

## QUICK GUIDE TO TRIBES OF COMPOSITAE IN CALIFORNIA

Subfamily Asteroideae

**Heliantheae** — Chaffy receptacle; pappus of anything except (gen) capillary bristles

Subtribe **Ambrosiinae** — Wind-pollinated; anthers free; female fls w/o corolla; florets dull-colored; easy

**Madieae** — Heterogeneous group not united by obvious morphological features; common in CA

Subtribe **Madiinae** — Phyllaries each enclosing a ray achene; tack-shaped “tar” glands; receptacular bracts gen limited to a series external to disc florets; easy

**Coreopsidaeae** — Similar to Heliantheae but achenes obcompressed

**Chaenactaeae** — Mostly *Chaenactis* in CA, with typically radiant heads (exc *Dimeresia* w/o radiant heads)

**Perityleae** — Desert plants with radiate heads; disc flts 4-merous; easy

**Bahieae** — Mostly (in CA) discoid heads (exc *Bahia*) w/ scales or awns for pappus (exc some *Bahia*); most that you’ll see are in the desert; doesn’t jump out with obvious morph characters

**Helenieae** — Heterogeneous group not united by obvious morphological features, exc gen epaleate; common in CA

**Senecioneae** — Pappus of capillary bristles; phyllaries appearing uniseriate and side-by-side

**Astereae** — Pappus of capillary bristles; phyllaries appearing multiseriate and overlapping

**Anthemideae** — Papery-margined phyllaries; compound or lobed leaves; truncate style branches; pappus gen 0; pls often aromatic

**Eupatorieae** — Long style branches; corollas never yellow; head discoid

**Calenduleae** — Radiate heads; tailed anthers; pappus 0; fr arcuate and warty

**Gnaphalieae** — Each entire phyllary papery (not green, not herbaceous); inconspicuous florets/heads; tailed anthers; easy to recognize, but often overlooked in the field

**Tageteae** — Aromatic, obvious oil glands on phyllaries, leaves, other parts; mostly desert in CA

Subfamily Cichorioideae

**Arctoteae** — Radiate heads; swollen area below style branches; stigmatic on adaxial surface

**Cardueae** — Thistle-like, often prickly; heads discoid; corolla lobes long; styles long but style branches short; tailed anthers; pappus of capillary bristles; easy to recognize

**Cichoreae** — All florets strap-shaped (ligulate) with 5 teeth; milky juice; the easiest to recognize

Subfamily Mutisioideae

**Mutisieae** — Bilabiate florets exclusively; tailed anthers; deserts; easy to recognize if you’re expecting them

Subfamily Hecastocleidae

**Hecastocleae** —