

Key to Common Composite (Asteraceae) Species of Tompkins County, New York

Descriptions of Floret and Head Types

The key that begins on the following page is divided into 3 large sections. Each section covers species having one of the three main types of flower heads. Definitions of other technical terms use in the key will be posted on the "botphoto.com" website as a separate document (forthcoming).

Disc floret: A small, tube-shaped, rayless floret located in a composite flower head. Disc florets are most often bisexual and fertile, but in some species may be unisexual or sterile. Disc florets may be found in either discoid or radiate flower heads.

Ray floret: A floret with an expanded, tongue-shaped lip; a "ray". In our species, ray florets may be either pistillate (female) and fertile, neuter or sterile. Ray florets are only found in radiate flower heads, around the periphery of the head.

Ligulate floret: Similar to a ray floret, but always bisexual. Ligulate florets also have an expanded, tongue-shaped lip, but the lip is 5-lobed (appearing as teeth at the tip of the lip). They are the only floret type in ligulate flower heads, and are never present in either discoid or radiate heads.

Ligulate flower head: A flower head that includes only ligulate florets. That is, all florets in ligulate heads are bisexual, and have the same basic morphology.

Discoid flower head: A flower head that includes only tube-shaped disc florets. Ray florets are not present in this type of head, though in some species, the florets around the circumference are enlarged or expanded, and appear like rays. These false rays are usually neuter.

Radiate flower head: A flower head that includes disc florets in the center of the disc and ray florets around the circumference of the disc.

Index to Sections of the Key

Section A. Species with ligulate flower heads (plants with "milky" sap).	Page 2
Section B. Species with discoid flower heads, rays are absent (sap clear, watery).	Page 7
Section C. Species with radiate flower heads (sap clear, watery),	Page 12

**Key to Common Composite (Asteraceae) Species
of Tompkins County, New York**

A. Species with *ligulate* flower heads (plants with "milky" sap).

1a. Corollas are blue, white or greenish.

2a. Corollas are bright to very pale blue; heads are not pendulous.

3a. Heads are relatively large and showy. Most peduncles are very short and inconspicuous.

Cichorium intybus

3b. Heads are very small. Peduncles are longer (evident).

Lactuca biennis

2b. Corollas are white, pink or pale greenish; heads are pendulous (hanging down).

4a. Corollas are pale greenish; pappus is straw-colored to pale brown.

5a. Each head contains 5-6 florets.

Prenanthes altissima

5b. Each head contains 9-20 florets.

Prenanthes trifoliolata

4b. Corollas are white to pale pink; pappus is deep rust colored.

Prenanthes alba

1b. Corollas are yellow or orange.

6a. Corollas are bright orange.

Pilosella aurantiaca
(*Hieracium aurantiacum*)

6b. Corollas are yellow.

7a. Leaves are predominantly basal; stem leaves are few or lacking; if stem leaves are present, then they are greatly reduced in size or scale-like. (*For plants with numerous, well-developed stem leaves, skip to 7b. below. Species in 7b. may also retain some basal leaves at flowering.*)

8a. Plants stolon-producing, sometimes forming dense colonies.

9a. Involucres are (9-)12-13 mm high.

Pilosella flagellaris
(*Hieracium flagellare*)

9b. Involucres are 5-9 mm high.

**Key to Common Composite (Asteraceae) Species
of Tompkins County, New York**

- 10a. Heads number 1 or 2 per stem (more often solitary). ***Pilosella officinarum***
(*Hieracium pilosella*)
- 10b. Heads number typically more than 2 per stem.
- 11a. Involucres are 7.5-9.0 mm high. Heads very crowded at summit of stem on very short peduncles; involucre bracts often very dark due to dense concentration of glandular hairs. Leaves green, not glaucous. ***Pilosella caespitosa***
(*Hieracium caespitosum*)
- 11b. Involucres are 5-7 mm high; inflorescence is somewhat more open, less crowded at summit of stem; heads borne on longer (evident) peduncles; involucres variously blackened (usually showing more green); leaves are blue-green, glaucous, sometimes sparsely hairy.
- 12a. Prostrate stolons are produced early during blooming period. ***Pilosella xfloribunda***
(*Hieracium xfloribundum*)
- 12b. Ascending stolons are formed toward end of the flowering period. ***Pilosella piloselloides***
(*Hieracium piloselloides*)
- 8b. Plants are not stolon-producing; not forming dense colonies from stolons.
- 13a. Plants stemless; heads borne on peduncles arising directly from basal rosettes. ***Taraxacum officinale***
- 13b. Plants with stems. Heads borne on peduncles arising from nodes along stems.
- 14a. Stems each bearing two heads on long peduncles.
- 15a. Leaves are broadly oblanceolate, densely hairy with long, stiff hairs; pappus is of expanded, feather-like bristles; receptacles have chaff (i.e., scales that separate individual florets). ***Hypochaeris radicata***
- 15b. Leaves are narrowly-oblanceolate, glabrous or sparsely pubescent; pappus is of thin, hair-like bristles; receptacles lack chaff. ***Leontodon autumnalis***

**Key to Common Composite (Asteraceae) Species
of Tompkins County, New York**

- 14b. Stems typically bearing more than 2 heads; peduncles of various lengths.
 - 16a. Basal leaves have purple veins; stems, branches and peduncles are thinly pubescent with glandular hairs. *Hieracium venosum*
 - 16b. Basal leaves have green veins; stems, branches and peduncles are densely pubescent with stellate and glandular hairs. *Hieracium murorum*
- 7b. Stems typically with normal-size (i.e., not scale-like) leaves at flowering, though some basal leaves may be also be present at flowering in some species.
 - 17a. Leaves are unlobed.
 - 18a. Principal leaves are 10 or more times longer than wide.
 - 19a. Involucral bracts equal to or shorter than outer-most series of florets; apex of peduncle not swollen in flower; cypselae 15-25 mm long (including beak). *Tragopogon pratensis*
 - 19b. Involucral bracts longer than outer-most series of florets; apex of peduncle swollen in flower; cypselae 25-40 mm long (including beak). *Tragopogon dubius*
 - 18b. Principal leaves are broader, much less than 10 times longer than wide.
 - 20a. Involucres are 6-7 mm high; florets number 8-30; stems are sparsely pubescent to glabrous. *Hieracium paniculatum*
 - 20b. Involucres 7-9 mm high; florets number 40-60+; stems are densely pubescent with branched (stellate) hairs. *Hieracium scabrum*
 - 17b. Some or all leaves are lobed.
 - 21a. Heads are relatively small (containing 5-20+ florets).
 - 22a. Cypselae are scarcely, if at all, flattened, without pappus; leaf lobes are small or shallow, except the greatly enlarged terminal lobe. *Lapsana communis*

**Key to Common Composite (Asteraceae) Species
of Tompkins County, New York**

- 22b. Cypselae are flattened, beaked at the summit; pappus is attached to summit of beak; leaves have conspicuously large and deep lobes;
- 23a. Beak is short (up to 1 mm); heads with 5 florets. ***Mycelis muralis***
- 23b. Beak is longer (1-4 mm); heads with 12-20+ florets.
- 24a. Cypselae are dark brown/black; faces are 1(-3) nerved; corollas are dark yellow to orange. ***Lactuca canadensis***
- 24b. Cypselae are light brown to grayish; faces are (3-)5-9 nerved; corollas are pale yellow. ***Lactuca serriola***
- 21b. Heads larger (containing 30+ florets).
- 25a. Involucral bracts are spreading outward; hairs non-glandular; leaves lanceolate, oblanceolate to lance-ovate, coarsely toothed to shallowly-lobed, wavy-edged; pappus of minutely-barbed bristles (pappus promptly detaching). ***Picris hieracioides***
- 25b. Involucral bracts are appressed; peduncles often with some glandular hairs; leaves lanceolate to oblanceolate, at least the basal and lower- to mid-stem leaves deeply lobed; pappus of hairlike (i.e., slender) bristles.
- 26a. Cypselae are round in cross-section, narrowed toward summit, but not with a beak; stems rough-hairy. ***Crepis capillaris***
- 26b. Cypselae are flattened, neither beaked nor narrowed toward the summit; stems and leaves generally glabrous, sometimes glaucous, and sometimes with glandular hairs near the inflorescence. Involucres conspicuously enlarged or swollen toward the base, especially after flowering.
- 27b. Plants perennial with creeping rhizomes; heads 3-5 cm wide in flower; involucres 14-22 mm high in fruit; stems, peduncles and phyllaries either glandular or not glandular (i.e., glabrous). ***Sonchus arvensis***

**Key to Common Composite (Asteraceae) Species
of Tompkins County, New York**

27b. Plants annual with taproots; heads 1.5-2.5 cm wide in flower; involucre 9-13 mm high in fruit; glandular hairs on peduncles and phyllaries sometimes present.

28a. Faces of cypselae smooth between ribs; leaf blades firm with conspicuous, stiff prickles on the margins; leaf auricles often recurved or curled about the stem; leaves unlobed or shallowly lobed; upper surface usually bright green, shiny. ***Sonchus asper***

28b. Faces of cypselae minutely ridged between ribs; leaf edges with evident but not stiff prickles; leaf auricles triangular, the tips sometimes slightly overlapping, but not curled about the stem (i.e., extending \pm perpendicular to the stem); leaves usually deeply lobed, the terminal lobe often largest; leaf upper surface usually dull blue-green. ***Sonchus oleraceus***

**Key to Common Composite (Asteraceae) Species
of Tompkins County, New York**

B. Species with *discoïd* flower heads, rays are absent (sap clear, watery)

101a. Plants having at least some leaves that are lobed, divided and/or dissected.

102a. Leaves, involucral bracts and sometimes stems armed (i.e., leaf edges, lobes and/or teeth spiny).

103a. Plants perennial, colonial from creeping rhizomes; colonies often extensive; involucre 1-2 cm high.

Cirsium arvense

103b. Plants annual or biennial; stems not connected by creeping rhizomes.

104a. Pappus of slender, hair-like bristles; heads comparatively small; involucre 1.4-2.0 cm high.

Carduus acanthoides

104b. Pappus of expanded, feather-like bristles, heads larger.

105a. Surface of cypselae densely pubescent with appressed hairs; innermost series of involucral bracts narrow, straw-colored, falsely appearing like bright rays that spread open at mid-day and fold closed over the disc late in the day; involucre 2.0-2.5 cm high.

Carlina vulgaris

105b. Surface of cypselae glabrous; inner involucral bracts not straw-colored, not appearing like rays.

106a. Involucral bracts well appressed, only the minute (up to 0.5 mm) spine tip spreading outward; involucre 1.7-3.0 cm high.

Cirsium muticum

106b. Involucral bracts appressed to spreading, spine-tips much longer (1.5-6.0 mm).

107a. Branches and portions of the stem with conspicuous, wavy-margined, spine-tipped wings; involucre 3-4 cm high.

Cirsium vulgare

107b. Branches and stems not with spine-tipped wings; involucre 3.5-5.0 cm high.

Cirsium pumilum

**Key to Common Composite (Asteraceae) Species
of Tompkins County, New York**

- 102b. Leaves, stems and involucre bracts unarmed (i.e., not spiny or prickly)
- 108a. Leaves with shallow lobes, not deeply cut or dissected; toothed or untoothed.
- 109a. Leaves wide, ovate to nearly round in outline, 3(-5) lobed; corollas greenish. ***Ambrosia trifida***
- 109b. Leaves narrower, lance-shaped in outline, with irregular, shallow lobes; corollas variously colored but not greenish (corollas of peripheral florets not enlarged).
- 110a. Disc corollas pink to magenta; leaves sometimes lobed but untoothed. ***Centaurea nigra***
- 110b. Disc corollas bright yellow or creamy-white; lobes toothed.
- 111a. Disc corollas bright yellow; leaf lobes with shallow, dull teeth. ***Senecio vulgaris***
- 111b. Disc corollas dull yellow to creamy-white; leaf lobes with long, sharp teeth, or double-toothed; . ***Erechtites hieraciifolius***
- 108b. Leaves dissected or with deeply cut lobes.
- 112a. Foliage strongly fragrant.
- 113a. Receptacle conical; heads very small, florets greenish-yellow; herbage pineapple-scented. ***Matricaria discoidea***
- 113b. Receptacle flat; heads large, bright yellow, showy; otherwise sweet-fragrant. ***Tanacetum vulgare***
- 112b. Foliage not fragrant or only very faintly fragrant.
- 114a. Staminate and pistillate florets in separate heads (i.e., heads unisexual), the staminate heads arranged in an elongate, slender raceme, positioned on branches above the pistillate heads; leaves dotted with minute, stalkless glands. ***Ambrosia artemisiifolia***
- 114b. Staminate and pistillate florets in the same heads (i.e., heads bisexual); heads uniform, not in long slender racemes; leaves not gland-dotted.

**Key to Common Composite (Asteraceae) Species
of Tompkins County, New York**

- 115a. Florets pistillate (peripheral) and bisexual (central). ***Artemisia vulgaris***
- 115b. Florets all bisexual; (*infrequently with rays 4-8 mm long*)
- 116a. Larger leaves dissected into three distinct leaflets, each with an evident (though sometimes very short) stalk; the entire leaf with a thin petiole.
- 117a. Heads with 3-5 herbaceous (i.e., green, leaflike), not or only sparsely ciliate involucre bracts; involucre 4-6(-9) mm wide. ***Bidens discoidea***
- 117b. Heads with 5-21 herbaceous, ciliate-margined, involucre bracts; involucre 7-12 mm wide. ***Bidens frondosa***
- 116b. Larger leaves variable: either undivided, but shallowly lobed along the margins, or divided into 2-4 lobes, a larger terminal lobe, and 1-2 smaller basal lobes; the lobes not cut to the midrib, and when divided, with broadly winged petioles. ***Bidens tripartita*
*B. connata***
- 101b. Plants with leaves neither lobed, divided nor dissected (i.e., "simple" leaves).**
- 118a. Leaves opposite or whorled on stems and branches.
- 119a. Corollas of disc florets white; leaves opposite.
- 120a. Leaves lacking petioles; leaf bases fused, surrounding stem; principal series of involucre bracts of varying lengths, gland-dotted. ***Eupatorium perfoliatum***
- 120b. Leaves with long petioles; leaf bases not fused; principal series of involucre bracts of approximately the same length, not gland-dotted. ***Ageratina altissima***
- 119b. Corollas of disc florets pink/magenta to nearly white, leaves whorled.
- 121a. Florets 9-20, pink/magenta; stems uniformly purple or purple spotted. ***Eutrochium maculatum***

**Key to Common Composite (Asteraceae) Species
of Tompkins County, New York**

- 121b. Florets 4-8, pale pink to nearly white; stems purple primarily at nodes, green otherwise; topmost portion of inflorescence round-topped. ***Eutrochium purpureum***
- 118b. Leaves alternate on stems and branches or primarily basal.
- 122a. Surfaces of leaves and stems with dense, "cobwebby" hairs; involucre bracts white or pale-colored, usually not very green, partly or entirely thin, dry and paper-like; not tipped with stiff, hooked appendages.
- 123a. Basal leaves withered by flowering period (i.e., all leaves are on stems, linear).
- 124a. Plants faintly fragrant, heads clustered into tight groups (glomerules) at tips of branches. ***Pseudognaphalium obtusifolium***
- 124b. Plants not fragrant, clustered in glomerules at tips of branches, in leaf axils or in flat- to round-topped terminal inflorescences.
- 125a. Heads very small (involucres 2-4 mm high), inconspicuous, aggregated in small clusters in leaf axils or in terminal inflorescences. ***Gnaphalium uliginosum***
- 125b. Heads larger (involucres 5-7 mm high), with bright white, papery involucre bracts; showy; on evident peduncles, in somewhat crowded terminal inflorescences. ***Anaphalis margaritacea***
- 123b. Primary leaves at flowering basal; oblanceolate to spatulate; stem leaves also present, but few in number and greatly reduced in size.
- 126a. Basal rosette leaves 2-15 mm wide, with 1 main vein, and sometimes with 2 faint additional veins.
- 127a. Tips of middle and upper stem leaves with a minute, thin, dry papery appendage ("flag").
- 128a. Upper surfaces of new rosette leaves densely hairy, gray-green in color. Stems with staminate heads may be produced. ***Antennaria neglecta***

**Key to Common Composite (Asteraceae) Species
of Tompkins County, New York**

- 128b. Upper surfaces of new rosette leaves bright green, promptly glabrous. Stems with staminate heads produced very rarely.
(in part) ***Antennaria howellii***
- 127b. Tips of middle and upper stem leaves blunt or sharp pointed (i.e., not with a "flag").
(in part) ***Antennaria howellii***
- 126b. Basal rosette leaves 15-55 mm wide, with 3-5 prominent veins.
- 129a. Carpellate involucre 5-7 mm high; new rosette leaves densely hairy, gray-green in color, becoming glabrate toward end of season. Stems with staminate heads may be produced. ***Antennaria plantaginifolia***
- 129b. Carpellate involucre 7-10 mm high; upper surfaces of new rosette leaves bright green and promptly glabrous OR upper surfaces of new rosette leaves densely hairy and gray-green in color. (*Note: two subspecies are represented here, one with glabrous leaves and the other with pubescent leaves.*) ***Antennaria parlinii***
- 122b. Surfaces of leaves and stems hairy or glabrous, but not with "cobwebby" hairs; involucre bracts tipped with stiff, hooked appendages.
- 130a. Florets green, inconspicuous; staminate and carpellate florets in separate heads; carpellate florets lacking a corolla. ***Xanthium strumarium***
- 130b. Florets all bisexual, heads of uniform morphology; corollas magenta/purple.
- 131a. Heads with short peduncles or sessile, arranged in raceme-like fashion on branches. ***Arctium minus***
- 131b. Heads with much longer peduncles, arranged in small, corymb-like inflorescences on branches. ***Arctium lappa***
(*A. lappa* has larger heads than *A. minus*, but the ranges in head diameter overlap.)

**Key to Common Composite (Asteraceae) Species
of Tompkins County, New York**

C. Species with *radiate* flower heads (sap clear, watery)

201a. Plants having at least some leaves that are lobed, divided and/or dissected.

202a. Peripheral (ray) and central (disc) florets the same color.

203a. All florets yellow or orange.

204a. Basal leaves present at flowering. Perennials.

205a. Leaves confined to lower half of stem; tips of rays conspicuously lobed.

Coreopsis lanceolata

205b. Leaves distributed throughout stem, though much reduced in size upwards; tips of rays with inconspicuous teeth.

Packera aurea

204b. Basal leaves not present at flowering. Annuals.

206a. Outer, herbaceous involucre bracts 8-12(-16).

Bidens aristosa

206b. Outer, herbaceous involucre bracts 12-21.

Bidens polylepis

203b. None of the florets yellow or orange.

207a. All florets white; ray florets pistillate and fertile, extremely small.

Achillea millefolium

207b. All florets pink/magenta; peripheral florets expanded, showy; neuter.

208a. Heads smaller. Involucre 10-13 mm high.

Centaurea stoebe

208b. Heads larger. Involucre 15-18 mm high.

209a. Involucre bracts light brown to brown; tips of middle and outer series irregularly cleft or lacerate; those of the inner series 2-cleft; pappus lacking.

Centaurea jacea

209b. Involucre bracts mostly brown; tips of middle and outer series regularly with comb-like fringes.

**Key to Common Composite (Asteraceae) Species
of Tompkins County, New York**

- 210a. Involucres 1.5 times as tall as wide; comb-like fringes of involucral bracts not completely obscuring tips of adjacent involucral bracts. ***Centaurea nigrescens***
- 210b. Involucres at least as wide as tall in life; comb-like fringes of involucral bracts irregular; often obscuring tips of adjacent involucral bracts; or involucral bract appendages of mixed morphology, some fringed, some lacerate/cleft. ***Centaurea xmoncktonii***
- 202b. Peripheral (ray) and central (disc) florets of different colors.
- 211a. Peripheral florets yellow. Disc florets yellow-green or brown/purple.
- 212a. Stems green-glaucous; disc florets yellow-green; leaf lobes large, deeply cut to lobed. ***Rudbeckia laciniata***
- 212b. Stems red-brown; pubescent; disc florets dark brown to purple (chaff are black); lower to mid-stem leaves often 3-lobed, lobes not deeply cut. ***Rudbeckia triloba***
- 211b. Peripheral florets white. Disc florets yellow.
- 213a. Leaves shallowly lobed to coarsely toothed; involucres 12-20 mm in diameter. ***Leucanthemum vulgare***
- 213b. Leaves deeply cut, dissected to midrib; involucres 5-13 mm in diameter.
- 214a. Leaf divisions lanceolate to lance-ovate. ***Tanacetum parthenium***
- 214b. Leaf divisions linear.
- 215a. Stems ascending; peripheral florets (rays) pistillate and fertile; herbage ± unscented. ***Anthemis arvensis***
- 215b. Stems erect; peripheral florets neuter; (ill-)scented. ***Anthemis cotula***

**Key to Common Composite (Asteraceae) Species
of Tompkins County, New York**

201b. Plants with leaves neither lobed, divided nor dissected (i.e., "simple" leaves).

216a. At least some leaves are opposite. Ray florets yellow.

217a. All leaves are opposite.

218a. Ray florets are pistillate and fertile.

219a. Leaves lacking petioles (sessile), bases fused, surrounding stems.

Silphium perfoliatum

219b. Leaves borne on petioles, leaf bases not fused.

Heliopsis helianthoides

218b. Ray florets neuter, infertile.

220a. Leaves glabrous.

Bidens cernua

220b. Leaf lower surfaces minutely hairy, roughened.

Helianthus divaricatus

217b. Lower to mid-stem leaves opposite, uppermost often alternate; peripheral florets neuter, infertile.

221a. Stems conspicuously pubescent with rough hairs, not glaucous.

Helianthus tuberosus

221b. Stems glabrous or nearly so, and glaucous.

222a. Involucral bracts spreading, surpassing the disc; lobes of the disc corollas pubescent; petioles 15-60 mm long; leaves prominently serrate.

Helianthus decapetalus

222b. Involucral bracts ascending, about height of the disc; lobes of the disc corollas glabrous; petioles 5-30 mm long; leaves shallowly serrate to nearly entire.

Helianthus strumosus

216b. Leaves alternate (true leaves all basal in *Tussilago farfara*). Ray florets of various colors.

**Key to Common Composite (Asteraceae) Species
of Tompkins County, New York**

223a. Ray florets yellow.

224a. Disc florets dark brown/purple.

225a. Ray florets neuter, reflexed; leaves decurrent on stems (stems appear "winged").

Helenium flexuosum

225b. Ray florets spreading; leaves not decurrent on stems.

Rudbeckia hirta

224b. Disc florets yellow.

226a. Disc florets unisexual (staminate); ray florets pistillate and fertile.

Tussilago farfara

226b. Disc florets bisexual and fertile; ray florets pistillate and fertile.

227a. Leaves decurrent on stems (stems appearing "winged"); pappus of awns or scales; ray florets reflexed.

Helenium autumnale

227b. Leaves not decurrent on stems; pappus of minutely-barbed bristles; ray florets spreading.

228a. Heads primarily in glomerules (tightly aggregated into compact clusters at ends of branches, often sessile).

Euthamia graminifolia

228b. Heads on evident peduncles, not in glomerules.

Solidago spp.

223b. Ray florets white, blue or violet.

229a. Heads solitary, borne on a peduncle arising from plant base; cypselae lacking pappus. ***Bellis perennis***

229b. Heads 2 or more per plant, arranged on branches; cypselae with pappus.

230a. Ray florets and disc florets are white.

231a. Heads mostly in glomerules; tips of involucre bracts strongly recurved.

Sericocarpus asteroides

**Key to Common Composite (Asteraceae) Species
of Tompkins County, New York**

231b. Heads borne on evident peduncles, clustered on short branches in leaf axils or in a terminal raceme; tips of involucre bracts appressed, not recurved. ***Solidago bicolor***

230b. Ray florets are of various colors; disc florets are yellow.

232a. Cypselae with pappus of scales only (i.e., lacking hairlike bristles).

233a. Corollas of ray florets dull white (pink); involucre bracts persistent after cypselae mature. ***Galinsoga parviflora***

233b. Corollas of ray florets bright white; involucre bracts deciduous after cypselae mature. ***Galinsoga quadriradiata***

232b. Cypselae with pappus of hairlike bristles or both bristles and scales.

234a. Rays are white, up to 3 mm in length. ***Conyza canadensis***

234b. Rays are white, blue, pink or violet, longer than 3 mm.

235a. Involucre bracts are all of equal length or nearly so.

236a. Stem leaf bases rounded, often clasping stems.

237a. Heads with 50-100 ray florets; rays > .8 mm wide; heads 1-5 per stem on relatively short branches. ***Erigeron pulchellus***

237b. Heads with 150-400 ray florets; rays <= .5 mm wide; heads 3-30(-40) per stem on more numerous, longer branches. ***Erigeron philadelphicus***

**Key to Common Composite (Asteraceae) Species
of Tompkins County, New York**

236b. Stem leaf bases tapered, not clasping stems.

238a. Principal stem leaves linear to lanceolate,
untoothed or obscurely toothed, up to
15 mm wide.

239a. Mid-stem pubescence very short,
ascending to appressed.

Erigeron strigosus var. strigosus

239b. Mid-stem pubescence with longer
(conspicuous), spreading hairs.

Erigeron strigosus var. septentrionalis

238b. Principal stem leaves ovate to lance-ovate,
toothed, 10-35(-70) mm wide; mid-stem
pubescence much longer (conspicuous)
and spreading.

Erigeron annuus

235b. Involucral bracts are of unequal lengths, the outer
series much shorter than the inner series (i.e.,
graduated in length).

240a. Tip of involucral bracts with a well-defined green
patch. Largest stem leaves are toward base of plant;
stem leaves become smaller upward along stem.

241a. Base of green patch tapered quickly
or gradually, appearing respectively
diamond-shaped or lens-shaped.
Overall inflorescence of plant typically
panicle-like. (Separate key forthcoming.)

Symphotrichum spp.

**Key to Common Composite (Asteraceae) Species
of Tompkins County, New York**

241b. Base of green patch ± abruptly truncated; green patch thus appearing "thumbnail" shaped. Overall inflorescence of plant typically corymb-like (i.e., flat-to round-topped). (Separate key forthcoming.) ***Eurybia spp.***

240b. Tips of involucre bracts lack a well-defined green patch; green coloration, when present, diffused ± evenly throughout involucre bract. Largest stem leaves are toward middle of stem; stem leaves become gradually smaller downward and upward from mid-stem.

242a. Cypselae are gland-dotted; heads are nodding in bud. ***Oclemena acuminata***

242b. Cypselae are not gland-dotted; heads are erect in bud. ***Doellingeria umbellata***