

Terms used in Asteraceae Zoom Session Oct 31 & Nov. 7 2020. Bolded one are either unique to the family or close to it.

Term	Definition
achene	a small dry one seeded indehiscent fruit; there's a historical argument about whether this fruit type is derived from a superior or an inferior ovary. For example, in the Asteraceae, it is from an inferior ovary and in the Cyperaceae from a superior ovary. Sometimes the fruit of that latter family is called a nutlet.
adnate	fusion of unlike parts
axillary (position)	positioned in or arising in an axil (usually in a leaf axil); see axil & assoc. drawings; compare terminal
barbellate bristles	with short stiff hairs or barbs (as in the pappus bristles of some of the Aster F.)
biennial	plant which lives for two years or seasons, reproduces, and then dies
bract	a reduced leaf or leaf-like structure associated with a flower or an inflorescence
calyculus	an additional whorl of bracts beneath (and separated from) the (regular) involucre; see <i>Bidens</i> , <i>Coreopsis</i> & <i>Cosmos</i>
calyx	collective term for all the sepals
capillary bristles	hair-like, very slender and fine (w/o barbs or feathery divisions on the main axis – so plain)
caudex	persistent, and often woody base, of an herbaceous perennial
chaff or palea (paleae = plural)	thin, dry, scaly bract attached to the receptacle of the head of member of the Asteraceae; often papery at maturity
connate	fusion of like parts
corymb	flat-topped (usually) or round-topped inflorescence, but with the lower pedicels longer than the upper
cuneate	wedge-shaped as in a leaf base (tapering to a narrow point in contrast to an obtuse or rounded base)
cypsela	achene with a pappus (unique to Asteraceae); this type of achene is derived from an inferior ovary
discoid head	a head with only tubular (disk) flowers
glabrous	smooth; without hair
head or capitulum	a (dense) cluster of sessile or nearly sessile flowers (as in the Asteraceae); the norm for the Aster family.
indehiscent	not opening at maturity along regular line (suture) or pore (as in a fruit type)
inflorescence	a cluster of flowers (especially with respect to the pattern in which they are arranged). E.g. head, spike, corymb, raceme, or panicle. Some are simple or solitary with only 1 flower.
involucre	a whorl of bracts associated with a flower or an inflorescence (esp. a head in the Asteraceae); norm for Aster F.
ligulate head (liguliflorous head)	a head with only ray (ligulate flowers)
naked (epaleate, w/o chaff)	head without chaff (paleae or "pales").
node	place on a stem where leaves occur (compare internode)

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ovule	in immature seed (one that has not been fertilized)
pappus	modified calyx consisting of bristles, awns, or scales at the top of the achene
pedicel	term for the stalk of a solitary flower (<u>when there is more than one flower</u>); i.e. term should not be used unless there is more than one flower; (irrelevant term for Aster family because all the flowers are sessile)
peduncle	stalk for a solitary flower or of an inflorescence (as in Aster F.). See separate handout on this term and the previous.
phyllary	an involucral bract (i.e. one of the individual bracts within the involucre (often referring to the Aster F.))
plumose bristles	feathery; with hairs or bristles on both sides of a main axis like a feather (as in the pappus bristles)
punctate	surface dotted with minute depressions or pits (can be colored, translucent and/or sunken)
radiate head	a head with central tubular (disk) flowers AND marginal ray (ligulate) flowers
receptacle	in the Aster family, the expanded apex of the peduncle where the (sessile) flowers are inserted ; other families, usually pertains to the place where the sepals, petals, and stamens are inserted.
sessile	attached directly without a stalk (as in a leaf or flower)
whorled phyllotaxy	more than 2 leaves emerging from the same node (least common of 3 types – compare opp. & altern.)
added latter	
disciform head	head with central disk flowers and marginal, female flowers without ligules. – not a common type e.g. <i>Palafoxia</i>
fertile flower	capable of producing fruit and seeds; a fertile flower may be <u>pistillate or perfect</u> . Harrington & Durrel (1957). Harris & Harris (2001) – capable of bearing seeds; capable of bearing pollen. THIS IS A CLEAR DISAGREEMENT.
imbricate	overlapping – like the honey-comb phyllaries (bracts) on an “aster” involucre.
imperfect flws	these are either staminate or pistillate (occ.
perfect flws	bixexual (hermaphroditic) forming both pollen and seeds
radiant	a discoid head with a peripheral ring of flowers having much enlarged, often bilateral corollas (UC Berkeley)
squarrose	spreading or recurved at some point above the base (as in the bracts of the involucre of some ssp of Aster Fam.
syngenesious	connate anthers
wanting	lacking (LOL!)