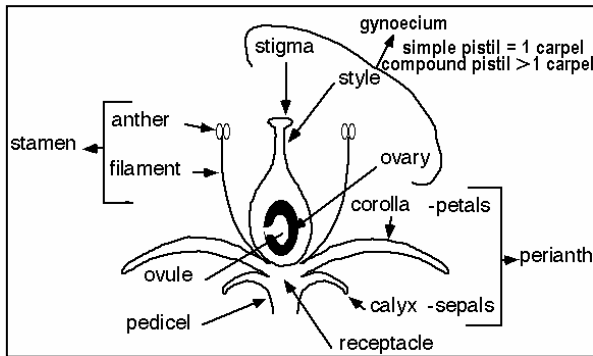


Tribes of the Asteraceae in New Mexico For the NPSNM-Albuquerque Chapter

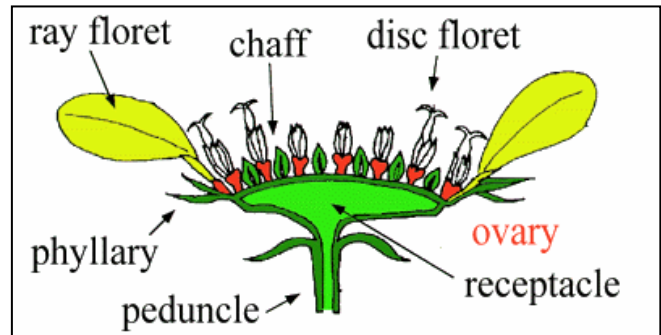
The Asteraceae is the largest family of dicots in the New Mexico flora, with 169 genera and approximately 690 species.

The primary key characteristic is the flower-like inflorescence = head or capitulum or 'composite' structure subtended by bracts (phyllaries) and this feature allows, in most cases, relatively easy family recognition.

Typical flower morphology



'Composite' floral morphology



Subfamily Cichorioideae

Usually: large florets; disc florets deeply lobed; flowers commonly red, violet and blue; discoid, bilabiate, or ligulate florets.

Subfamily Asteroideae

Usually: small florets; disc florets shallow lobed; flowers commonly yellow; radiate (true ray florets).

Tribes of the Cichorioideae:

- **Cardueae**
- **Lactuceae**
- **Mutiseae**
- **Vernonieae**

Tribes of the Asteroideae:

- **Anthemideae**
- **Astereae**
- **Eupatorieae**
- **Gnaphalieae**
- **Helenieae**
- **Heliantheae**
- **Plucheeae**
- **Senecioneae**

Tribes of the Cichorioideae

Cardueae (Thistles)



- Mostly herbaceous, spiny herbs with dissected leaves
- Predominantly discoid, florets 5-lobed
- Style has a ring of hairs on the shaft below the branches
- NM genera: *Arctium*, *Carduus*, *Cirsium*, *Cnicus*, *Onopordum*

Lactuceae (Lettuces)



- Mostly herbaceous with milky latex
- Usually dentate-pinnatifid to variously dissected leaves
- Florets ligulate, with a 5-lobed ligule
- Style slender, with hairs on shaft and along the branches
- NM genera: *Cichorium*, *Lactuca*, *Stephanomeria*

Mutiseae



- Herbs or shrubs, often serrate-dentate leaves, sometimes spiny
- Florets usually all bilabiate
- Style branches truncate
- South and Central American, rarely in North America
- NM genera: *Acourtia* (= *Perezia*), *Trixis*

Vernonieae



- Usually alternate-leaved herbs or shrubs, leaves entire or toothed
- Florets mostly discoid (deeply lobed), not yellow
- Styles slender with filiform, pilose style branches and a pilose upper shaft
- NM genus: *Vernonia*

Tribes of the Asteroideae

Anthemideae



Leaves pinnately divided
Florets disc + ray, white or yellow, though some disciform (*Artemisia*)
Pappus scaly or none
Involucral bracts with wide scarious margins
Style with apically truncate and penicillate branches, with stigmatic areas in two separate lines
NM genera: *Achillea*, *Artemisia*, *Tanacetum*

Astereae



Aromatic herbs or shrubs
Herbs and shrubs, leaves entire
Numerous and slender ray florets
Pappus generally of capillary bristles
Style branch appendages sterile; stigmatic areas separated into two bands
NM genera: *Baccharis*, *Chrysothamnus*, *Erigeron*, *Gutierrezia*, *Heterotheca*, *Machaeranthera*, *Solidago*

Eupatorieae



- Herbs or shrubs, leaves often opposite
- Discoid heads with white or blue-reddish florets (never yellow)
- Long, protruding and often colored style branch appendages
- NM genera: *Brickellia*, *Carpochaete*, *Conoclinium*, *Eupatorium*, *Liatris*, *Stevia*

Gnaphalieae



- Discoid heads
- The phyllaries are papery, often showy (these are not ray florets)
- Leaves woolly, entire
- Styles truncate with obtuse apical hairs; stigmatic areas in two lines
- NM genera: *Anaphalis*, *Antennaria*, *Evax*, *Filago*, *Gnaphalium*

Tribes of the Asteroideae- *continued...*

Helenieae



- Herbs with generally opposite, frequently trinerved leaves
- Rays mostly yellow or white
- Herbaceous involucral bracts (phyllaries) in few rows
- Fruit (achenes) black (except in *Gaillardia*)
- Pappus of scales
- Receptacle naked (no chaff)
- NM genera: *Bahia*, *Baileya*, *Dyssodia*, *Gaillardia*, *Helenium*, *Pectis*, *Psilostrophe*

Heliantheae



- Herbs or shrubs
- Leaves entire or dissected, with strigose (bristle hair and white-spotted) surface
- Corollas *generally* yellow and broad
- Receptacle generally chaffy
- Blackened anthers
- Achenes flattened
- Distribution: Mainly North and South America
- NM genera: *Ambrosia*, *Bidens*, *Encelia*, *Helianthus*, *Ratibida*, *Verbesina*, *Viguiera*, *Zinnia*

Plucheeae



- Herbs, shrubs or trees
- Leaves alternate, dentate to serrate or entire
- Disc heads; filiform and tubular (male) central florets, with outer disc florets (female)
- Tropical distribution; only one genus in NM, *Pluchea*

Senecioneae



- Recognized by single row of equal involucral bracts
- Radiate or discoid florets; yellow-flowered capitula
- Pappus of bristles
- Style branches with truncate tufts of hairs apically; stigmatic areas run in two ventromarginal bands along each style branch
- Largest tribe, worldwide distribution.
- NM genera: *Lepidospartum*, *Packera*, *Senecio*, *Tetradymia*
- Poisonous alkaloids