

# Florida Native Plant Society



Native Plant Owners Manual

*Coreopsis leavenworthii* – Leavenworth's Tickseed

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

Leavenworth's  
Tickseed

Aster family



*Coreopsis*  
*leavenworthii*





# Navigation Links

(for use in open discussion)

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

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[Life Cycle](#)

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recommended

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# Leavenworth's Tickseed, tickseed,

Leavenworth's coreopsis, calliopsis

*Coreopsis* (kor - ee - OP - sis)

From the Greek '*koris*,' a bug or gnat and – '*opsis*,' indicating a resemblance, meaning bug-like, referring to the achenes which look like ticks

*leavenworthii* (lev - en - WER - thee - eye)

Named for Melines Conklin Leavenworth (1796 – 1862), a Yale graduate, botanist, army surgeon and explorer. Leavenworth collected plant specimens in the S.E. United States, Mexico and Central America, and eventually settled in Augusta, GA.



# Biological and Genetic Relationships

*Coreopsis leavenworthii* Torr. & A.Gray –  
Leavenworth's tickseed

└─ *Coreopsis* L. - tickseed

└─ Coreopsidinae ── Coreopsideae

Chrysanthelinae ──┬─

Pinillosiinae ──┬─

*Staurochlamys* ──┬─

Bahieae ──┬─

Chaenactideae ──┬─

Tageteae ──┬─

Neurolaeneae ──┬─

Polymnieae ──┬─

Heliantheae ──┬─

Millerieae ──┬─

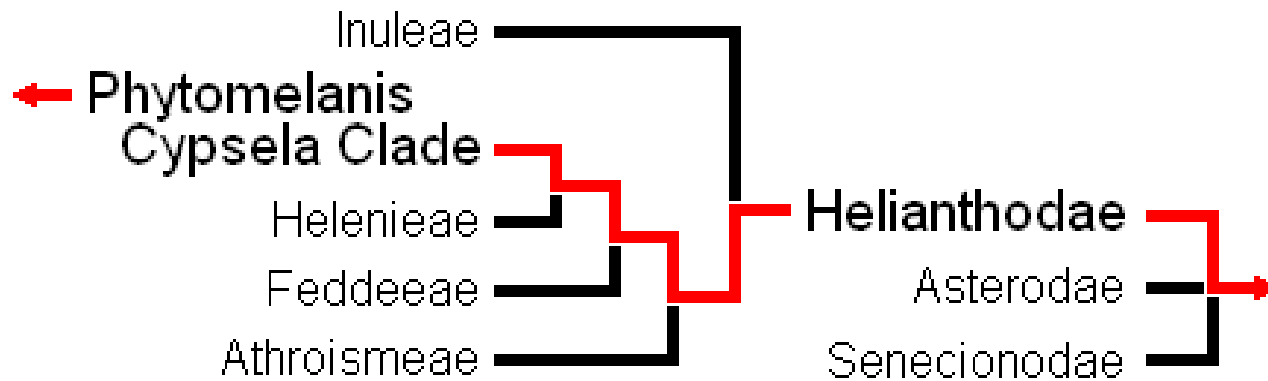
Madieae ──┬─

Pertyleae ──┬─

Eupatorieae ──┬─

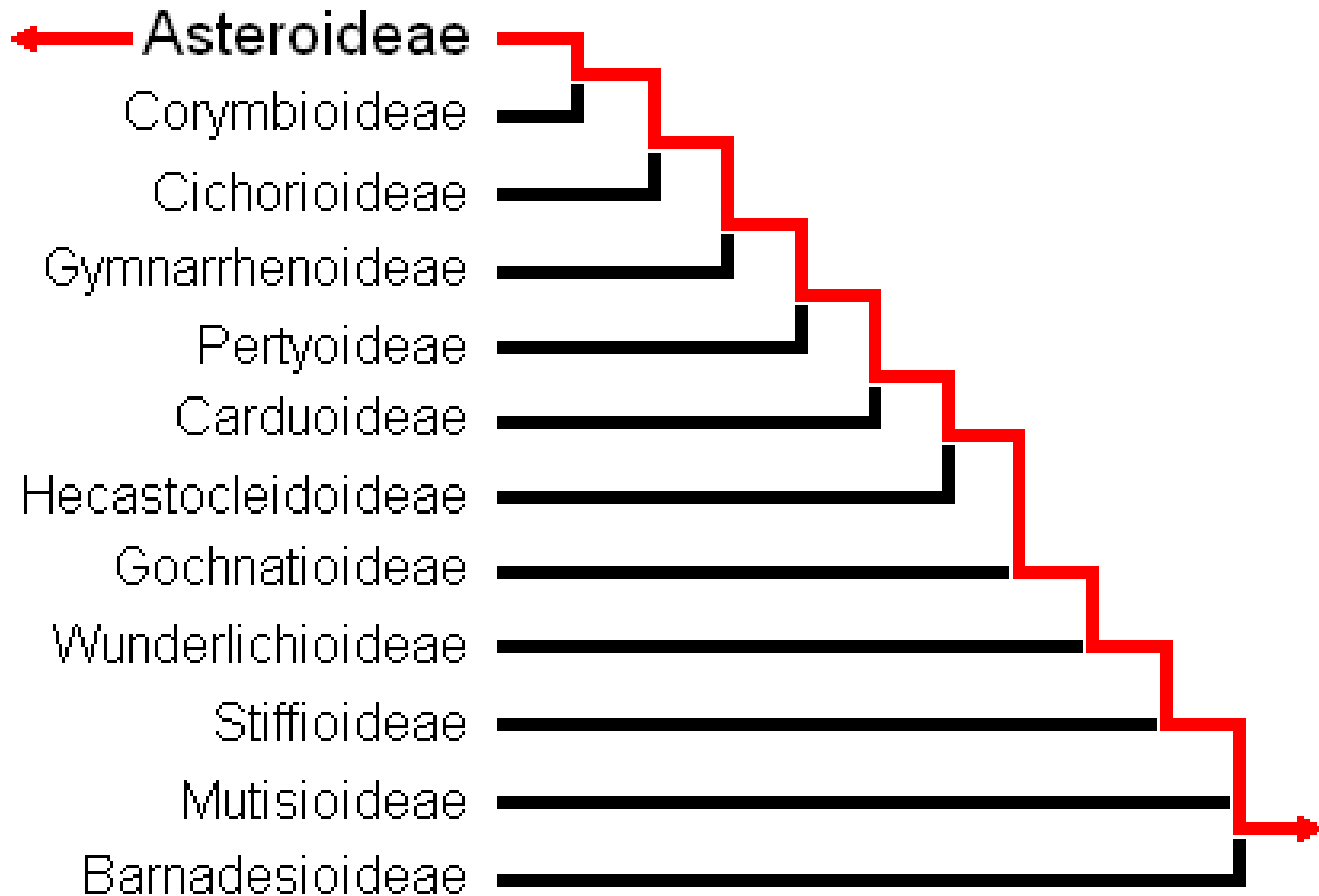
Each Species is a leaf on the  
Tree of Life. Its genetic  
connections can be explored by  
following the branches (red line),  
towards the roots of life.

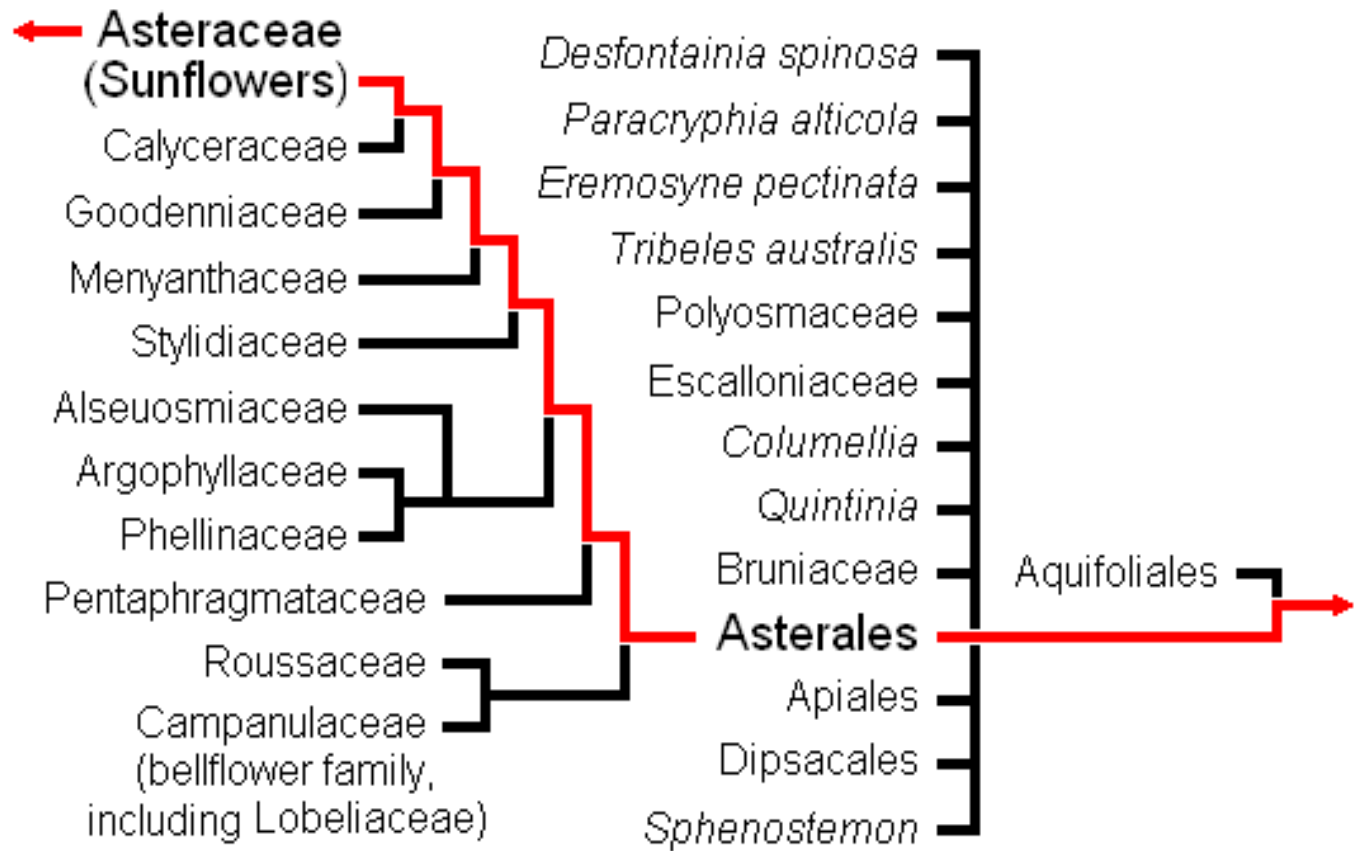




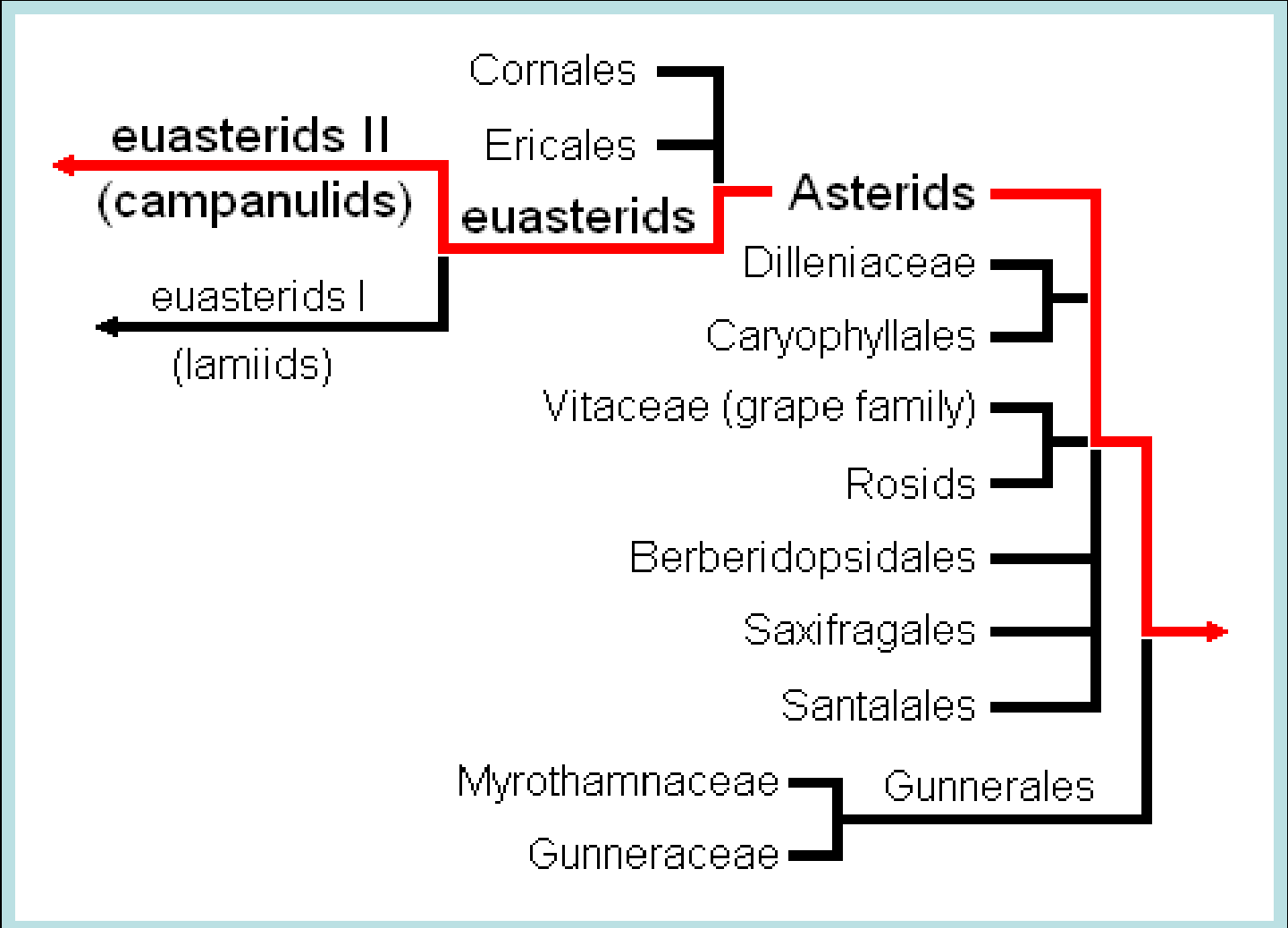
The Tree of Life Web Project (ToL) is a collaborative effort of biologists and nature enthusiasts from around the world. On more than 10,000 World Wide Web pages, the project provides information about biodiversity, the characteristics of different groups of organisms, and their evolutionary history

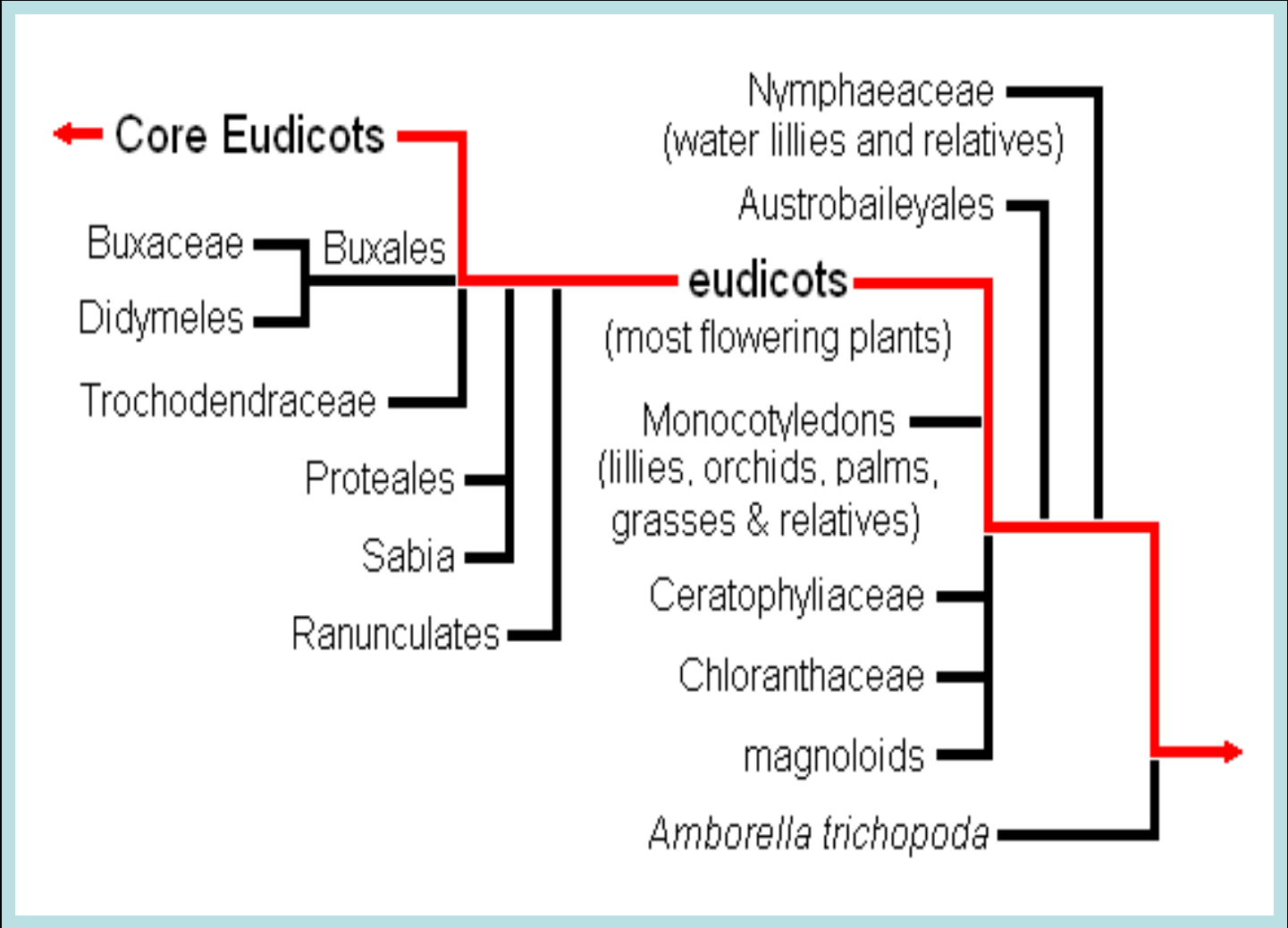


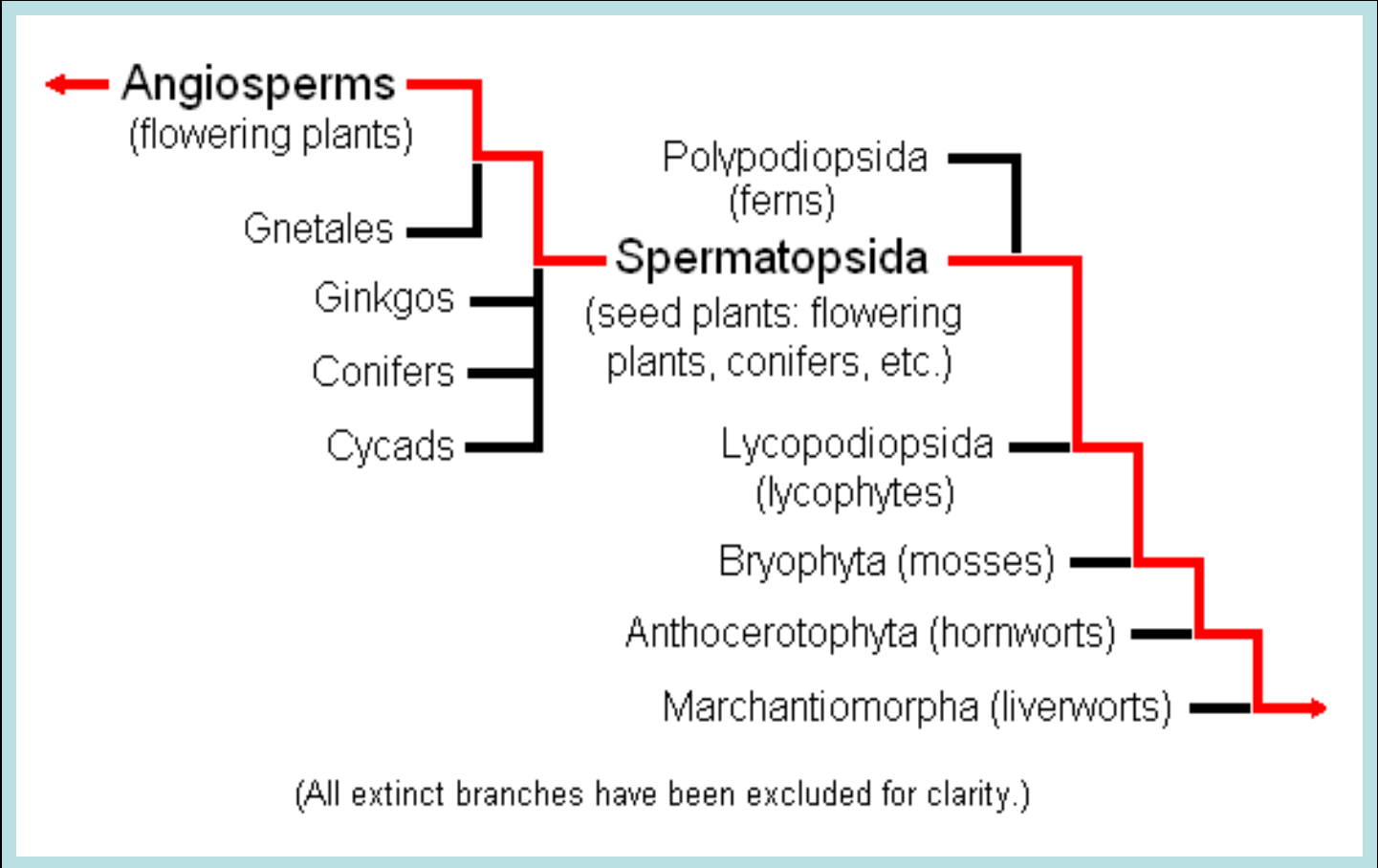




(Individual species and genus denoted by italics)







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



# Species Distribution in the United States

Leavenworth's Tickseed, native to North America, is endemic to the southeastern United States. It is found extensively throughout the Florida peninsula and scattered areas of the Panhandle. Its range extends northward up into two southern counties of Alabama.



(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.)



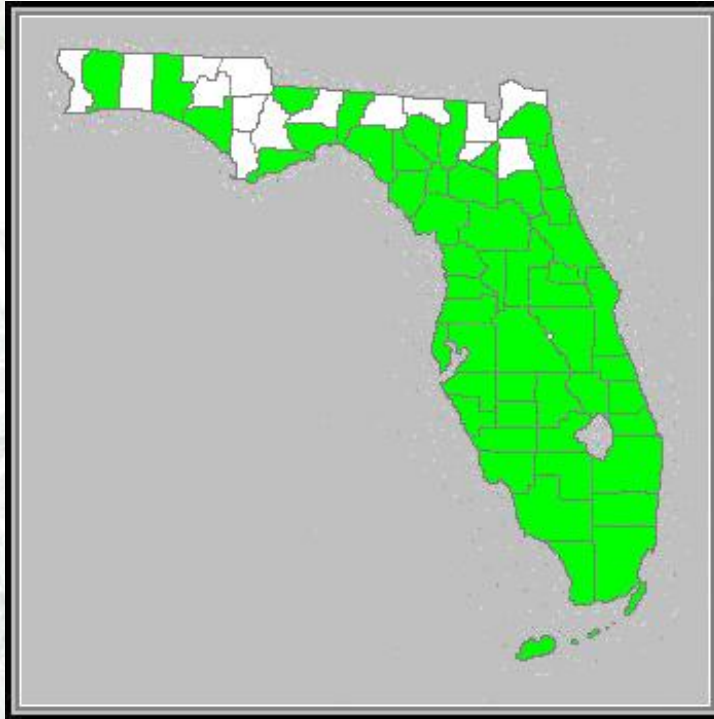
- The United States Department of Agriculture, NRCS, lists a total of thirty-three species of the genus *Coreopsis* L. throughout the United States.

- The Atlas of Florida Vascular Plants lists fourteen species occurring in Florida, 11 of which are native

**FSU Robert K. Godfrey  
Herbarium #199105 St Lucie  
Co., 1/15/1999**



# Species Distribution within Florida



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

- Leavenworth's Tickseed, a perennial wildflower, is \*vouchered in approximately fifty-two counties in Florida, including virtually the entire peninsula.
- *Coreopsis leavenworthii* prefers pine flatwoods, savannas and disturbed areas.







# Plant Structure and Life Cycle

*Coreopsis leavenworthii* is an annual to short-lived perennial. Leaf shape is quite variable, ranging from narrow, lance-shaped to pinnately and bi-pinnately compound leaves.

The primary root system is tap, with extensive fibrous secondary roots.



Leavenworth's Tickseed blooms from spring into summer for most of its growing range, and all year in the southernmost part of that range.



The flower starts as a spherical bud no larger than a quarter of an inch in diameter. The bud opens at the longitudinal fissures and the petals begin to extend outward.



Following pollination of the flower, the rays drop off and the fruit assumes nearly the same appearance as it had prior to the flower blooming.

*Coreopsis* is the Florida State Wildflower. There are fourteen species in the state.

The Seminole tribe used an Infusion of Leavenworth's Tickseed for the relief of heat prostration.





# Growing Conditions



- *Coreopsis leavenworthii* prefers direct sun
- Leavenworth's Tickseed does well in sand, loam, and clay, occasionally wet
- Acidic to slightly alkaline soil – 5.6 to 7.7 pH
- Moderate drought tolerance
- Hardiness: USDA Zone 8a: to 12.2 °C (10 °F)  
to USDA Zone 11: above 4.5 °C (40 °F)
- Flowering and seed production occur from spring into summer, year-round in frost free areas
- Height: 18 - 36 inches (45 - 90 cm.)



# Pollinators and Wildlife



*Coreopsis leavenworthii* is a must for any butterfly garden. Not only does it attract butterflies, but it also is a source of nectar and pollen for honeybees, native bees, and wasps.

It is also attractive to many critters generally considered pests: lygus bugs, thrips and leafhoppers, aphids and weevils.



# Seed Collection and Propagation

Nutlets are mature and ready to be collected about four weeks after the flower withers. These seedheads are easily shattered to facilitate seed collection.

Spread the seeds to dry on newspaper for a couple of days then stored in a paper sack in the refrigerator until ready to sow, August to mid October in frost free areas, and spring in areas having freezes.

Leavenworth's Tickseed can also be propagated by dividing the basil rosettes – the clumpy leaf growth that hugs the ground. Propagation by division should be used on plants that are a couple of years old. This division is best executed in the late fall or late winter.





# Maintenance and Care

As mentioned under 'Propagation', plants that are two- to three years old should be divided.

Selectively thinning by removing clumps from the interior of plantings is healthy for the individual plant.

Fertilizing is usually not necessary, but if you do, use a low rate of control-release fertilizer only.

*Coreopsis leavenworthii* is moderately drought tolerant, be careful that it doesn't dry out too much.

Although it may interfere with timely seed collection, deadheading wilted flowers will extend the bloom period.



# 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](#)



# Presentation References (cont.)

- Growing conditions and general information
  - [Wikipedia](#)
  - University of Florida [IFAS](#)
- Native American Ethnobotany
  - [University of Michigan](#)
- Nectar Food Plants
  - [Biospherenursery.com](#)
- 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:

*'Harvest season and fertilizer effects on seed production of Leavenworth's coreopsis'* **Journal of Environmental Horticulture 24:63-67, J.G. Norcini, J.H. Aldrich, and F.G. Martin. 2006**

*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

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

