Florida Native Plant Society

Native Plant Owners Manual

Berlandiera subacaulis – Florida Greeneyes

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

Florida Greeneyes

Aster family


Berlandiera subacaulis

Navigation Links

(for use in open discussion)

'View/Full Screen Mode' recommended

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

Florida Greeneyes, common greeneyes,

Florida dandelion, greeneyes

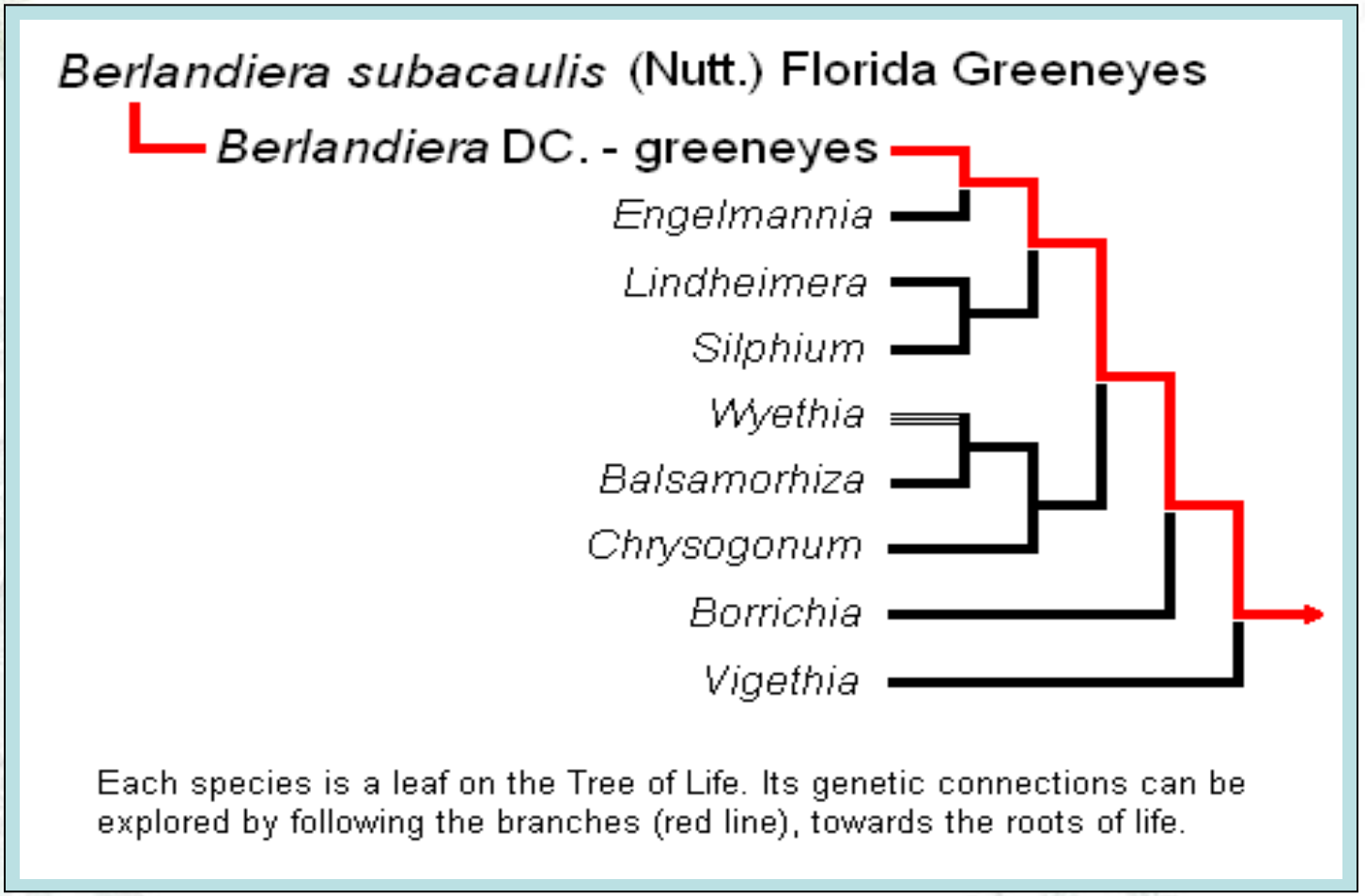
Berlandiera (ber - lan - dee - AIR - uh)

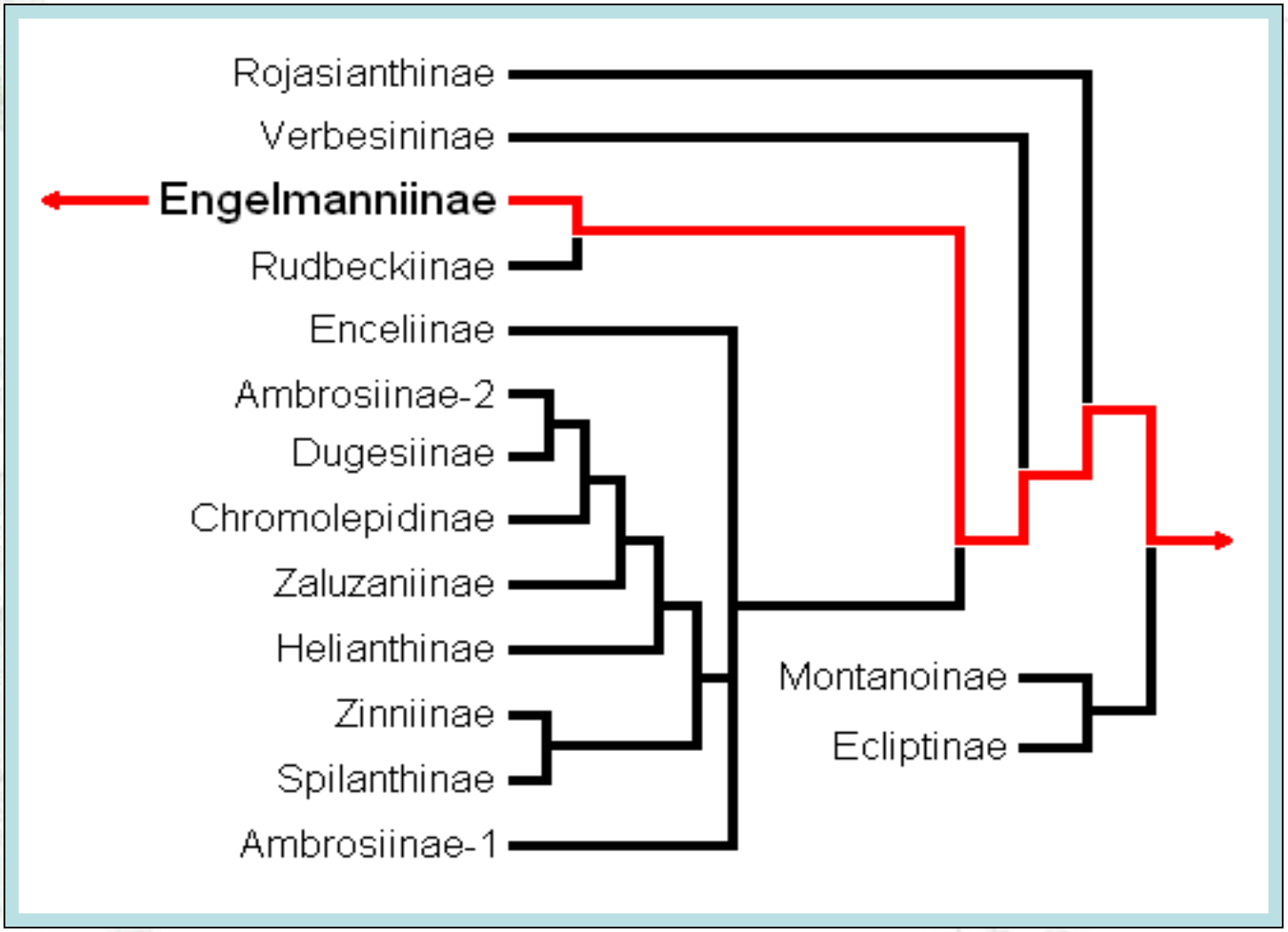
Named for Jean-Louis Berlandier (1805-1851), a French Naturalist who studied Botany in Switzerland. Made botanical collections in Mexico and Texas while studying Native American tribes, the Comanche in particular. In 1850 he served on the commission establishing a new border between the United States and Mexico.

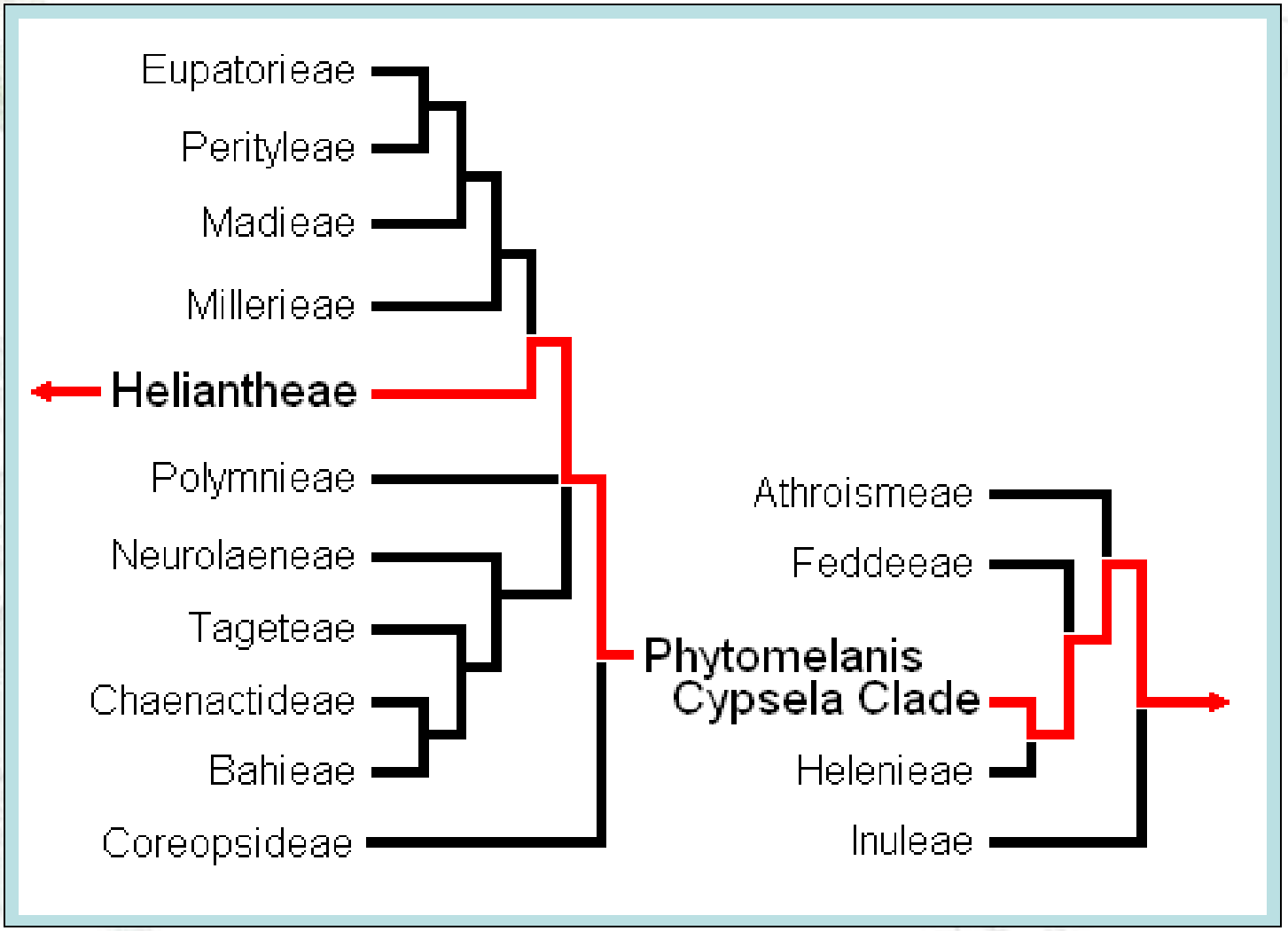
subacaulis (sub - a - KAW - liss)

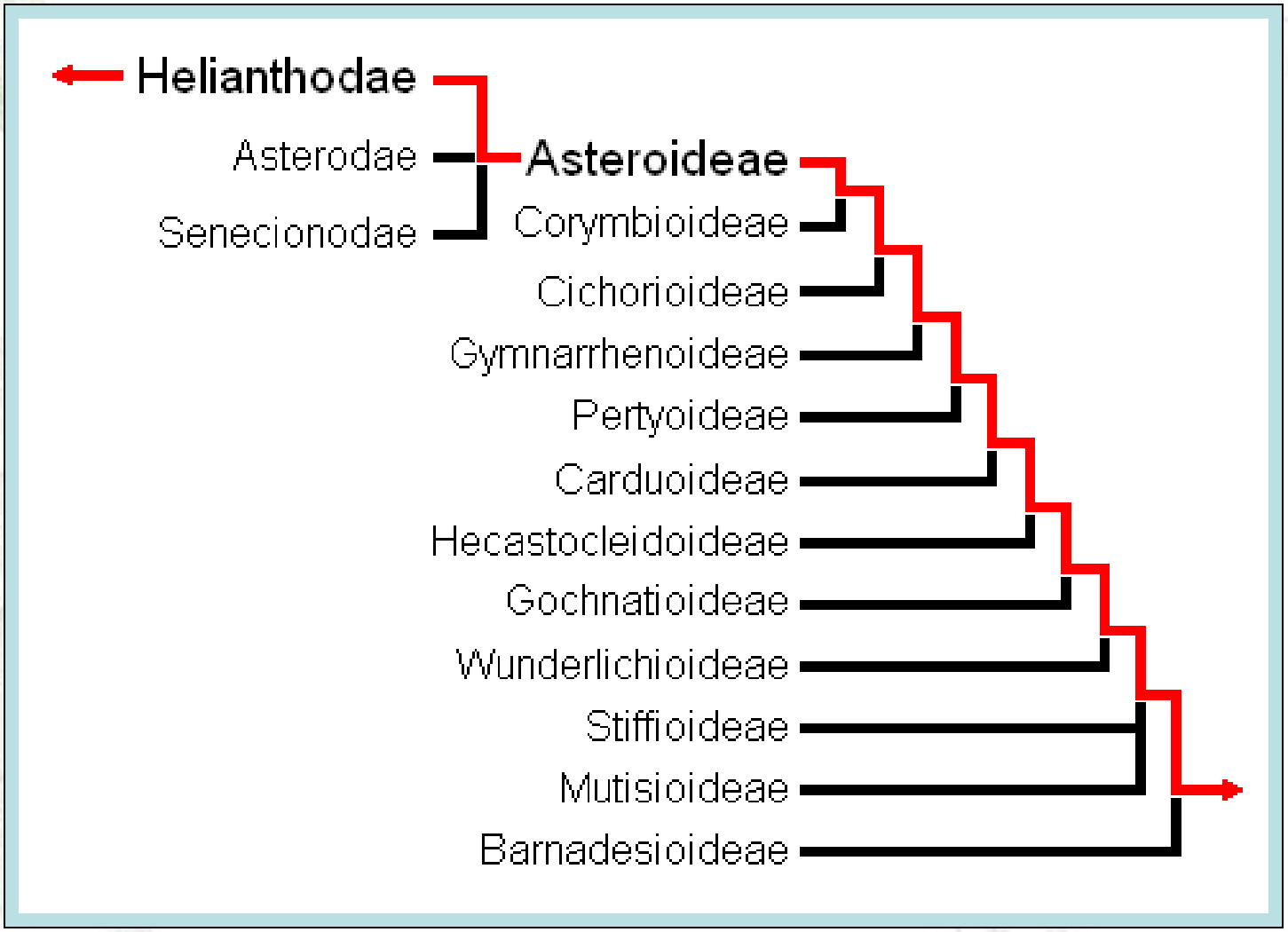
Without much stem, or less so than a similar plant.

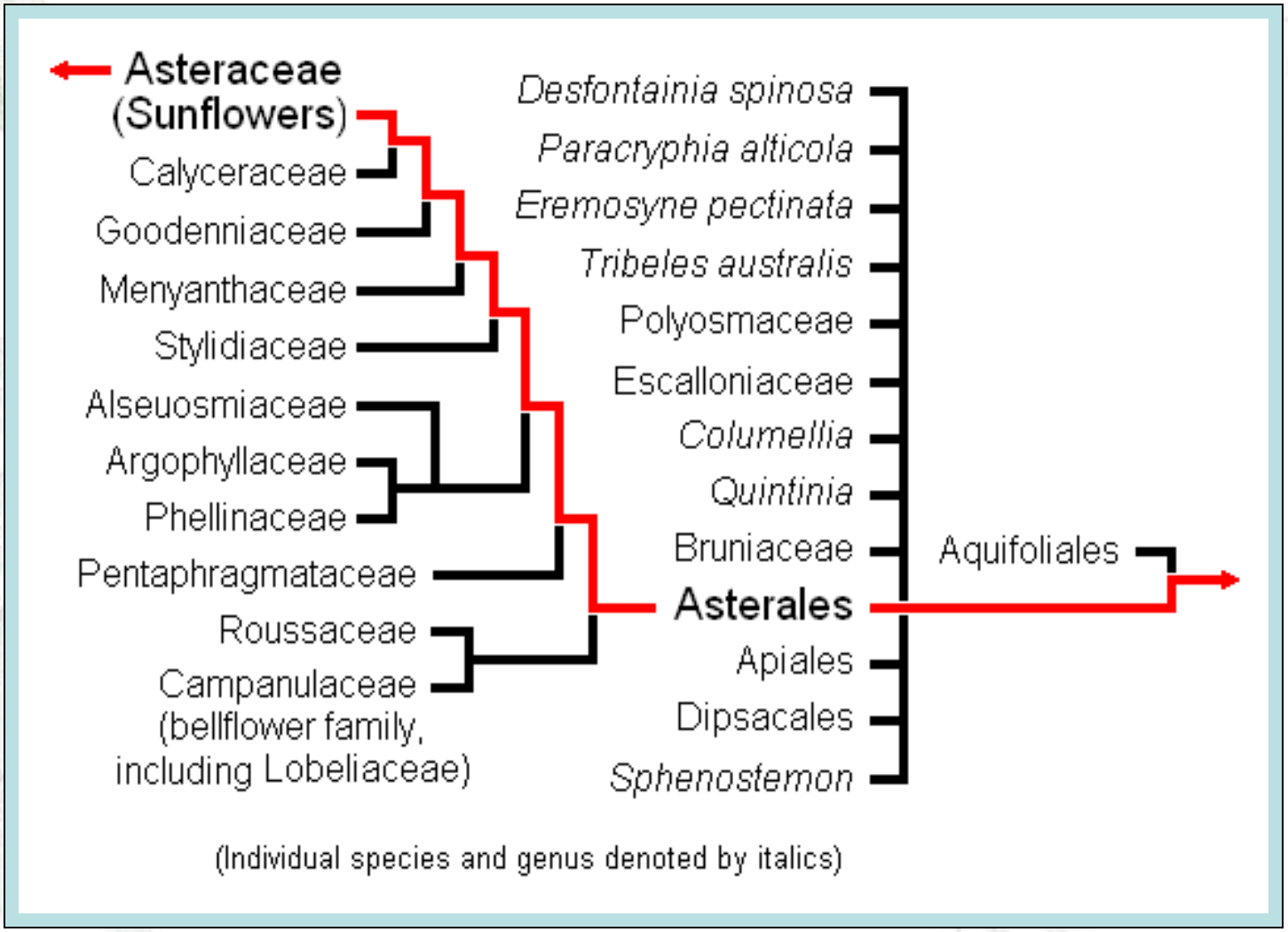
Biological and Genetic Relationships

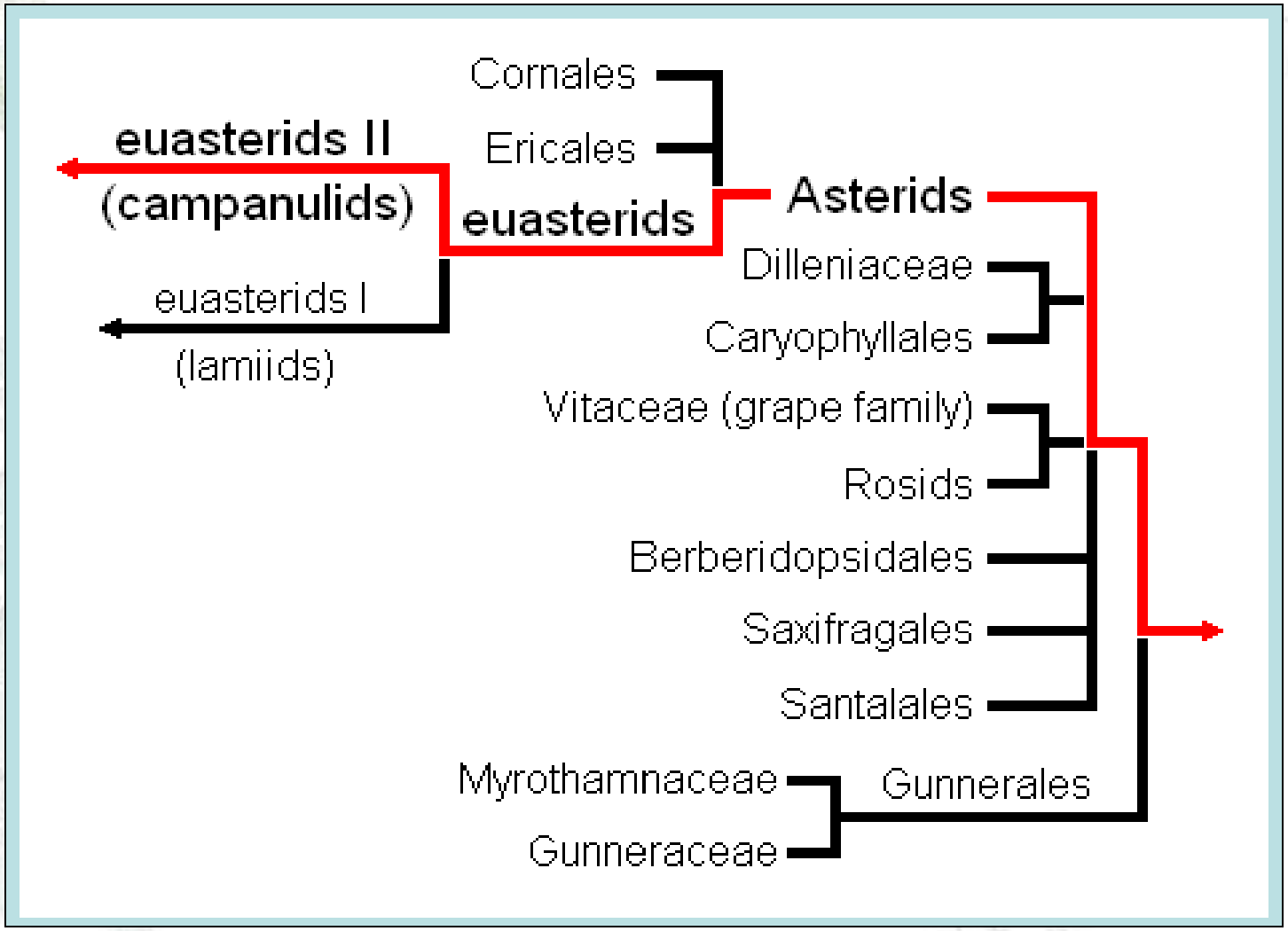


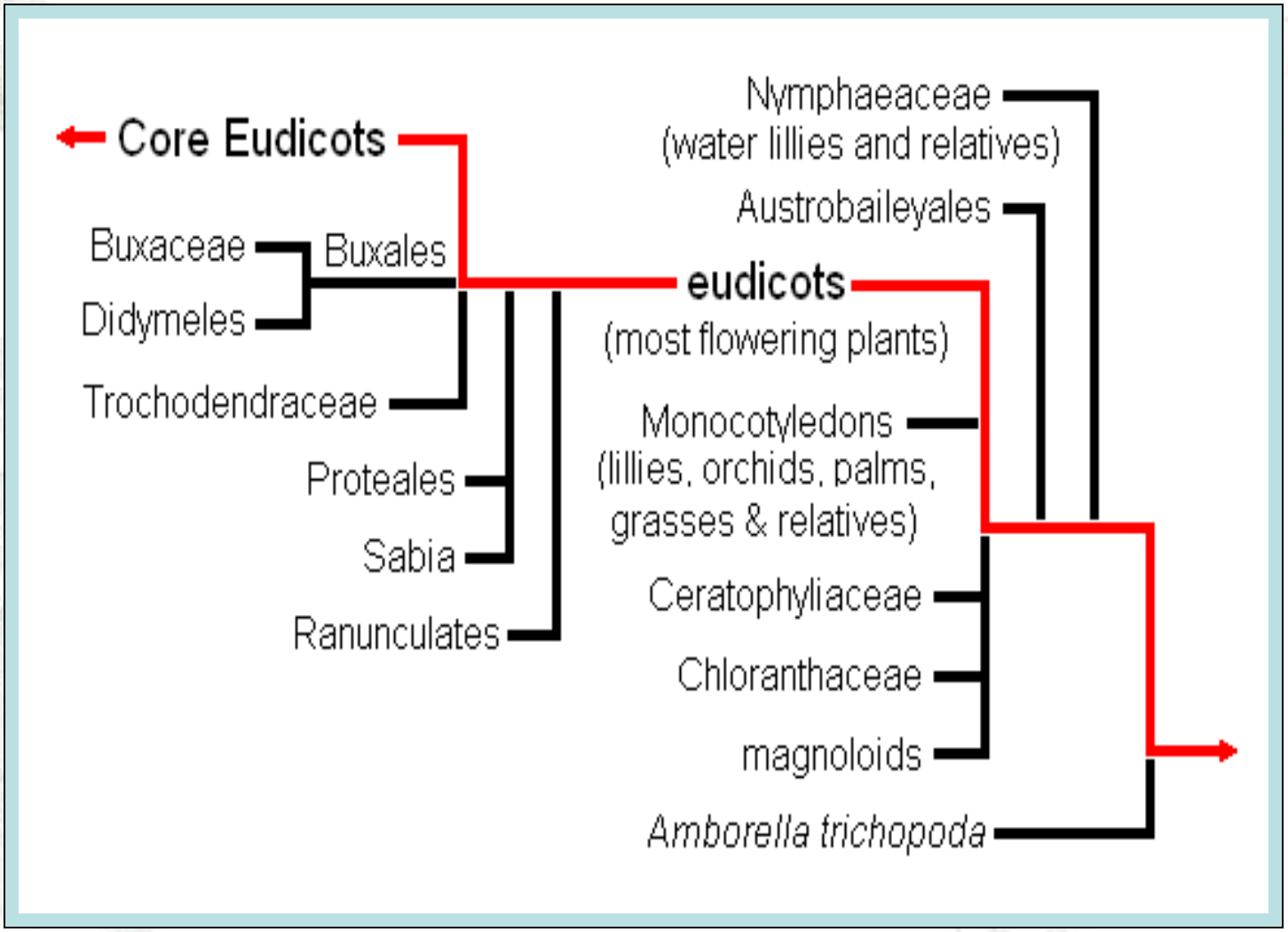

Rojasianthinae
Verbesininae
Engelmanniinae
Rudbeckiinae
Enceliinae
Ambrosiinae-2
Dugesiinae
Chromolepidinae
Zaluzaniinae
Helianthinae
Zinniinae
Spilanthinae
Ambrosiinae-1
Montanoinae
Ecliptinae

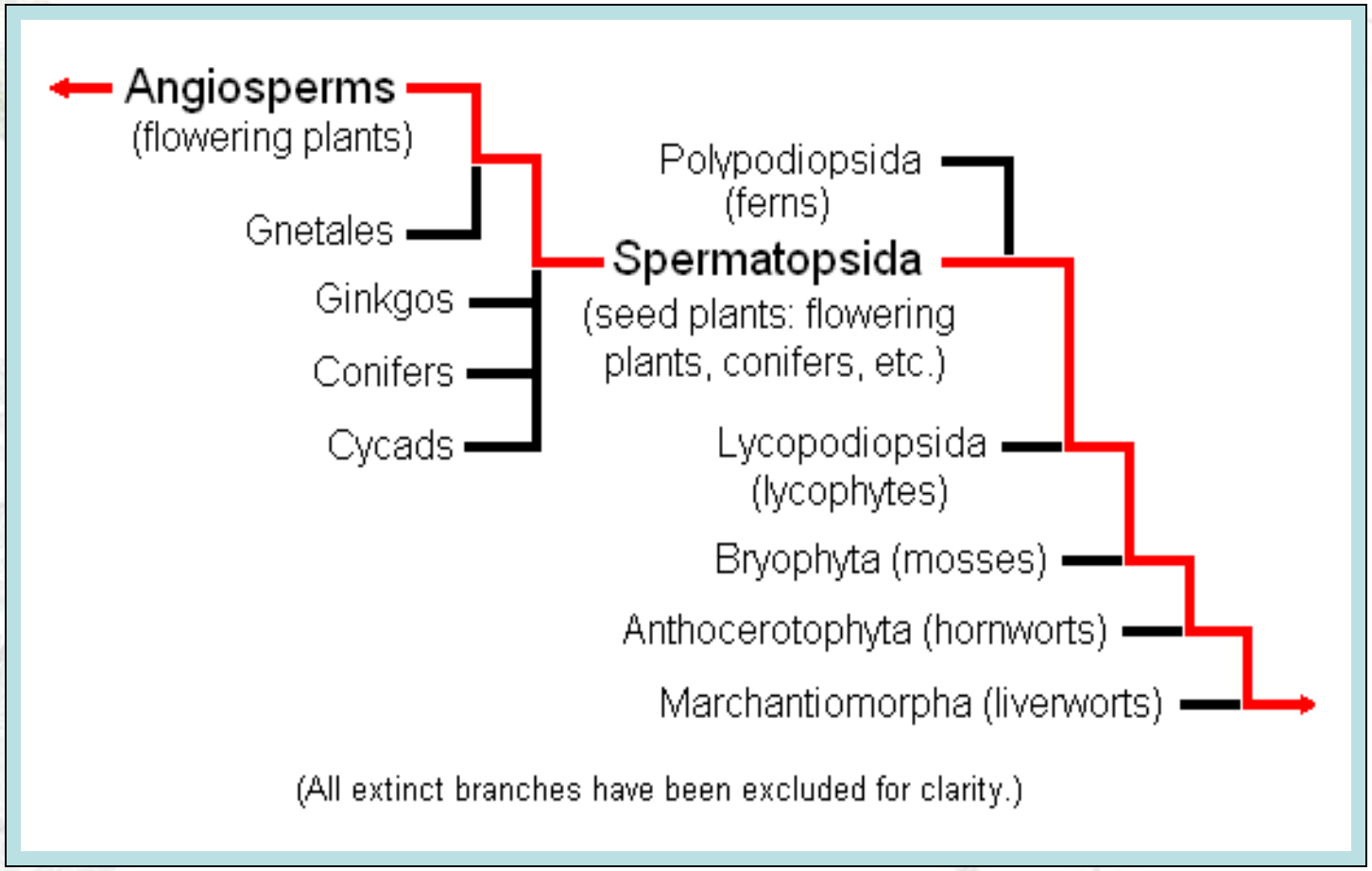

Eupatorieae
Perityleae
Madieae
Millerieae
Heliantheae
Polymnieae
Neurolaeneae
Tageteae
Chaenactideae
Bahieae
Coreopsideae
Phytomelanis
Cypsela Clade
Athroismeae
Feddeeae
Helenieae
Inuleae


Helianthodae
Asterodae
Senecionodae
Asteroideae
Corymbioideae
Cichorioideae
Gymnarrhenoideae
Pertyoideae
Carduoideae
Hecastocleidoideae
Gochnatioideae
Wunderlichioideae
Stiffioideae
Mutisioideae
Barnadesioideae

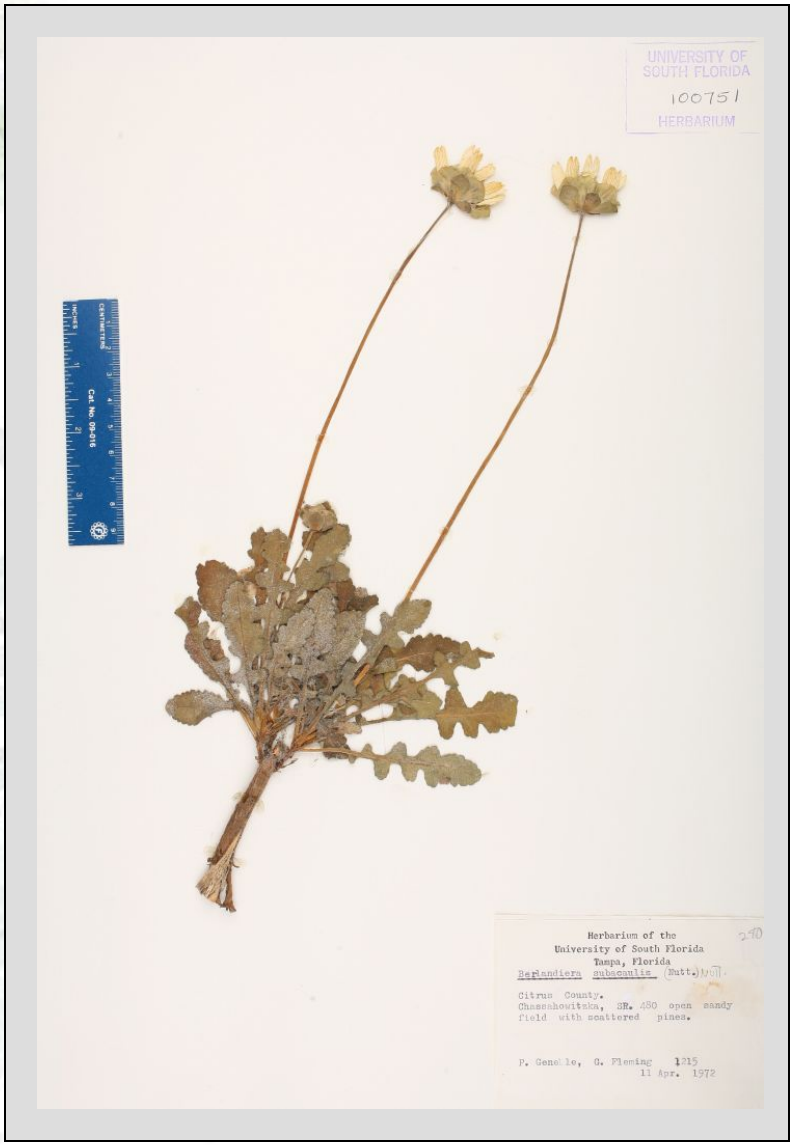

Asteraceae
(Sunflowers)
Calyceraceae
Goodeniaceae
Menyanthaceae
Stylidiaceae
Alseuosmiaceae
Argophyllaceae
Phellinaceae
Pentaphragmataceae
Roussaceae
Campanulaceae
(bellflower family,
including Lobeliaceae)
Desfontainia spinosa
Paracryphia alticola
Eremosyne pectinata
Tribeles australis
Polyosmaceae
Escalloniaceae
Columellia
Quintinia
Bruniaceae
Asterales
Apiales
Dipsacales
Sphenostemon
Aquifoliales
(Individual species and genus denoted by italics)


Cornales
Ericales
euasterids II
(campanulids)
euasterids
Asterids
Dilleniaceae
Caryophyllales
euasterids I
(lamiids)
Vitaceae (grape family)
Rosids
Berberidopsidales
Saxifragales
Santalales
Myrothamnaceae
Gunnerales
Gunneraceae


Core Eudicots
Buxaceae
Buxales
Didymeles
Trochodendraceae
Proteales
Sabia
Ranunculates
Nymphaeaceae
(water lillies and relatives)
Austrobaileyales
eudicots
(most flowering plants)
Monocotyledons
(lillies, orchids, palms,
grasses & relatives)
Ceratophyliaceae
Chloranthaceae
magnoloids
Amborella trichopoda



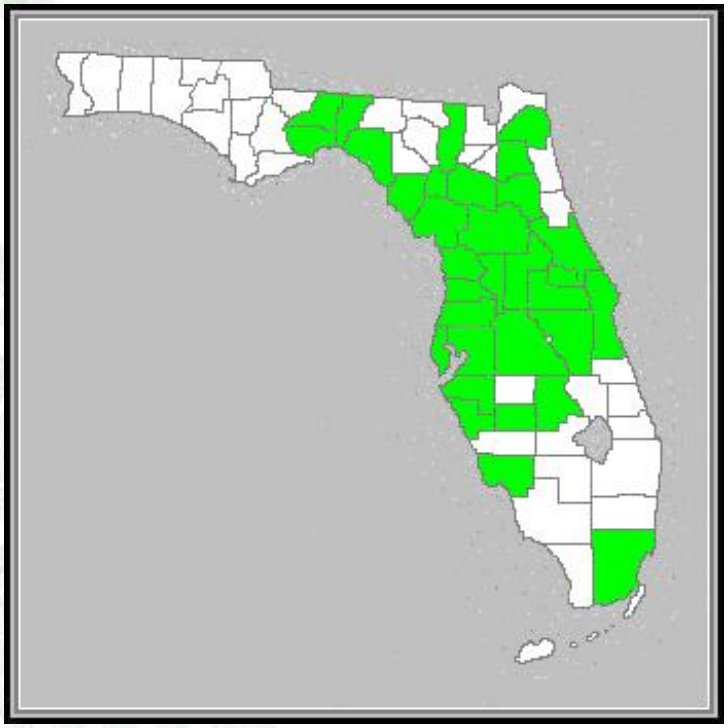
Link to the University of Arizona's Tree of Life.



- The United States Department of Agriculture, NRCS, lists a total of three species of the genus *Berlandiera* throughout the U.S.
- The Atlas of Florida Vascular Plants identifies three species occurring in Florida, all of which are native.

USF Herbarium #100751
Citrus Co., 4/11/1972

Species Distribution within Florida



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

- A perennial, endemic to the Florida peninsula. *Berlandiera subacaulis* is *vouchered in approximately thirty-three Florida counties and in no other State.
- Florida Greeneyes prefers Sandy Oak and Pine flatwoods, Sandhill and disturbed areas.

Plant Structure and Life Cycle

This herbaceous perennial first emerges between March and May. It is unremarkable, resembling common dandelion.

Initially, the rough, hairy stemmed leaves are ovate to ovate with an acute tip, having scalloped edges and prominent veins. Leaves can be alternate or opposite, simple or compound.

Berlandiera subacaulis is supported and nourished by a sizeable taproot system. This one is approximately one inch in diameter at the top and is about ten inches in length.

This hardy root system helps the plant survive through periods of drought in the sandy soils of scrub and Flatwoods habitats that it has evolved with, and assures a quick recovery following wildfires.

As the plant matures, the leaves maintain a scalloped edge while assuming a lyrate form, no wonder a common name is Florida dandelion.

As Florida Greeneyes bloom, a cup of green bracts first appears. Then the yellow petals emerge from the circumference. The primary seed-producing flowers begin to develop in the central disc area.

As the petals extend and form a corolla, tiny florets start to mature and open into a multitude of tiny blooms in the disc.

The yellow of Florida Greeneyes corolla attracts both butterflies and bumblebees as pollinators.

The yellow rays and the smaller yellow, or red to maroon florets of the disc, are dropped as seed development progress.

The ray florets have fertile pistillate, while the disc florets, functionally staminate, have all that is needed for pollinators to facilitate fertilization.

The seeds develop in the cup of green bracts that initiated flower development. Seeds mature in plate-like structures that separate as the flower head dries out.

The seeds self-sow as the flower head falls apart, *Berlandiera subacaulis* flowers throughout the growing season from spring to the first frost, producing many seeds.

Growing Conditions

 to 

- Full sun to slight shade

- Florida dandelion prefers well-drained sandy soil.
- Acid to slightly alkaline soil – 5.1 to 7.5 pH
- Good drought tolerance
- Hardiness: USDA Zone 9a: to -6.6 °C (20 °F)
  to USDA Zone 11: above 4.5 °C (40 °F)
- Flowering and seed production occur year round
- Height: 12-18 inch (30-45 cm)

Propagation

Florida Greeneyes multiply by seed and self-sowing from spring to late fall.

By bagging the flower heads once the petals start dropping, seeds can be collected to sow as desired.

Presentation References

- Biological and genetic relationships

  University of Arizona Tree of Life

- Florida distribution

  Atlas of Florida Vascular Plants

- Growing conditions & general information

  Wildflower Center UTA

  Wikipedia genus *Berlandiera*

  Flora of North America

  Dave's Garden

  ZipcodeZoo.com

Presentation References (cont.)

- 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:

The Right Plants for Dry Places: Native Plant Landscaping in Central Florida. Suncoast Native Plant Society. 2005 (2nd edition). St. Petersburg: Great Outdoors Publ. Co. ISBN 0820004235.