



# Summer Annual Broadleaf Weeds of Kentucky

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# Summer Annual Broadleaf Weeds of Kentucky

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In late spring or early summer, many summer annual weeds appear in cultivated fields, home gardens, turf, pastures, roadsides and fallow fields. It is possible to identify summer annuals while they are in the seedling and/or juvenile stages. However, it becomes much easier to identify them when they have flowers and fruits in summer or early autumn.

Summer annuals complete their life cycle within one growing season. The plant starts from seed in the spring or summer, develops into a

mature plant, produces its seed before frost and dies. These plants are capable of producing a large number of seeds, which allows them to survive year to year. Thus preventing the plant from flowering and producing seeds causes better weed control.

The following 22 summer annual weeds represent 10 different plant families. They are separated into family groups and characteristics of the family are listed in the table below.

## Plant Family Characteristics

FAMILY	LEAVES	STEM	FLOWERS	FRUIT
<b>Carpetweed</b> ( <i>Aizoaceae</i> )	usually whorled at the node, fleshy	round	5-8 sepals no petals	capsule
<b>Aster</b> ( <i>Asteraceae</i> )	alternate, opposite rarely whorled, simple, entire or lobed	sometimes a milky sap	many flowers in a head, surrounded by bracts (modified leaves)	achene
<b>Goosefoot</b> ( <i>Chenopodiaceae</i> )	usually alternate, simple, often reduced to small scales	often fleshy	5 small sepals, petals absent	nutlet
<b>Morningglory</b> ( <i>Convolvulaceae</i> )	alternate, simple, entire or lobed	erect or twining	sepals 5, petals 5-lobed often forming a funnel	capsule
<b>Gourd</b> ( <i>Cucurbitaceae</i> )	alternate, entire or lobed	round	male & female flowers separate, (monoecious) petals 5-parted	dry and 1-seeded
<b>Spurge</b> ( <i>Euphorbiaceae</i> )	opposite, simple, toothed	often with milky juice	male & female flowers separate, sepals 5 or more, petals 5 or none	3-lobed capsule

<b>Mallow</b> ( <i>Malvaceae</i> )	alternate, simple, entire, usually palmately veined	round	sepals 5, petals 5, distinct stamens numerous, united to form a tube	ring-shaped, made up of 5-17 beaked segments
<b>Buckwheat</b> ( <i>Polygonaceae</i> )	alternate, simple often with a sheathing papery leaf base	often swollen at the nodes	3-6 sepals (undifferentiated parts)	achene that is compressed or triangular
<b>Purslane</b> ( <i>Portulacaceae</i> )	leaves opposite, alternate or clustered, entire and fleshy	round	2 sepals, 4-6 petals	capsule
<b>Nightshade</b> ( <i>Solanaceae</i> )	alternate, simple, sometimes dissected	round	5 sepals, often enlarging in fruit, 5 petals that are often wheel shaped	capsule

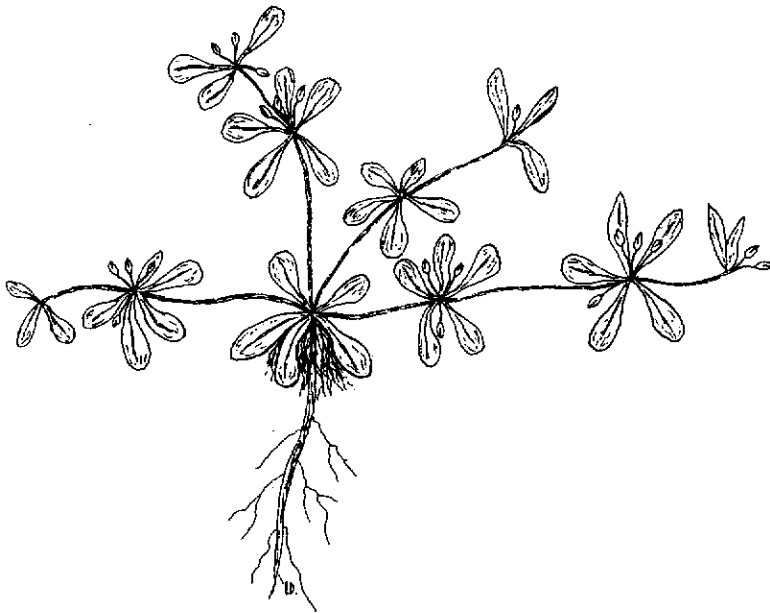
## Glossary

- Capsule—** A dry, dehiscent (opening) fruit made up of more than 1 carpel.
- Achene—** A dry, 1-celled, 1-seeded indehiscent (not opening) fruit with the seed attached at 1 place.
- Schizocarp—** A dry fruit of 2 or more carpels that splits at maturity into 2 or more 1-seeded segments.

- Berry—** A fleshy, pulpy, many-seeded fruit.
- Nutlet—** A small nut or nutlike fruit.

The following 22 species of summer annuals are common throughout Kentucky.

## Carpetweed Family (Aizoaceae)



### Carpetweed

**Scientific name:** *Mollugo verticillata* L.

**Stems:** low to the ground, freely branching from leaf joints, smooth.

**Leaves:** forming a circle with 5 to 6 per node, spatulate and widest at the apex, smooth.

**Flowers:** small, white in clusters of 2 to 5 on stalks arising from the leaf axils.

**Fruit:** a 3-parted capsule with numerous brownish red seeds.

**Location:** gardens, lawns, roadsides, fallow fields, waste places, damp soils along riverbanks and cultivated fields.

## Aster Family (Asteraceae)



### Common Ragweed

**Scientific name:** *Ambrosia artemisiifolia* L.

**Stems:** hairy, freely branched, 1 to 6 ft tall.

**Leaves:** Opposite below, alternate above, deeply divided, hairy, emitting a strong odor when crushed.

**Flowers:** male and female on different parts of the branches; male flowers drooping at top in saucer-shaped clusters, and female flowers in the axils of the leaves.

**Fruit:** an achene, straw-colored with a central protuberance.

**Location:** riverbanks, moist soils, roadsides, waste places, gardens, fencerows, pastures and cultivated fields.

# Aster Family

(Asteraceae)



## Giant Ragweed

**Scientific name:** *Ambrosia trifida* L.

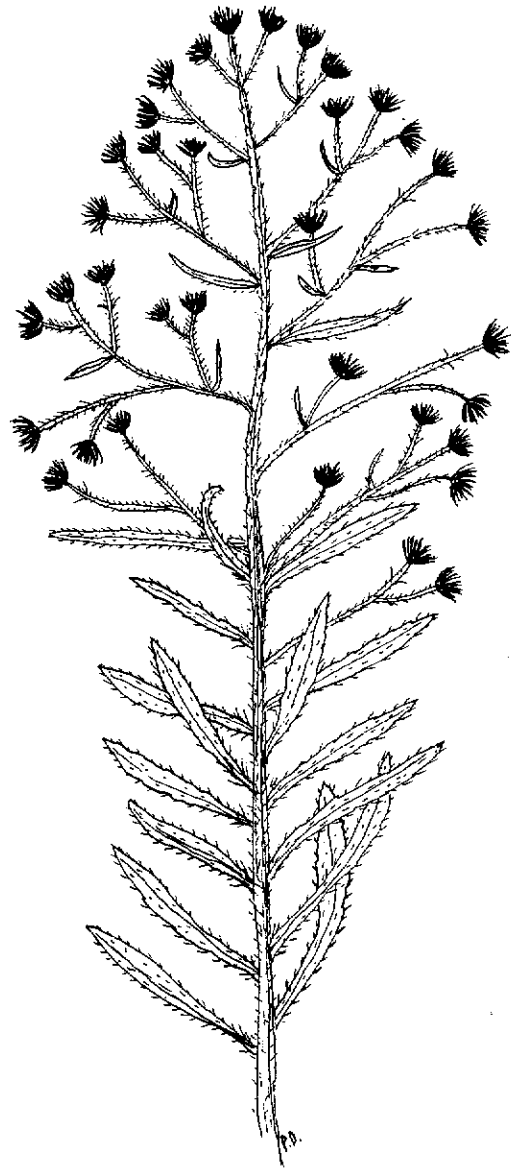
**Stems:** coarse, hairy, erect, up to 10 ft tall or more on fertile, moist soils.

**Leaves:** opposite, stalked, large, entire or 3 to 5 lobed with toothed margins, coarse and slightly hairy.

**Flowers:** produces two kinds—the male flowers on the tips of the branches in spike-like clusters and the female, small, few, in the axils of the upper leaves.

**Fruit:** seed brown with sharp, cone-shaped beak surrounded by smaller, thick spines with ribs leading downward toward base of seed.

**Location:** gardens, fields, fencerows, roadside ditches, waste places and cultivated fields.



## Horseweed

**Scientific name:** *Conyza canadensis* (L.) Cronq.

**Stems:** erect much-branched to wand-like at top, with bristly hairs, 1 to 6 ft tall.

**Leaves:** alternate, crowded, narrow, stalkless at top, smooth or toothed along the margins.

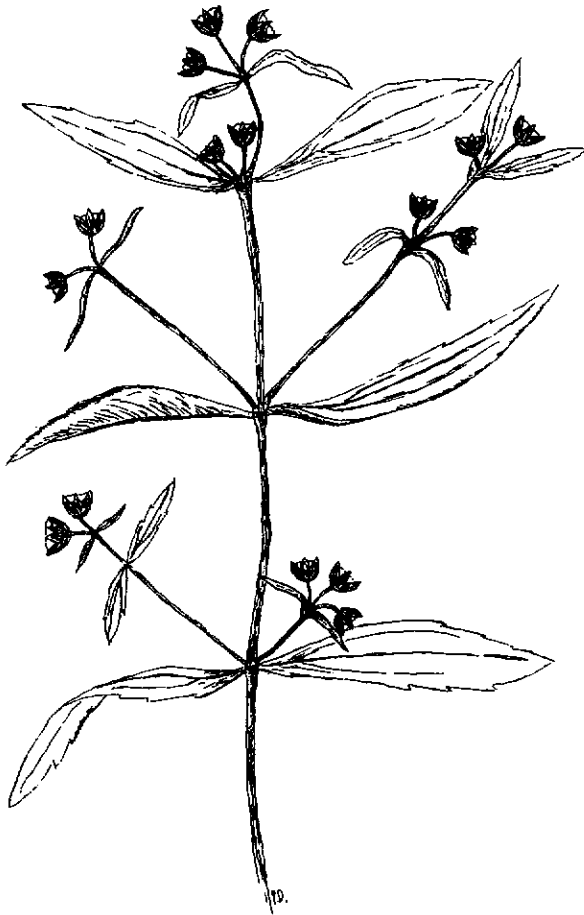
**Flowers:** numerous in many small heads with white petals and a yellow center.

**Fruit:** an achene, narrow, yellowish with whitish bristles at the top.

**Location:** pastures, gardens, thickets, roadsides, waste places, barnyard lots and cultivated fields.

## Aster Family

(Asteraceae)



### Eclipta

**Scientific name:** *Eclipta prostrata* (L.) L.

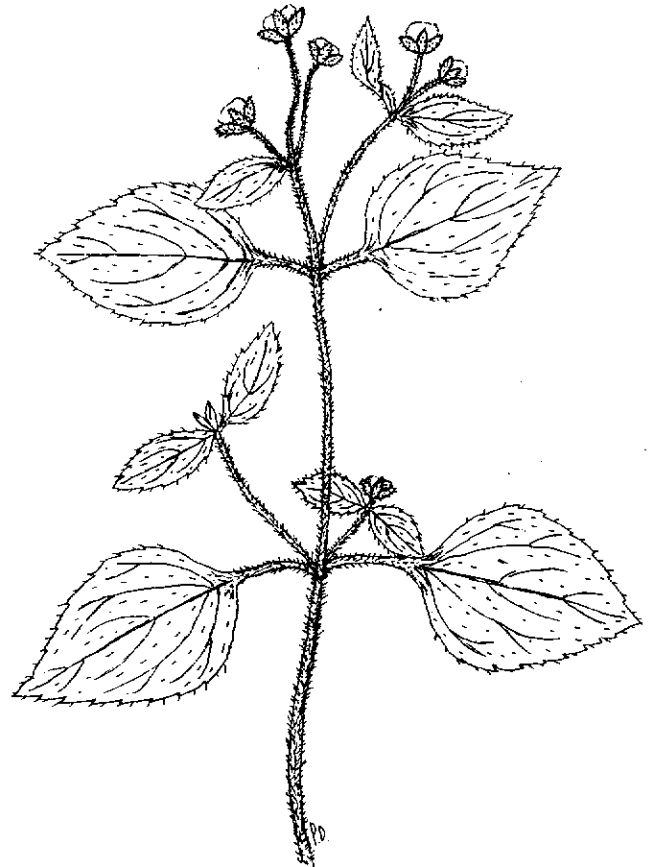
**Stems:** low growing and rooting, or upright, reddish-brown, ridged.

**Leaves:** opposite, narrow, toothed.

**Flowers:** numerous in solitary heads at the ends of the branches, white with yellow centers.

**Fruit:** an achene, widest at the top, with short hairs at the base; warty on surface, black-brown.

**Location:** gardens, moist soils, waste places, lawns and cultivated fields.



### Hairy Galinsoga

**Scientific name:** *Galinsoga ciliata* (Raf.) Blake

**Stems:** erect, rough, hairy.

**Leaves:** opposite, spoon-shaped, coarsely toothed, veined

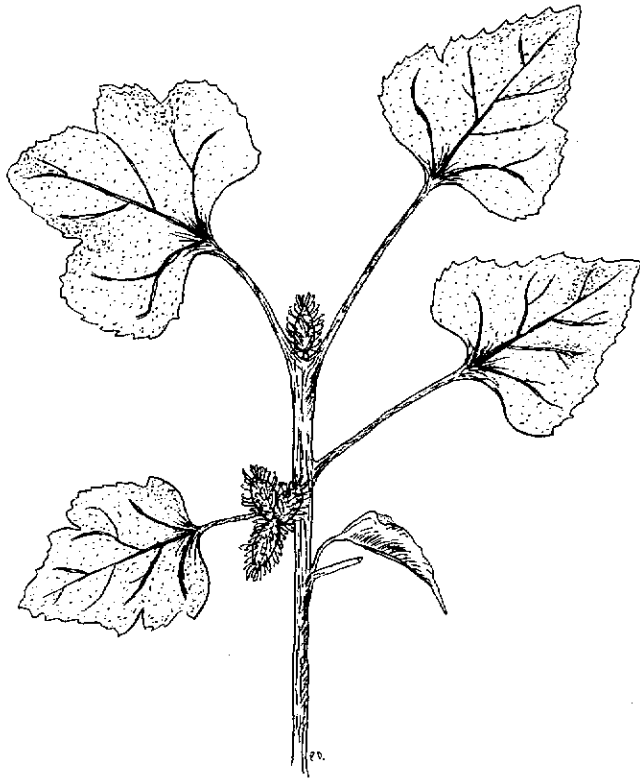
**Flowers:** heads small, with yellow centers and white outer rays.

**Fruit:** an achene, widest at top, hairy, dark brown to black.

**Location:** gardens, roadsides, waste places, lawns and cultivated fields.

## Aster Family

(Asteraceae)



### Common Cocklebur

**Scientific name:** *Xanthum strumarium* L.

**Stems:** loosely branched, stout, green with maroon flecks, hairy, grooved or ridged, 2 to 4 ft tall.

**Leaves:** alternate, long stalked, 3-lobed, coarsely toothed, dull green and rough on both surfaces with 3 major veins.

**Flowers:** in heads on different parts of the plant; male flowers small, in spikes and female flowers in axillary clusters surrounded by bristles.

**Fruit:** an achene enclosed in a bur with hooked prickles.

**Location:** waste places, pastures, gardens, barnyard lots, bottomlands and cultivated fields.

## Goosefoot Family

(Chenopodiaceae)



### Common Lambsquarters

**Scientific name:** *Chenopodium album* L.

**Stems:** stout, vertically ridged with green and/or purple lines, 3 to 5 ft tall.

**Leaves:** alternate, variable with the lower ones triangular in shape and the upper ones narrow, stalkless, toothed or smooth margins, with white mealy glands on the underside, 1 to 3 inches long.

**Flowers:** at the ends of the branches, or in the leaf axils, small, green, without petals.

**Fruit:** papery, enclosing a single, small, black seed.

**Location:** gardens, waste places, fallow fields, thickets, roadsides and cultivated fields.

## Goosefoot Family

(Chenopodiaceae)



### Mexicantea

**Scientific name:** *Chenopodium ambrosioides* L.

**Stems:** erect, stout, usually branched, covered with glands.

**Leaves:** alternate, narrow, entire or wavy margined, with golden glands on both surfaces; emitting a strong odor when crushed.

**Flowers:** small, green, lacking petals, produced in the tops of the branches.

**Fruit:** papery, enclosing a single, small, black seed.

**Location:** gardens, old fields, barnyard lots, waste places, roadsides and cultivated fields.

## Morningglory Family

(Convolvulaceae)



### Ivyleaf Morningglory

**Scientific name:** *Ipomoea hederacea* (L.) Jacq.

**Stems:** climbing or low to the ground, hairy.

**Leaves:** alternate, usually 3-lobed, tapering into sharp points.

**Flowers:** showy, light blue or pink, on long stalks from the leaf axils; sepals long narrow, with recurved tips, densely hairy, 2 to 4 inches long.

**Fruit:** a brown capsule containing dark brown to black seeds shaped like an orange wedge.

**Location:** fields, roadsides, fencerows, gardens, waste places and cultivated fields.



# Morningglory Family

(Convolvulaceae)



## Entireleaf Morningglory

Scientific name: *Ipomoea hederacea* (L.) Jacq.  
var. *integriuscula* Gray

Similar to ivyleaf morningglory, but the leaves are entire, heart-shaped and unlobed.

## Pitted Morningglory

Scientific name: *Ipomoea lacunosa* L.

Stems: trailing over the ground or climbing, ridged, purplish in color.

Leaves: alternate, heart-shaped with a long point at the tip, smooth margined, stalks purplish.

Flowers: small, less than 2 inches long, white or pink, 2 to 3 clustered on stalks arising from the leaf axils; sepals 5, hairy, long pointed.

Fruit: a brown capsule containing dark-brown seeds shaped like an orange wedge.

Location: fields, gardens, roadsides, fencerows, waste places and cultivated fields.

## Morningglory Family

(Convolvulaceae)



### Tall Morningglory

**Scientific name:** *Ipomoea purpurea* (L.) Roth.

**Stems:** climbing or low to the ground.

**Leaves:** alternate, long stalked, hairy, broadly heart-shaped with a pointed tip.

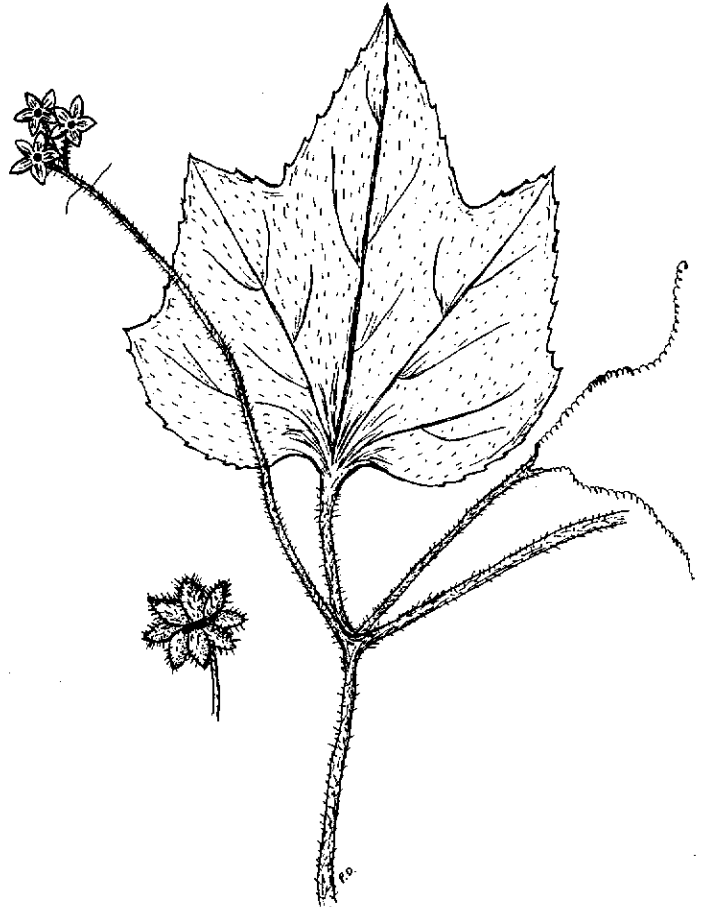
**Flowers:** on long stalks from the leaf axils, petals ranging in color from white to red, to purple, 2 or more inches long; sepals broad, sharp pointed and hairy at the base.

**Fruit:** a brown capsule containing brownish-black seed-shaped like an orange wedge.

**Location:** fields, pastures, gardens, roadsides, fencerows, waste places and cultivated fields.

## Gourd Family

(Cucurbitaceae)



### Burcucumber

**Scientific name:** *Sicyos angulatus* L.

**Stems:** hairy, ridged with forked tendrils at the side of leaves.

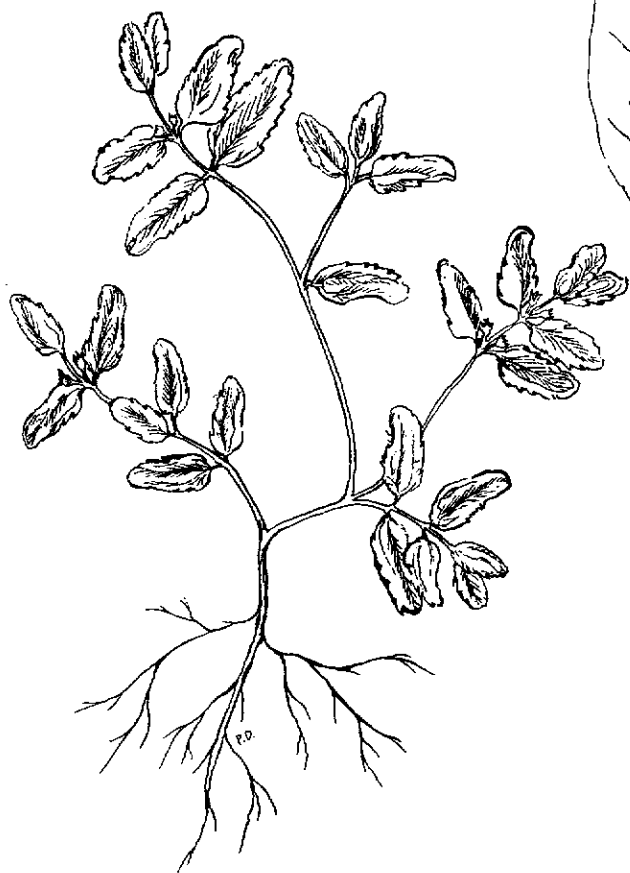
**Leaves:** alternate, 3-5 lobed, hairy, with a deep basal sinus, lobes sharp pointed 4 to 8 inches wide.

**Flowers:** male and female on separate stalks from the same leaf axils, whitish-green, ½ inch long.

**Fruit:** roundish in outline, leathery, tapering into a sharp point, covered with hairs and bristles, warty.

**Location:** riverbanks, damp soils, woodland thickets, fencerows, roadsides, waste places and cultivated fields.

## Spurge Family (Euphorbiaceae)



### Spotted Spurge

**Scientific name:** *Euphorbia nutans* Lag.

**Stems:** with branches loosely nodding, reddish, emitting a milky latex when broken.

**Leaves:** opposite, with a purplish blotch in the center, toothed, stalked.

**Flowers:** small, arranged in a cup-like structure, white or red, clustered at the ends of the branches.

**Fruit:** a capsule, 3-lobed on a short stalk, smooth.

**Location:** gardens, roadsides, waste places, fields, lawns and cultivated fields.

## Mallow Family (Malvaceae)



### Velvetleaf

**Scientific name:** *Abutilon theophrasti* Medic.

**Stems:** stout, slightly branched, velvety in texture, to 6 ft tall.

**Leaves:** large, heart-shaped with a long tapering point, long-stalked, velvety on both surfaces.

**Flowers:** solitary, yellow-orange, in the leaf axils,  $\frac{3}{4}$  inch wide.

**Fruit:** a ring of 10 to 17 beaked segments splitting apart at maturity.

**Location:** gardens, waste places, fallow fields and cultivated fields.

## Mallow Family

(Malvaceae)



### Prickly Sida

**Scientific name:** *Sida spinosa* L.

**Stems:** erect with widely spreading branches, hairy, 2-3 ft tall.

**Leaves:** alternate, narrow to spoon-shaped, toothed, on long stalks; a spine like process at the base of each leaf.

**Flowers:** single in the leaf axils, yellow, short-stalked, about ½ inch across.

**Fruit:** brown, ring-shaped, separating into 5 parts at maturity.

**Location:** gardens, waste places, fields, roadsides and cultivated fields.

## Buckwheat Family

(Polygonaceae)



### Pennsylvania Smartweed

**Scientific name:** *Polygonum pennsylvanicum* L.

**Stems:** ascending, green or reddish, swollen at the leaf joints, plants 1 to 4 ft tall.

**Leaves:** alternate, narrow to spoon-shaped, with a paper sheath surrounding the stem, 2 to 6 inches long.

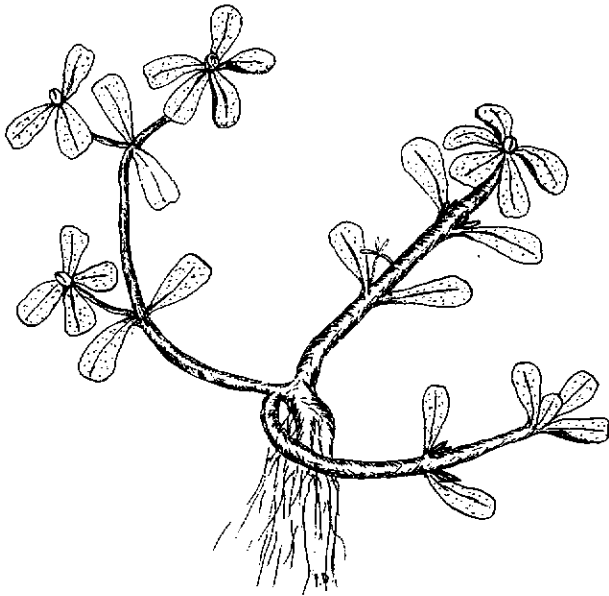
**Flowers:** small, pink, forming a dense spike.

**Fruit:** an achene, containing a circular glossy seed that is black with a yellow scar at the end.

**Location:** damp thickets, pond margins, ditches, waste places, roadsides, fallow fields and cultivated fields.

## Purslane Family

(*Portulacaceae*)



### Common Purslane

**Scientific name:** *Portulaca oleracea* L.  
**Stems:** forming mats, to 1 ft long, succulent, green or purple, smooth margined, fleshy, widest at the tip, rounded, short-stalked or absent.  
**Leaves:** usually opposite, sometimes alternate.  
**Flowers:** small, single, yellow, at ends of the branches or in the axils of the leaves.  
**Fruit:** splitting around the middle, containing many circular seeds.  
**Location:** lawns, gardens, fallow fields, pastures, roadsides, waste places and cultivated fields.

## Nightshade Family

(*Solanaceae*)

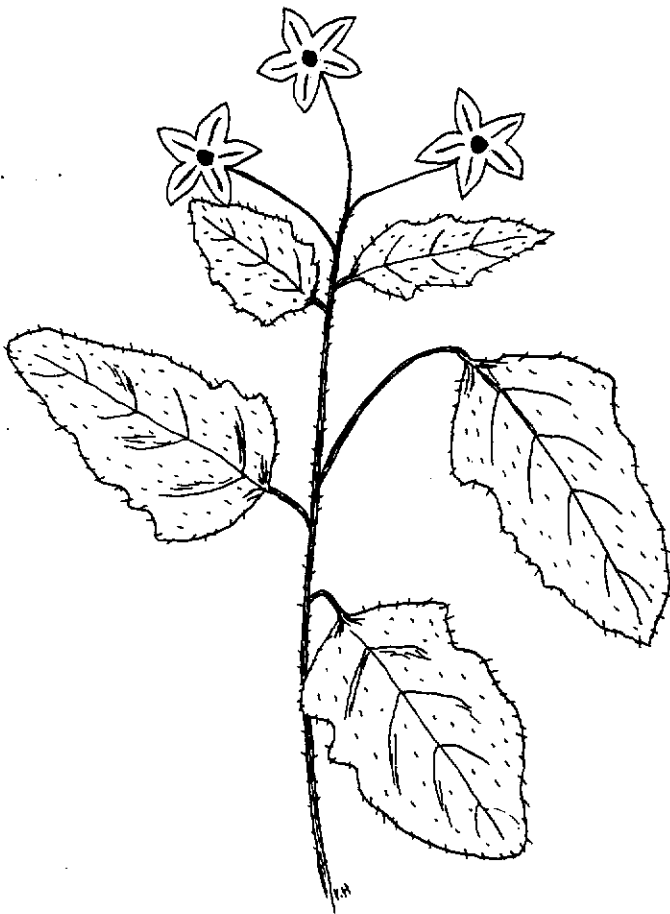


### Jimsonweed

**Scientific name:** *Datura stramonium* L.  
**Stems:** erect with widely spreading branches, stout, green or purple.  
**Leaves:** alternate, long-stalked, dark green above, unevenly toothed or lobed, emitting a strong odor when crushed.  
**Flowers:** large, white, tubular, produced singly in the leaf axils, 2 to 5 inches long.  
**Fruit:** a capsule with 4 prickly valves that split open at maturity.  
**Location:** old field lots, hog pens, roadsides, waste places, gardens and cultivated fields.

## Nightshade Family

(Solanaceae)



### Eastern Black Nightshade

**Scientific name:** *Solanum ptycanthum* Dunal ex DC.

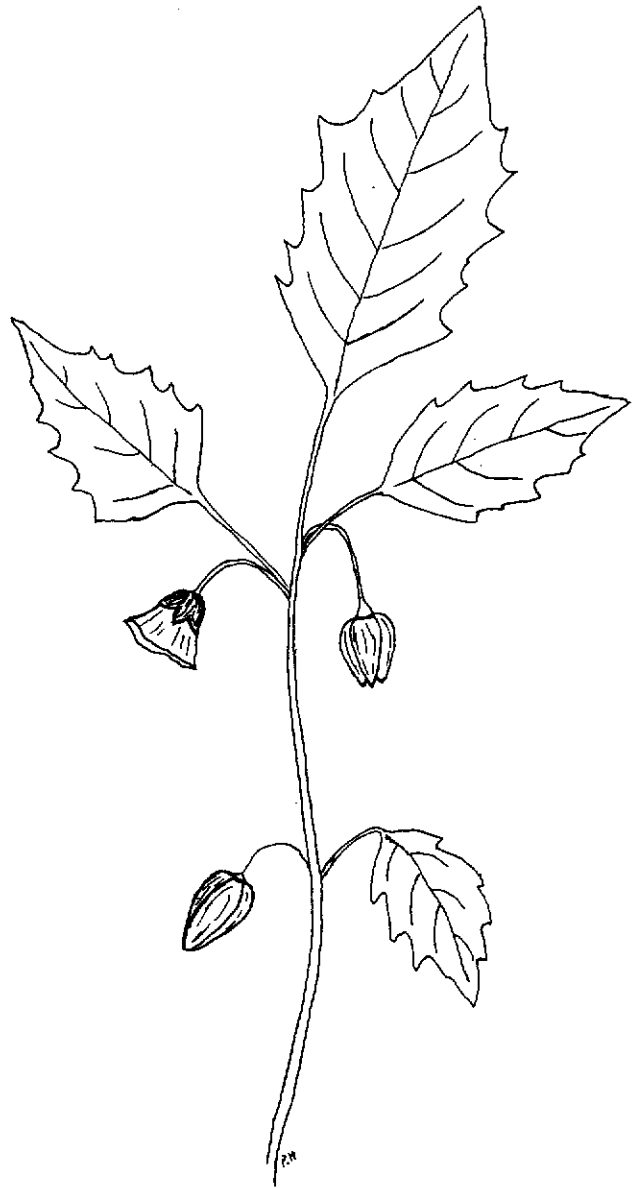
**Stems:** slender, freely-branching, ridged, greenish-purple.

**Leaves:** alternate, triangular to elliptical leaves, sometimes purple-tinged on the underside; leaf margins entire to bluntly toothed.

**Flowers:** in clusters with each star-shaped flower having 5 sharp-pointed sepals, 5 whitish-yellow petals and 5 bright yellow anthers.

**Fruit:** a green berry, turning purplish-black at maturity, less than ½ inch wide.

**Location:** gardens, pastures, roadsides, waste places and cultivated fields.



### Cutleaf Groundcherry

**Scientific name:** *Physalis angulata* L.

**Stems:** branched, erect and smooth.

**Leaves:** stalked, alternate, ovate in outline with coarsely toothed margins.

**Flowers:** usually solitary, wheel-shaped with 5 triangular sepals and 5 light yellow petals. No purple coloring inside petals.

**Fruit:** berry that is enclosed by papery, triangular calyx lobes.

**Location:** gardens, pastures and cultivated fields.

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