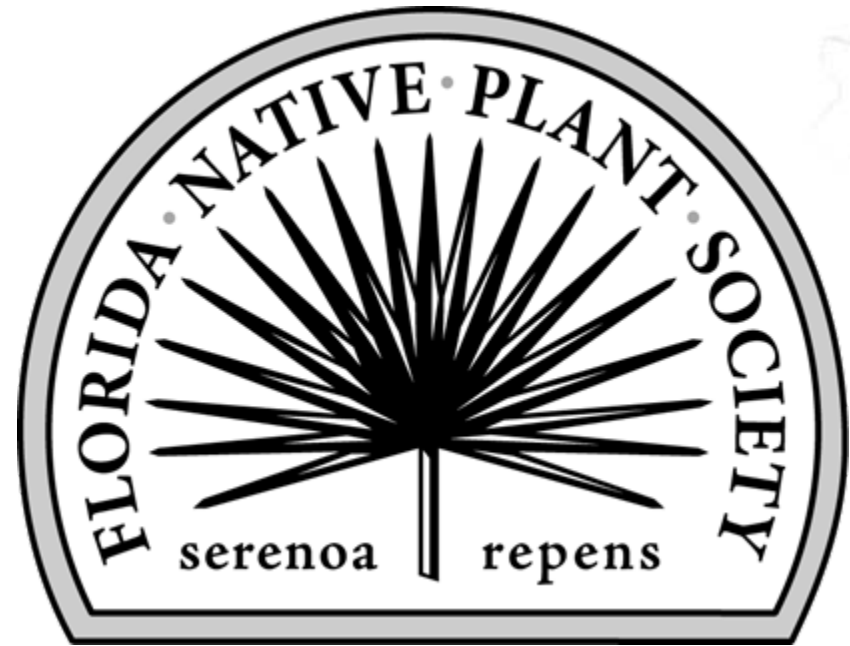


Florida Native Plant Society



Native Plant Owners Manual

Erythrina herbacea – Coral Bean

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

Coral Bean

Legume family



Erythrina herbacea





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](#)
- [Live a long life](#)

[Life Cycle](#)

[References](#)

‘View/Full Screen Mode’
recommended

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



Coral Bean, Cherokee bean, cardinal spear,
red cardinal

Erythrina (er - ith - RY - nuh)

Ancient Greek for red
colored

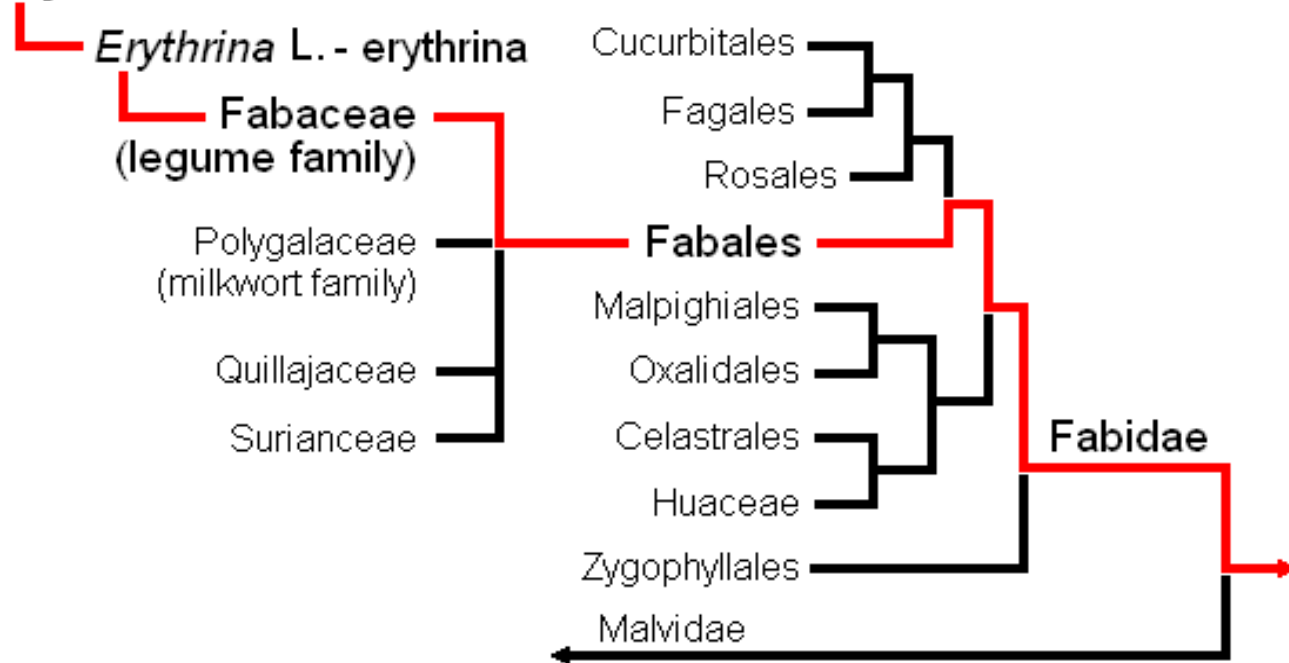
herbacea (her - buh - KEE - uh)

Derived from the Latin
'*herb(a)*,' meaning "grass, not
woody"



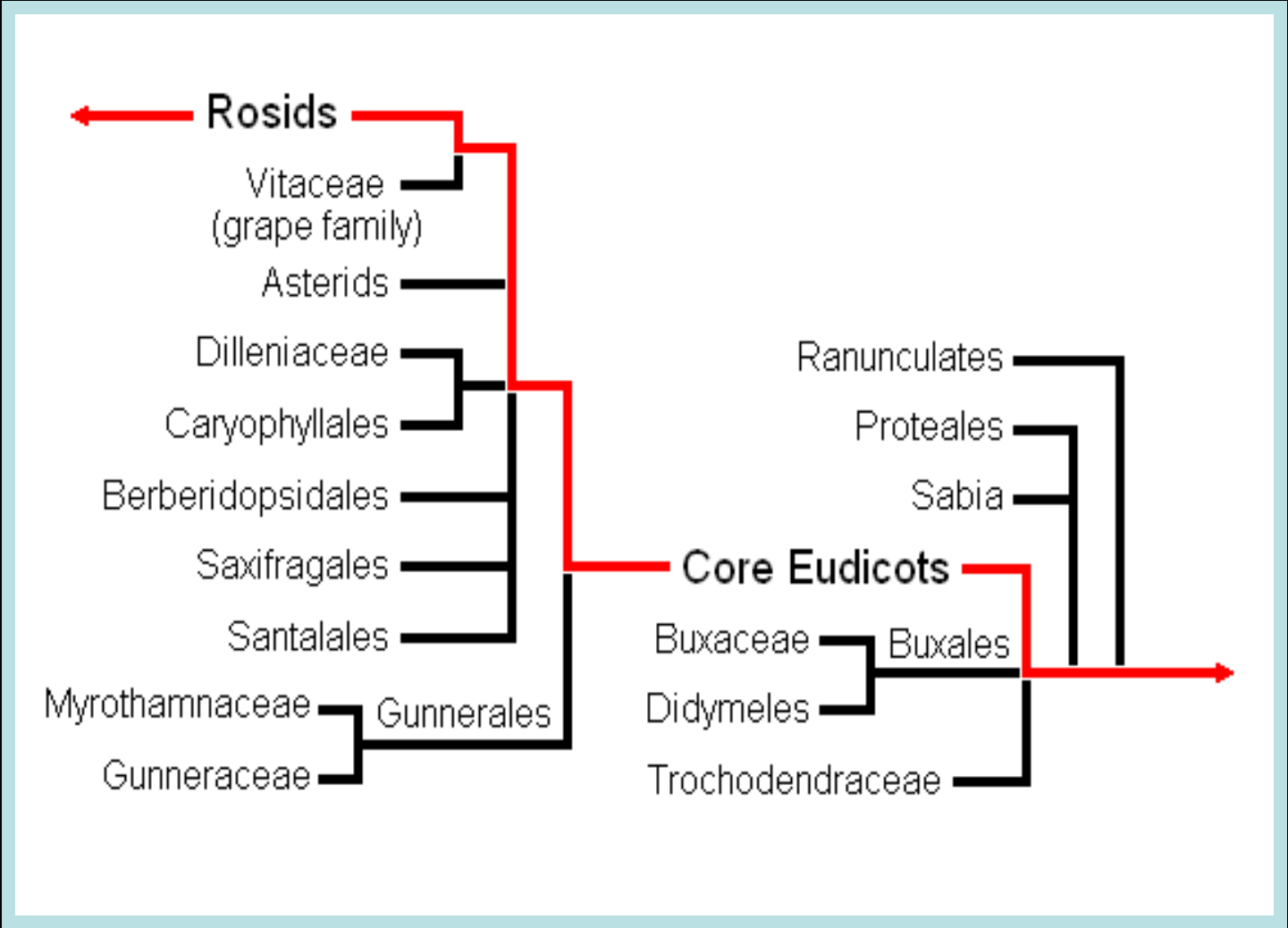
Biological and Genetic Relationships

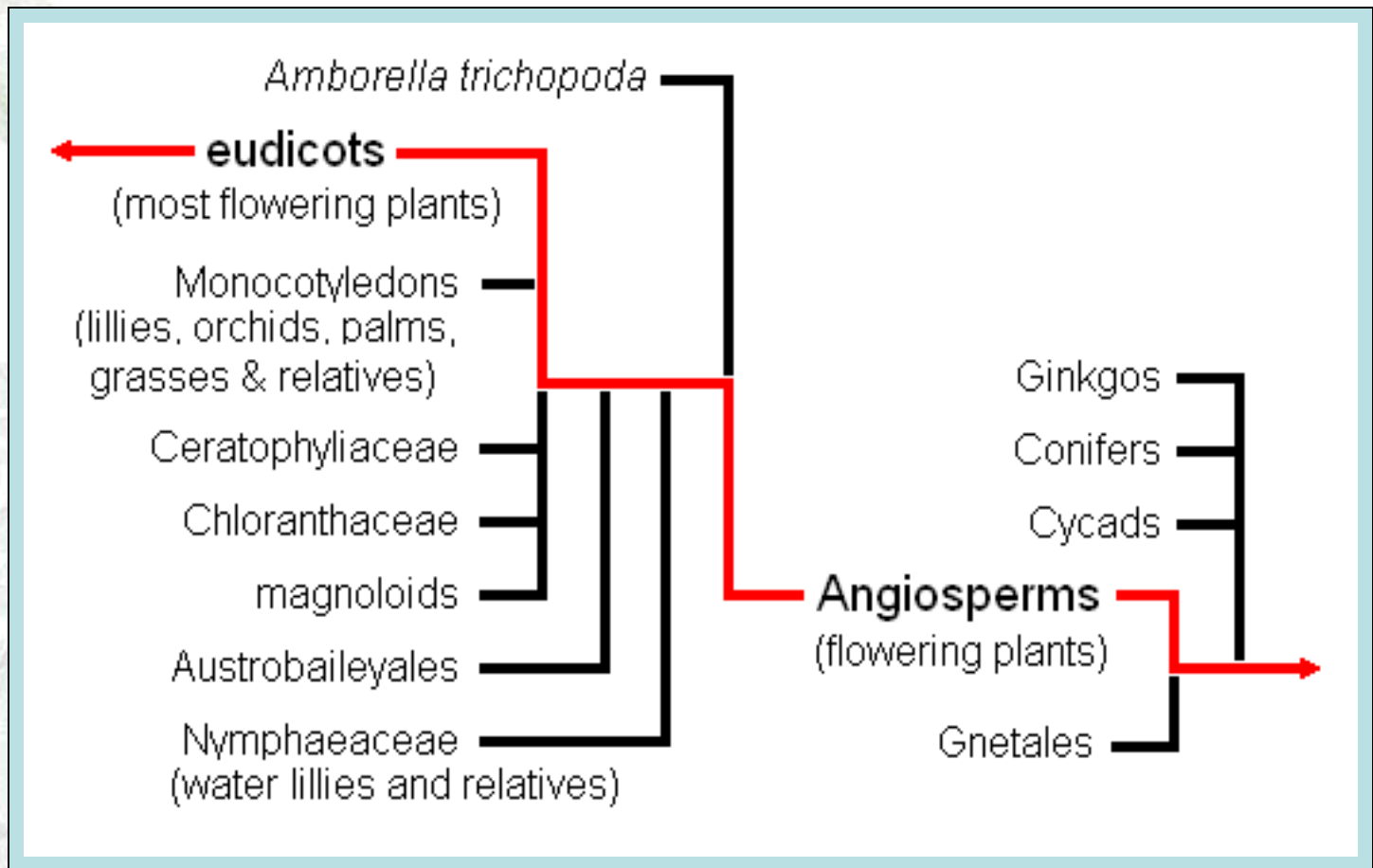
Erythrina herbacea L.- redcardinal



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.







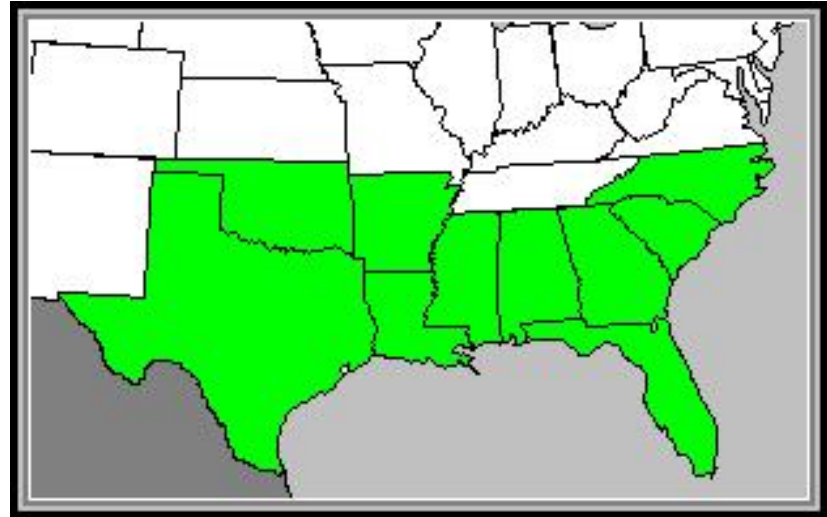
Link to the University of Arizona's [Tree of Life](#).



Species Distribution in the United States

Coral Bean, native to North America, is endemic to the southeastern United States. Its growing range extends from eastern and coastal Texas to the most southern counties of North Carolina.

Erythrina herbacea is a salt tolerant species and favors coastal areas in most of its growing range.



(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.)





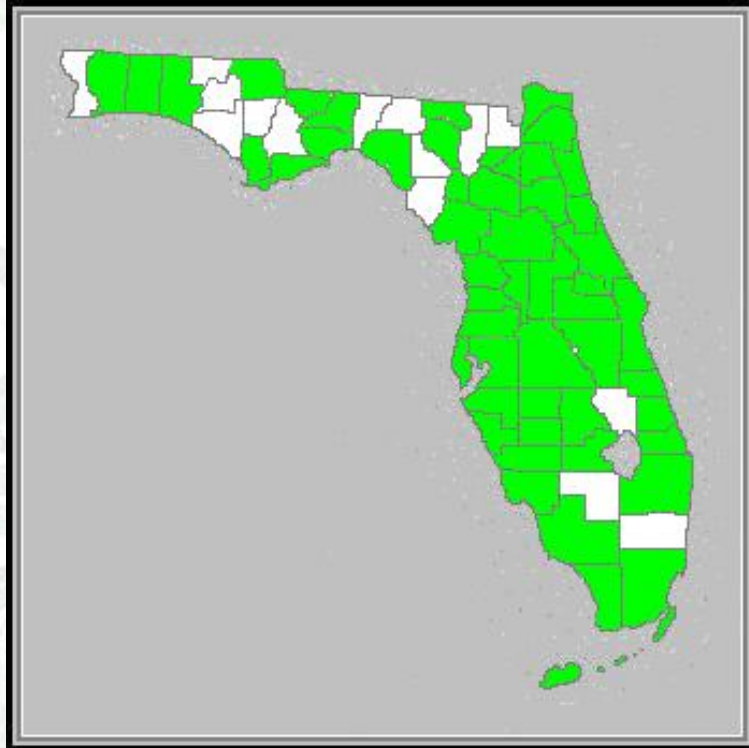
- The United States Department of Agriculture, NRCS, lists a total of 13 species of the genus *Erythrina* L. in the United States.

- Cherokee or Coral Bean is the only species of this genus native to Florida.

**R.K.Godfrey Herbarium (FSU)
#162526 Jackson Co., 5/6/1982**



Species Distribution within Florida



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

- Coral Bean, a perennial deciduous shrub to small tree, is *vouchered in approximately fifty-two counties in Florida, favoring the central peninsula.
- *Erythrina herbacea* prefers understory areas of open woods, hardwood hammocks and disturbed areas.



Plant Structure and Life Cycle



First emerging in April or May in warmer regions, the yellowish- green alternating pinnately trifoliate leaves have three deltoid or arrowhead-shaped leaflets.

Small curved thorns protrude from the junction of the stem and leaf petiole and extend towards the leaflets, helping to provide protection for small birds and animals.





Coral Bean has a taproot system that has many hair-covered fibrous roots, extending from the primary taproot.

As *Erythrina herbacea* matures this taproot continues to grow in length as well as girth, both offering protection from drought and giving the plant the ability to recover quickly from insect damage or the effects of brush fire, once common to open woods.



Initially in spring, Cherokee Bean sends up a series of stems that will flower. These stems are quite different from the leaf-bearing stems, having a greener and smoother appearance, as shown below, at left, compared to a primary leaf stem, at right.





The bright red tubular flowers of *Erythrina herbacea* attract butterflies and hummingbirds as pollinators.



Once fertilization has occurred, the immature green seedpod begins to emerge from the flower before the petals have had a chance to drop.





The flower petals quickly fall away and the fruit continues to develop losing its sleek initial appearance, becoming protuberant.

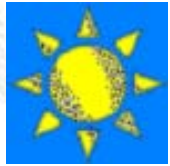
As the seeds mature the pod dries, contracting and twisting somewhat, turning a dark brown. The pods then split open, revealing the bright red seeds from which Coral Bean gets its most popular name.



The seeds of *Erythrina herbacea* are very poisonous and are used for rat poison in Mexico, while a fish poison can be made from the bark and leaves. Interestingly enough, Native Americans used other parts of the plant for medicinal purposes, including tea made from the root for bowel trouble, and an extract from the seeds to make a topical rub.



Growing Conditions



to



- Cherokee Bean prefers broken to partial shade

- Coral Bean favors sandy well-drained soil with a high organic content and is salt tolerant
- Acidic to slightly alkaline soil – 5.4 to 7.6 pH
- Good drought tolerance
- Hardiness: USDA Zone 7b: to $-14.9\text{ }^{\circ}\text{C}$ ($5\text{ }^{\circ}\text{F}$)
to USDA Zone 11: above $4.5\text{ }^{\circ}\text{C}$ ($40\text{ }^{\circ}\text{F}$)
- Flowering and seed production occur in spring and early summer
- Height: 3 -16 feet (1-5 meters)



Seed Collection and Propagation

Seed collection is very easy once the seedpods have split, revealing the bright red seeds. Some experts recommend fumigating the seeds before storage.

Scratching the seeds, or rubbing them with a slight abrasive, prior to planting in the spring is recommended, wear gloves to avoid the poison from these seeds.

Semi-hardwood cuttings can be rooted. Dusting the exposed cutting with root hormone, and keeping the planting moist are standard procedures.



Maintenance and Care

The brilliant green protective thickets and striking crimson flowers of Coral Bean make it an ideal addition to the right native landscape. Once opened, the showy pods display their strikingly beautiful seeds for weeks, sometimes extending to months – eye candy.

To get the most from this wonderful plant requires a minimal amount of work. Once the flower bearing stems have dropped their seed pods, these stems will dry up and can be cut down to the ground. When re-growth starts back in Spring examine the plant looking for noticeably dry and wilted stems. If dead, they should be cut back to solid, live stem.



Presentation References

- Biological and genetic relationships

University of Arizona [Tree of Life](#)

- United States distribution

[USDA](#) - Natural Resource Conservation Service

- Florida distribution

[Atlas of Florida Vascular Plants](#)

- Herbarium specimen

FSU Robert K Godfrey [Herbarium](#)

- Native American Ethnobotany

[University of Michigan](#)



Presentation References (cont.)

- Growing conditions and general information

- [Wikipedia](#) *Erythrina herbacea*
- University of Florida [IFAS](#) Extension
- [Dave's Garden](#)

- 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:

Xeric Landscaping with Florida Native Plants. Michael Jameson and Richard Moyroud, editors. 1991. San Antonio, FL: Association of Florida Native Nurseries. No ISBN.

Bringing Nature Home: How Native Plants Sustain Wildlife in Our Gardens. Douglas W. Tallamy. 2009. Timber Press. ISBN 978-0881929928.

Gardening for Florida's Butterflies. Pamela F. Traas. 2000 (2nd edition). St. Petersburg: Great Outdoors Publishing Co. ISBN 0820004200.

