

- 1 Plants annual or biennial; mid-cauline leaves sessile or petiolate, either the base of the blade or the base of the petiole auriculate-clasping; pappus absent on ray flowers, present on disk flowers *Heterotheca subaxillaris*
Found throughout the state. This and *Heterotheca angustifolia* are the two most frequently encountered in Kansas.
- 1 Plants perennial; mid-cauline leaves sessile or petiolate but never auriculate-clasping; pappus present on both ray and disk flowers
 - 2 At least the larger cauline leaves sparingly serrate; leaves green *Heterotheca camporum*
Not reported in the state by Nesom, but well-documented in parts of adjacent Missouri. One specimen at KANU (Hansen 458) and one observation on iNaturalist appear to be this species. Both are near Kansas City. Nesom suggests this species may be spreading beyond its original range along highways and railroads.
 - 2 All leaves entire; leaves usually ± silvery, sometimes green
 - 3 Leaves usually narrowly obovate to elliptic, occasionally oblanceolate, green; stems eglandular, with 2-storied pubescence, long spreading to deflexed hairs above an understory of short hairs, these spreading to hispid-strigose *Heterotheca hirsutissima*
Not reported in the state by Nesom, but present in adjacent eastern Colorado. I include it here so that it might be identified if it does cross into the western edge of Kansas. The leaves are sessile-glandular and hispid-strigose to loosely strigose on the surfaces, and the larger leaves are usually sparsely long-ciliate on the margins.
 - 3 Leaves linear to oblanceolate, usually ± silvery, occasionally green; stems glandular or not, with eglandular pubescence 1-storied (long, spreading hairs absent or sparse) or ± silvery, or both
 - 4 Leaves ± silvery; leaves strigose to sericeous, eglandular or glandular but the glands obscured, sometimes with sparse, long, spreading marginal cilia; phyllaries loosely strigose to canescent, eglandular or with the glands mostly obscured
 - 5 Plants caespitose; leaf surfaces strigose with long, straight, pustulose-based hairs; leaves of the distal stems and peduncles usually oblanceolate to linear-oblanceolate, usually spreading at base and bent upward about midlength, usually ciliate toward the base or along the entire margin, the cilia stiffly spreading *Heterotheca angustifolia*
Found throughout the western 2/3 of Kansas. Nesom indicates that the leaf margins of both this and *Heterotheca scabrifolia* are revolute, and uses this feature in keys. I cannot recognize this feature reliably enough to use it for identification.
 - 5 Plants rhizomatous, forming colonies; leaf surfaces sericeous, the hairs thin, silky and usually somewhat flexuous; stems usually without any long, spreading hairs; leaves of the distal stems and peduncles usually linear, sometimes linear-oblanceolate, usually ascending at base and ± straight or gently recurved near the apex, usually eciliate or sparsely ciliate basally, the cilia often somewhat ascending *Heterotheca canescens*
Found primarily in south-central Kansas. This species appears to be consistently distinct from *Heterotheca angustifolia*, but when the rhizomatous habit is not obvious the differences between the two can be subtle and require familiarity with both species.
 - 4 Leaves pale green; leaves prominently glandular, eglandular pubescence hispid-strigose (hairs short, spreading at base, then curved to parallel the surface); phyllaries prominently glandular, eglandular pubescence absent or very sparse *Heterotheca scabrifolia*
Apparently uncommon in Kansas and found primarily along the southern edge of the state. In Oklahoma, primarily around the Wichita Mountains, there is a form of this species that is prominently pustulose and has a dense whorl of linear bracts subtending each head. This form looks very different from the usual form on the plains, but apparently the two grade into each other.