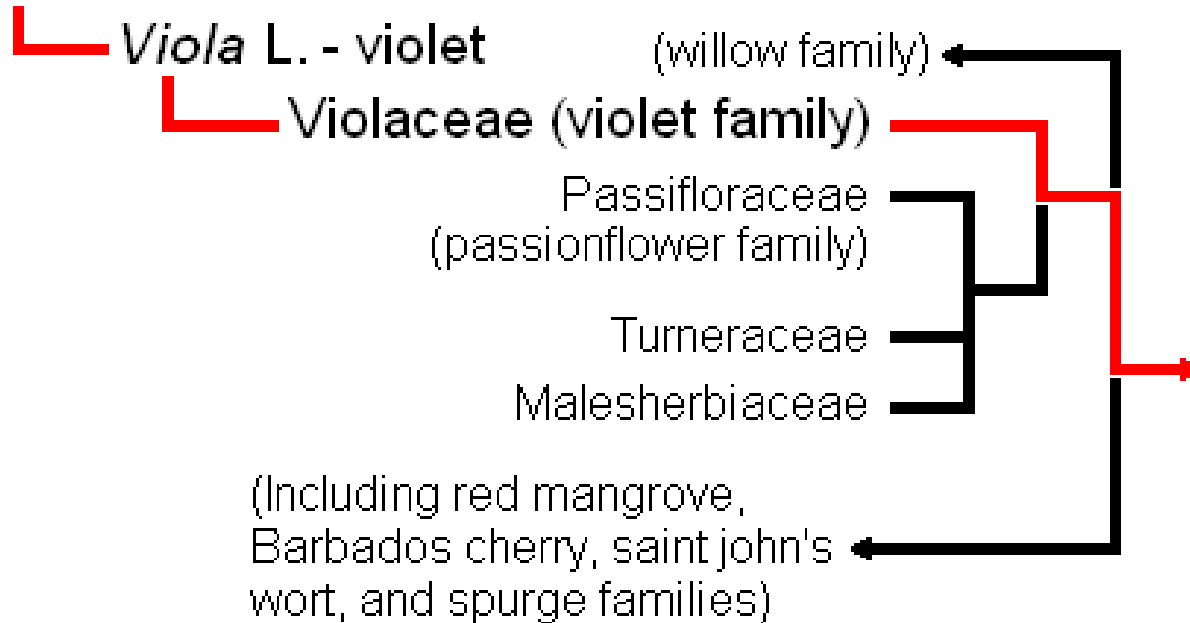
Latin, meaning
related, allied
similar, aligned with,
mingled with.

Referring to the
plant resembling
other species



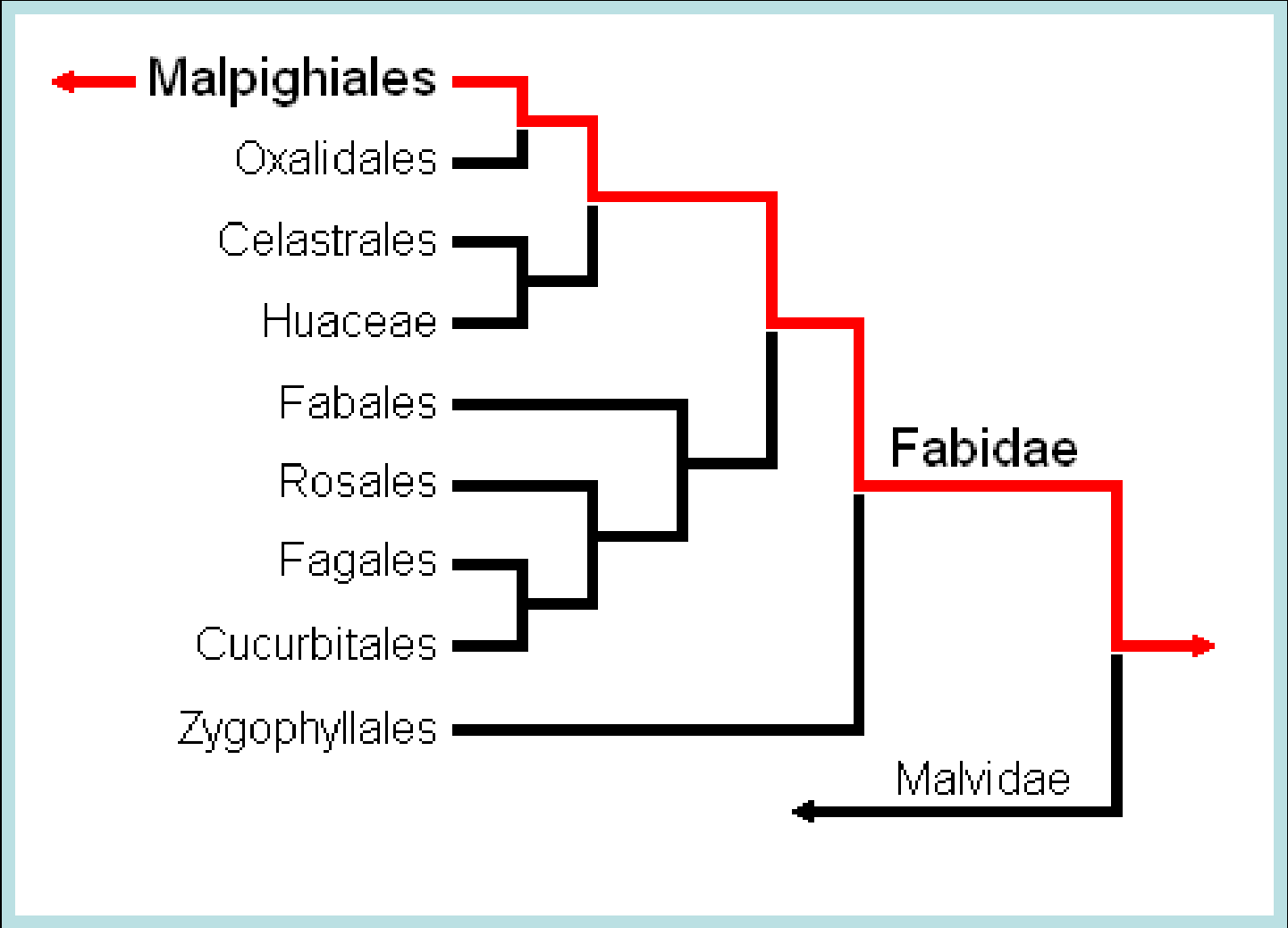
Biological and Genetic Relationships

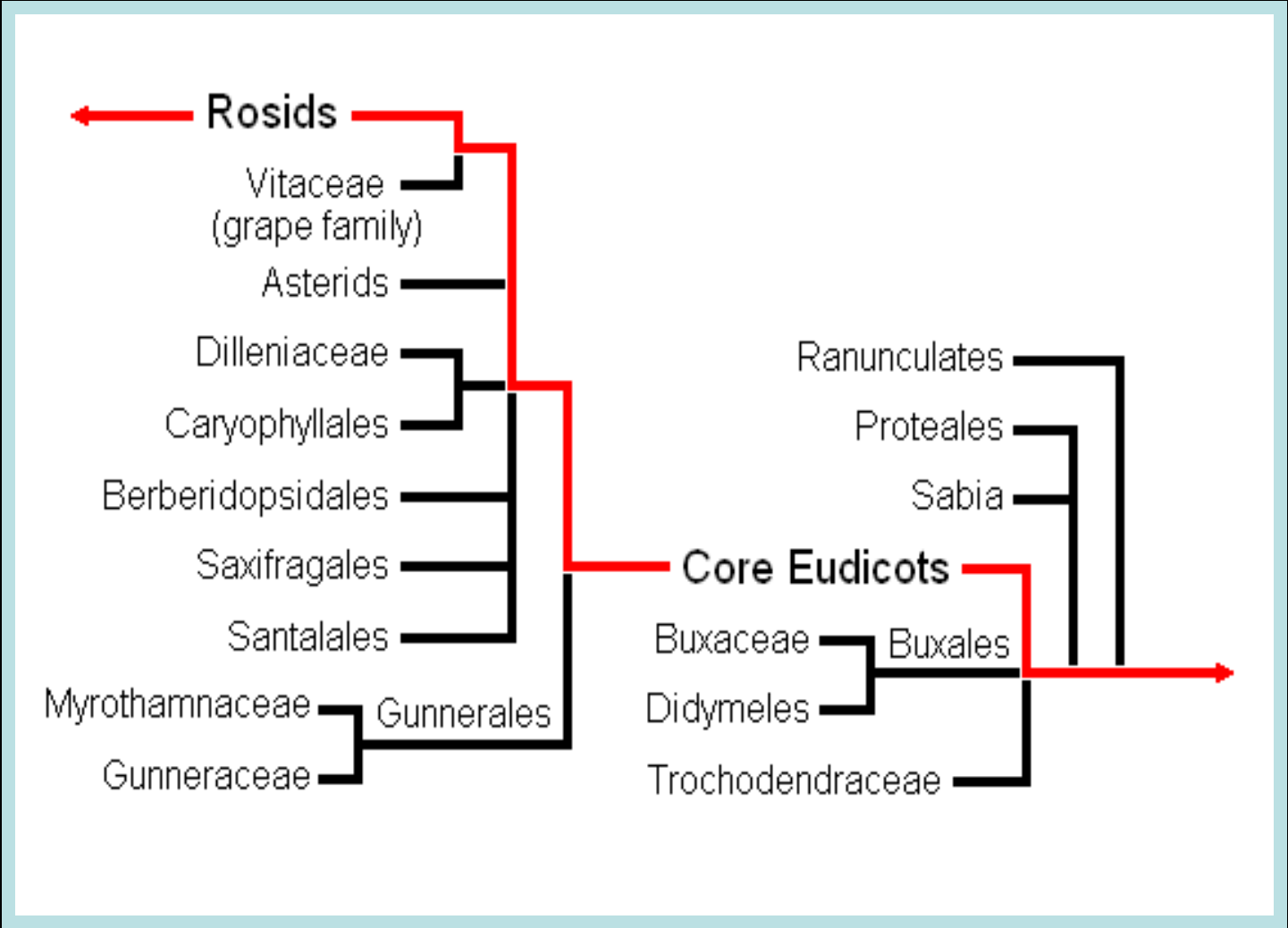
Viola affinis Leconte – sand violet

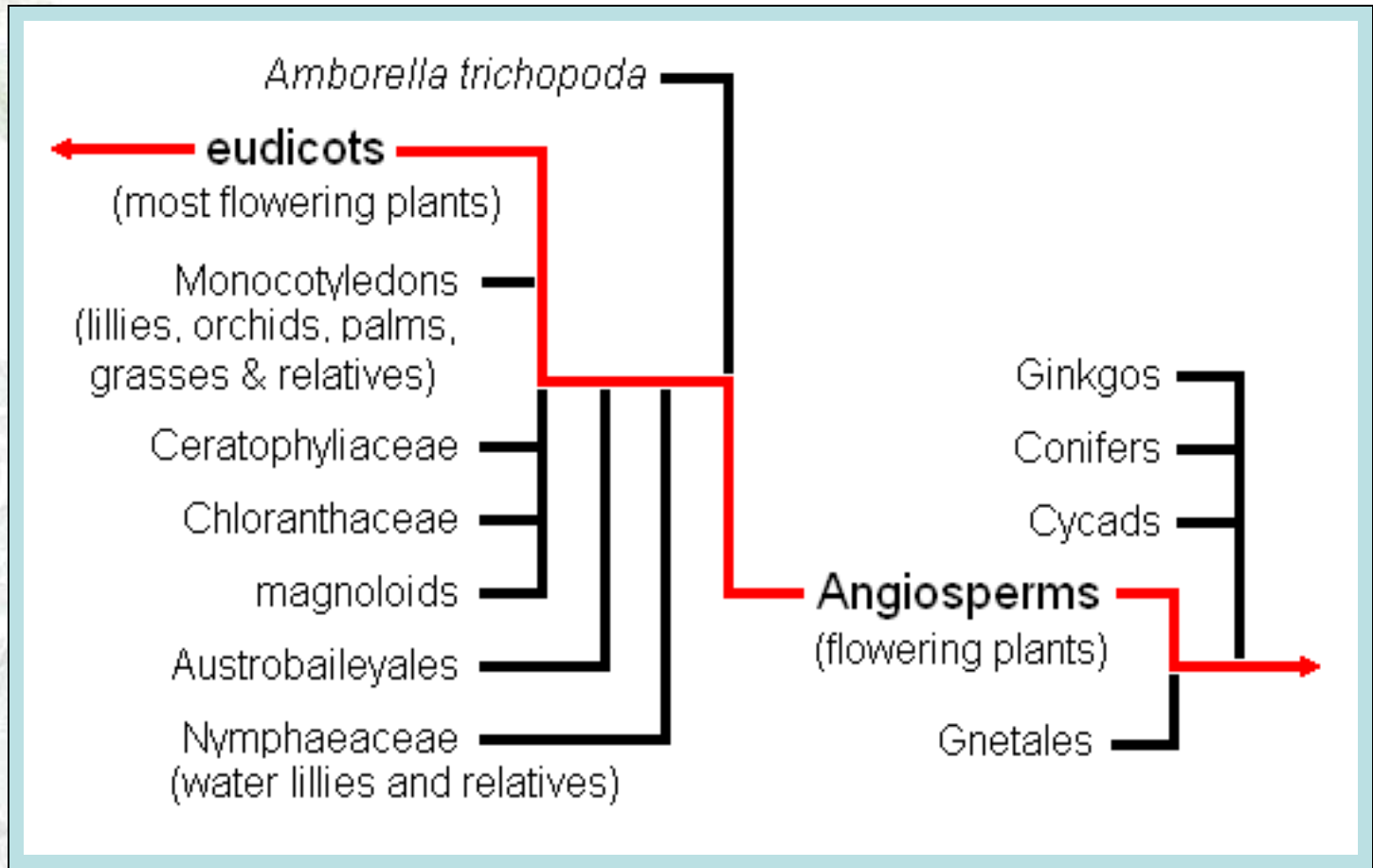


Each species is a leaf on the Tree of Life. Its genetic connections can be explored by following the branches (red line), towards the roots of life.









Link to the University of Arizona's [Tree of Life](#).



Contradictions between References

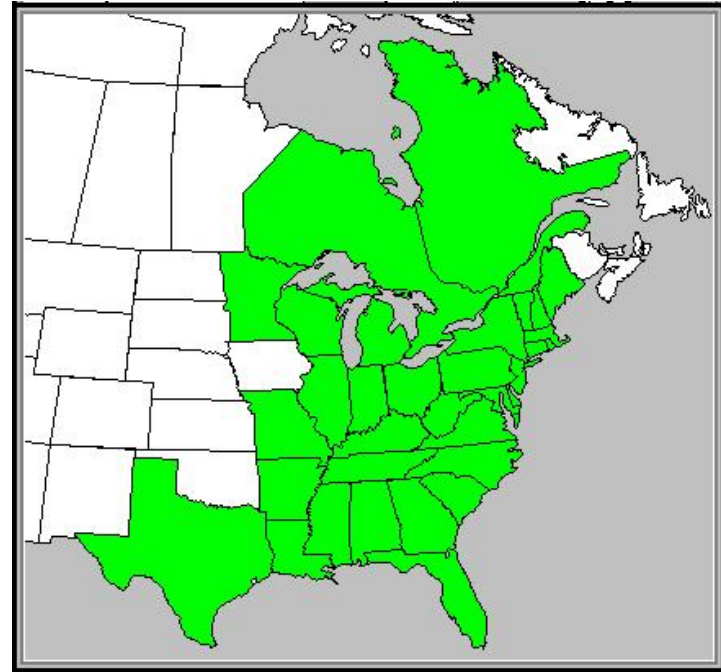
The Atlas of Florida Vascular Plants list *Viola affinis* as a synonym of *Viola sororia*. Whereas the USDA differentiates the two species, and has separate listings for each. The North American range map for *Viola affinis* is used for reference rather than *Viola sororia*, which extends farther west into the Great Plains.

The USDA only details the Florida range for *Viola sororia* which differs slightly from the Atlas of Florida Vascular Plants for *Viola affinis* which is the same as the range map used in this presentation.

Another possibility *V. sororia* var. *affinis*.

Species Distribution in North America

The Sand Violet, native to North America, is endemic to the eastern half of the continent. Its growing range extends from west of the Mississippi, in the Great Plains, eastward to the Atlantic coast, to as far north as Quebec, and occurring along the entire Atlantic seaboard.



(For specific distribution within any of the shaded areas go to the USDA link provided on the reference page, and click the shaded area of interest.)





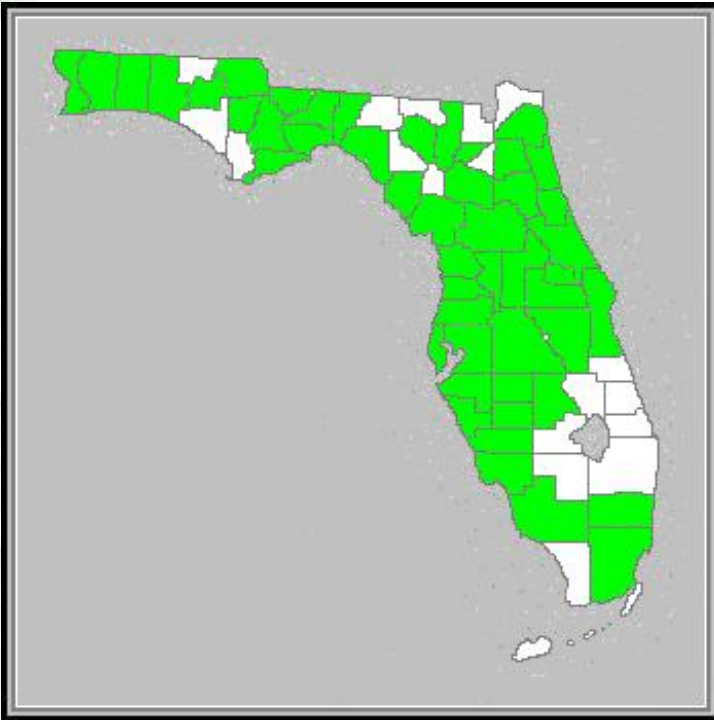
- The USDA, NRCS, lists a total of 125 of the genus *Viola* L. throughout North America.

- The Atlas of Florida Vascular Plants lists five species of this genus occurring in Florida, this being the only native.

**R. K. Godfrey Herbarium (FSU)
189651 Leon Co., 13/3/97**



Species Distribution within Florida



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

- Sand Violet, a perennial wildflower, is *vouchered in approximately forty-eight counties in Florida, favoring the Panhandle, Gulf coast, and most of the Atlantic coast.
- *Viola affinis* prefers the moist, loamy soil of bottomland woods.



Plant Structure and Life Cycle



Viola affinis is a cold, hardy perennial with foliage visible throughout the winter in Florida. The coarsely-toothed, glossy, heart-shaped leaves with acute tips start new growth at the first hint of spring.

The leaves cluster in a basal rosette that arises from a much-rooted rhizome.



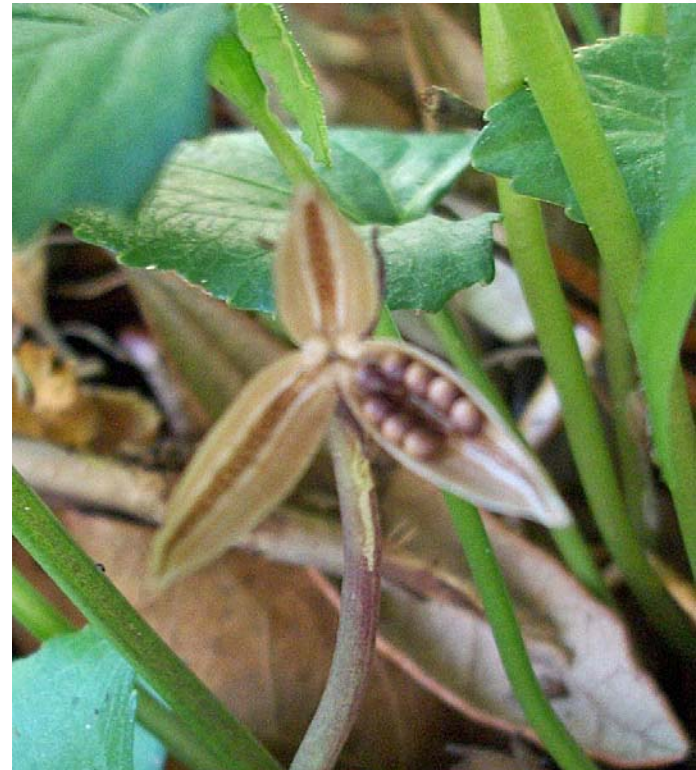
Before you know it is spring, *Viola Affinis* begins new leaf and flower regeneration. Both the petioled leaves and the solitary flowers are attached directly to the much-rooted rhizome by peduncles. The flowers are slightly irregular with two upper petals, two lateral petals, and one lower petal that bears a spur at the base. The two lateral petals are bearded with short straight hairs and, like the lower petal, are lined with dark blue to purple veins.



The three-carpelled ovary develops into a capsule that splits into three boat-shaped segments called valves.

Seeds are attached to the placental region along the mid-line of each valve by a small fleshy appendage called a caruncle. The seeds are expelled when the walls of the valve press

firmly together from the base. The nutrient-rich caruncle remains attached to the seeds once they are squeezed out of the valve and attract ants, which in turn disperse the seeds.





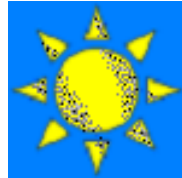
Native Americans found many medicinal uses for *Viola affinis*. The Cherokee used a poultice of leaves to sooth the pain of headache, and a poultice from the crushed roots for relief from boils. While using an infusion for the relief of diarrhea from dysentery, blood disorders, coughs and colds. The Iroquois used this plant for many similar purposes.



Growing Conditions



to



- *Viola affinis* prefers moderate to slight shade

- Sand Violet favors loamy moist soil
- Mildly acidic to mildly alkaline soil - 6.1 to 7.8 pH
- Good drought tolerance
- Hardiness: USDA Zone 5A: to -28.8 °C (-20 °F)
to USDA Zone 10b: above 1.7 °C (35 °F)
- Flowering and seed production occur from winter into spring
- Height: 3 - 6 inches (8 - 15 cm.)



Seed Collection and Propagation

Sand Violet produces seed pods through both chasmogamous (open) and cleistogamous (closed) flowers. As discussed earlier, the open flower produces seed in a valve which, when it opens, are eventually dispersed by ants. The inconspicuous closed flowers produce a fruit that explosively ejects seeds when the capsule they are in dries sufficiently. Either of these seed pods can be enclosed in a small mesh bag to collect the seeds when the pods open or explode.

Dividing the root ball in late fall or after flowering in early spring is another means to propagate this species.



Presentation References

- Biological and genetic relationships

University of Arizona [Tree of Life](#)

- U.S. distribution

[USDA](#) - Natural Resource Conservation Service

- Florida distribution

[Atlas of Florida Vascular Plants](#)

- Herbarium specimen

[University of Florida Herbarium](#)



Presentation References (cont.)

- Growing conditions and general information

[Wildflower Center UTA](#)

[Ramapo College of New Jersey](#)

- 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

- [Florida Plants](#) by zone and habitat, use your county name or zip-code to see native habitat classifications and appropriate plants.



- For more in-depth study:

Best Native Plants for Southern Gardens: A Handbook for Gardeners, Homeowners, and Professionals. 2010. Gil Nelson. Gainesville: University Press of Florida. ISBN 978-0-8130-3458-4

Florida Butterfly Caterpillars and Their Host Plants. Marc C. Minno, Jerry F. Butler, and Donald W. Hall. 2005. Gainesville: University Press of Florida. ISBN 0813027896.

Native Florida Plants: Low Maintenance Landscaping and Gardening. Robert G. Haehle and Joan Brookwell. 2004 (revised edition). Taylor Trade Publishing. ISBN 1589790510.

