Florida Native Plant Society

Native Plant Owners Manual

Chamaecrista fasciculata - Partridge Pea

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 and Shirley Denton


Partridge Pea
Legume family


Chamaecrista fasciculata

Navigation Links

(for use in open discussion)

'View/Full Screen Mode' recommended

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

Partridge Pea, Sleeping plant, sensitive pea, dwarf cassia, golden cassia

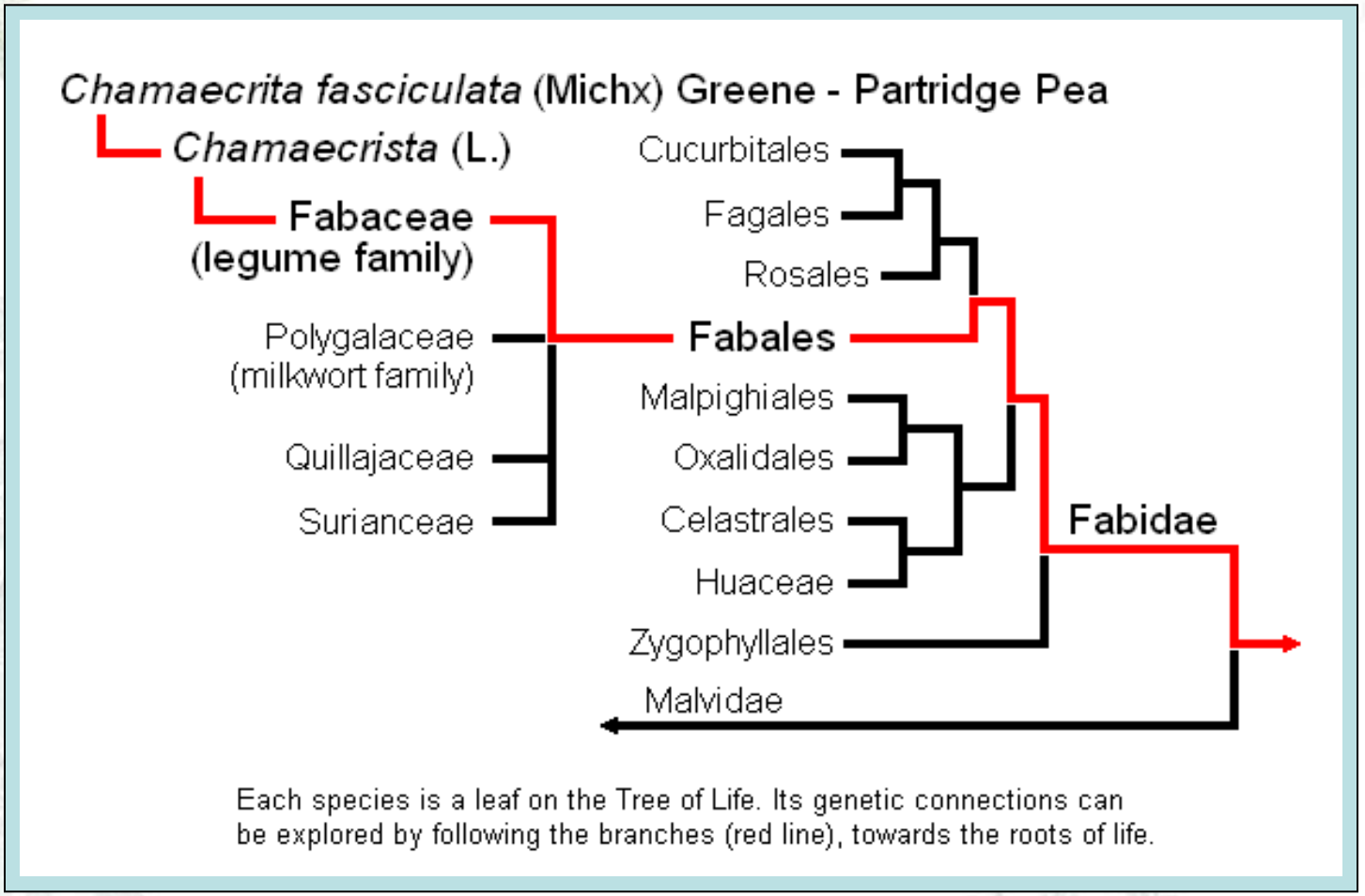
Chamaecrista (kam – ay – KRIS - ta)

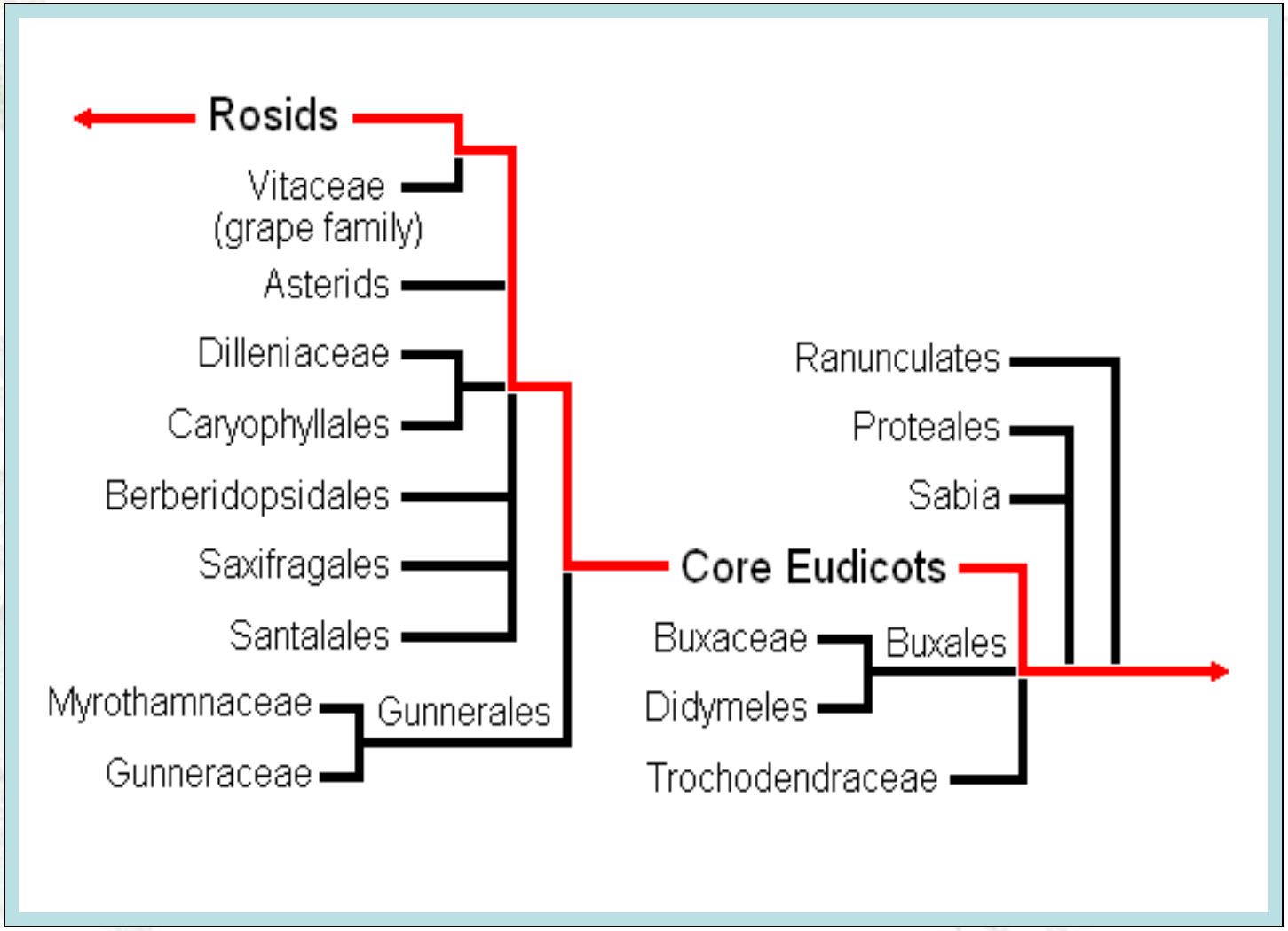
From the Greek adverb '*chamai*' meaning on the ground, on the earth or dwarf, and '*crista*', meaning crest

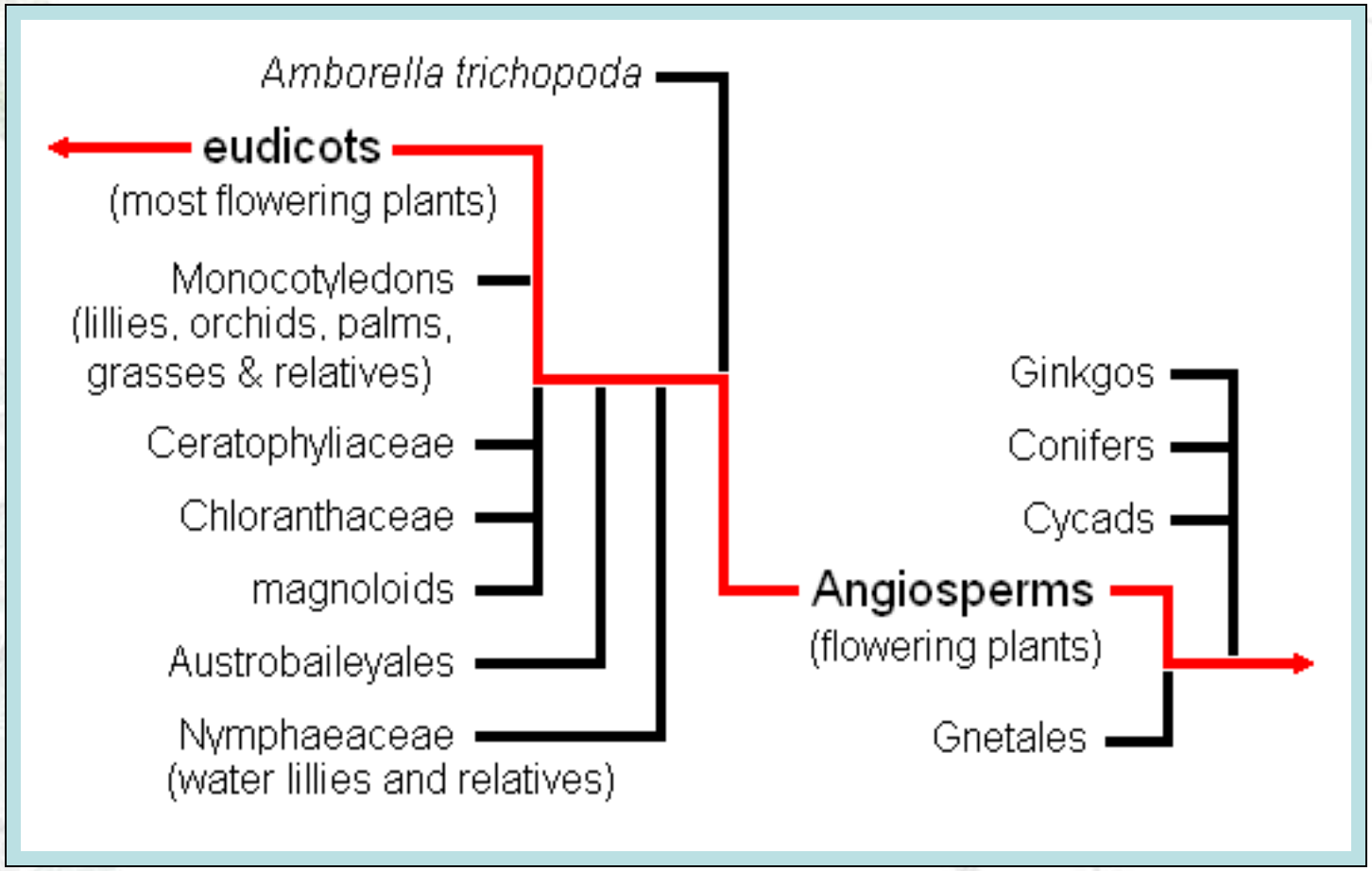
fasciculata (fas – sik – yoo – LAH - tuh)

From the Latin *'fascis'*, meaning banded or bundled.

Biological and Genetic Relationships



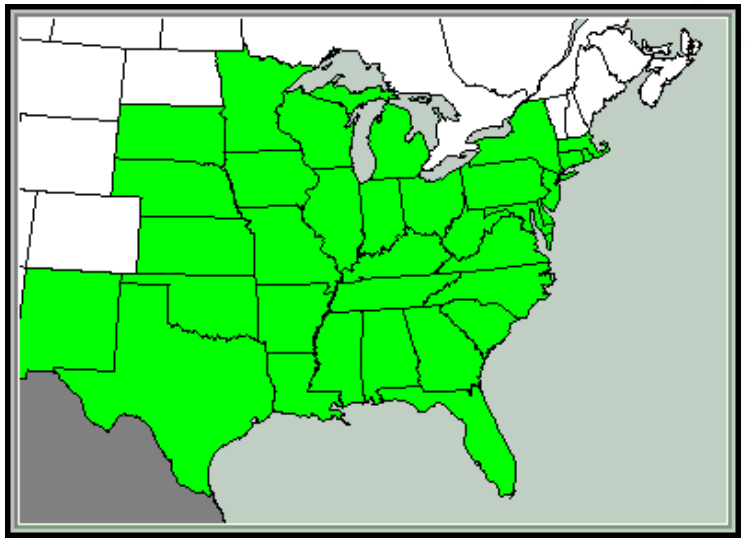

Rosids
Vitaceae
(grape family)
Asterids
Dilleniaceae
Caryophyllales
Berberidopsidales
Saxifragales
Santalales
Myrothamnaceae
Gunneraceae
Gunnerales
Core Eudicots
Ranunculates
Proteales
Sabia
Buxaceae
Buxales
Didymeles
Trochodendraceae



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

Species Distribution in North America

Partridge Pea is native to North America. Endemic from New Mexico in the west, its growing range extends northeast to the Great Plains states as far north as Minnesota. Stretching east as far as Massachusetts, it then extends down along the eastern seaboard as far south as Florida and the Gulf Coast.



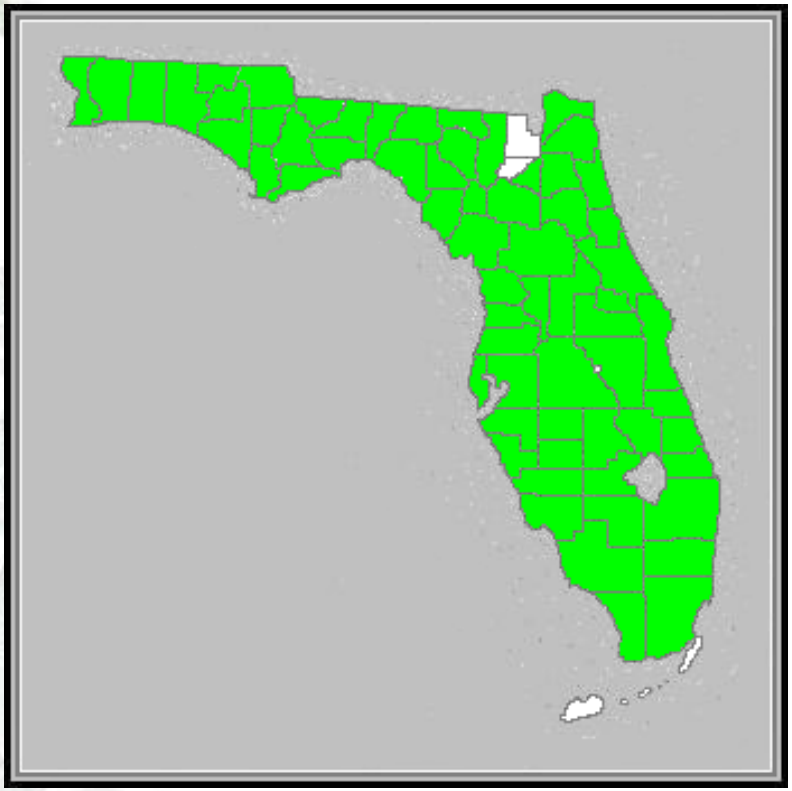
(For specific distribution within any of the shaded areas go to the USDA link provided on the reference page, and click the shaded area of interest.)

- The USDA, NRCS, lists a total of 19 species of the genus *Chamaecrista* throughout the U.S.

- The Atlas of Florida Vascular Plants identifies seven species of this genus occurring in Florida, four of which are native.

R.K.Godfrey Herbarium (FSU) #202553 Wakulla Co., 5/30/2008

Species Distribution within Florida



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

- A herbaceous annual native to most of Florida, Partridge Pea is *vouchered in approximately sixty-four Florida counties.
- *Chamaecrista fasciculata* prefers dry pinelands, wooded and disturbed areas.

Plant Structure and Life Cycle

In early summer the distinctive, pinnately-compounded, alternate leaves, bearing many small leaflets can be seen emerging. These leaves are sensitive and will contract when touched. This plant can oftentimes be found in areas where the soil has been disturbed and is poor. Partridge pea hosts nitrogen-producing microorganisms that inhabit the nodules on the plant’s root system.

The nitrogen is produced in abundance, usually enough to both feed the plant and enrich the soil. In addition to fortifying the soil, partridge pea is also a good soil stabilizer.

These improvements to the soil encourage the introduction of other plants with more demanding soil requirements.

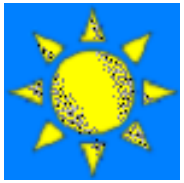
In areas with disturbed soil, this member of the pea family is oftentimes a pioneer in the reestablishment of native and other plant communities.

Flowers begin to form in the summer, continuing to do so late into fall. The flowers are hermaphroditic, having both male and female sexual components. Partridge pea is an important source of nectar for honey, but the flowers are secondary in this role. See the ‘Pollinators and Wildlife’ section of this presentation for details.

After fertilization has occurred, the flowers evolve into bean pods and the seeds within the pod develop and mature.

As fall comes to an end, the entire plant will dry up, and the seed pods will eventually fall free from the plant as winter begins.

Growing Conditions

 to 

• *Chamaecrista fasciculata* prefers direct sun to slight shade

• This plant favors sandy, to sandy loam, well-drained soil, but is not picky about quality

• Strongly acid to slightly alkaline soil – 5.0 to 7.5 pH

• Drought tolerant and moderately salt tolerant

• Hardiness: USDA Zone 3a: to –39.9 °C (-40 °F)
to USDA Zone 10b: above 1.7 °C (35 °F)

• Flowering and seed production occur from late summer into early winter

• Height: 24 - 30 inches (60 - 90 cm.)

Pollinators and Wildlife

Partridge Pea is pollinated primarily by bees and butterflies. It serves as larval host to several butterfly, including cloudless sulfur butterfly (*Phoebis sennae*), ceraunus blue (*Hemiargus ceraunus*), gray hairstreak (*Strymon melinus*), and little yellow (*Pyrisitia lisa*).

(A cloudless sulfur on the bloom of rosinweed.)

An important honey plant, the nectar of this wildflower is produced not in the flowers themselves, but at small orange-colored glands at the base of each leaf. Ants oftentimes take advantage of this cache of goodies. Although the seeds and foliage of *Chamaecrista fasciculata* provide browse for deer and other wildlife, both the live and dry plant contain a cathartic substance that can be poisonous to cattle, and reportedly poisonous to humans when consumed in large quantities, causing bodily stress and sometimes death. ▸

The seeds of Partridge pea are a source of fall and winter food for the northern bobwhite and other quail, lesser prairie-chicken, ring-necked pheasant, mallard, grassland birds, and field mice. High in phosphorous and protein, the seeds are highly digestible.

C. fasciculata often grows in thick clusters providing shelter for numerous species of small birds, water fowl, amphibians and reptiles.

Seed Collection and Propagation

As a member of the pea family, the seeds of *Chamaecrista fasciculata* are nicely packaged and easily collected. Following fertilization, the flowers change to a narrow pod in which seeds form and gradually take on the look of a regular bean pod. Once these pods dry and turn a dark brown they can be harvested once they fall off the plant easily. This usually occurs between late October and November. Crack the casing and remove the dried seeds. Exposing the seeds to the cold for an extended period of time will improve the germination rate. Plant in late fall to spring for best results.

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

- Nectar Food Plants

  Biospherenursery.com

Presentation References (cont.)

- Growing conditions and general information

  USDA-NRCS

  Wildflower Center University of Texas – Austin

  Wikipedia

- Native American Ethnobotany

  University of Michigan

- 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:

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

Florida Plants for Wildlife: A Selection Guide to Native Trees and Shrubs. Craig N. Huegel. 1995. Orlando: Florida Native Plant Society. ISBN 1885258046.

Grafting, Budding, Cutting, Layering & Other Ways of Propagating Fruit Plants in Florida. 1995. Gainesville: Institute of Food & Agricultural Science. ISBN 0916287092.