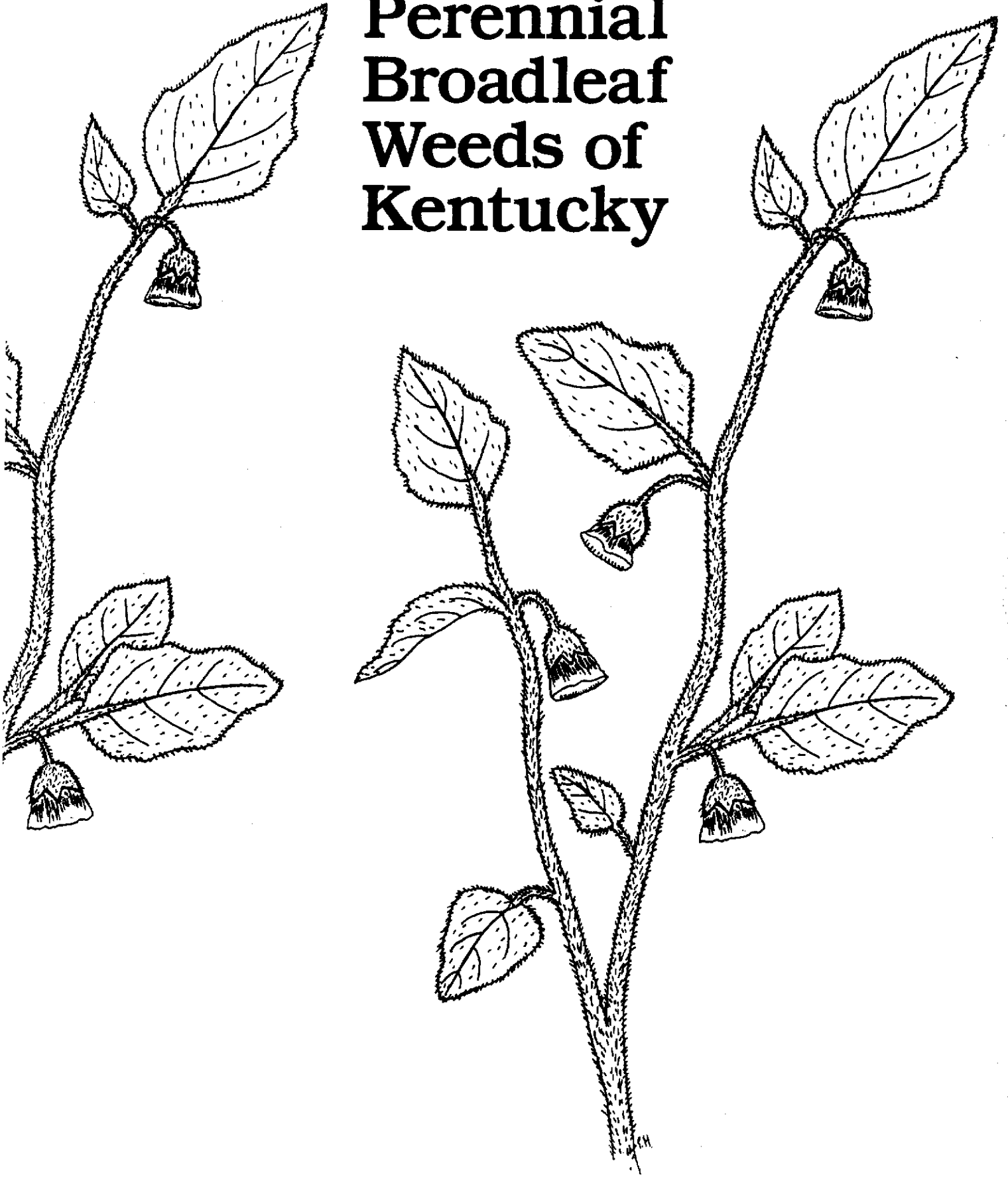


Perennial Broadleaf Weeds of Kentucky



Perennial Broadleaf Weeds of Kentucky

Patricia Dalton Haragan and William W. Witt

Perennials live for more than 2 years, and in many cases, almost indefinitely. Most are capable of reproducing by seed and vegetative structures. They are defined as either simple perennials or creeping perennials according to their method of spread or dissemination. Simple perennials are spread primarily by seed; however, if the plant is cut, the fragmented pieces may produce new plants. Creeping perennials spread by creeping roots, creeping above ground stems (stolons) and creeping below ground stems (rhizomes).

Perennial weeds can be a serious problem in field crops and pastures. These weeds are usually more of a problem in fields with limited tillage. In these situations, the underground vegetative structures are not physically damaged and not exposed to dessication on the soil surface. Once established, perennials can be very difficult to control. Therefore, being able to identify these troublesome weeds is important.

Plant Family Characteristics

| FAMILY | LEAVES | STEM | FLOWERS | FRUIT |
|--|---|---|---|--|
| Dogbane <i>Apocynaceae</i> | usually opposite, simple, entire | slightly woody at base, round, smooth, with milky sap | bell-shaped, in clusters, 5 united sepals, 5 united petals | 2 long, red dark brown pods (follicle) |
| Milkweed <i>Asclepidaceae</i> | simple, opposite, whorled, entire, veins prominent | erect or twining, some with milky sap | sepals 5, petals 5 | a pod (follicle), either smooth or warty |
| Aster <i>Asteraceae</i> | basal, alternate or opposite, lobed, divided or entire | round, often with milky sap | flowers inconspicuous, in heads surrounded by bracts (modified lvs) | achene |
| Bignonia <i>Bignoniaceae</i> | opposite, compound | often viney, woody, smooth | funnel-shaped, sepals 5, petals 5, showy | a cigar-shaped capsule |
| Pink <i>Caryophyllaceae</i> | opposite, simple, entire, hairy | round, hairy, often rooting at the lower nodes | sepals 5, petals 5, often notched at the tip | capsule |
| Morningglory <i>Convolvulaceae</i> | alternate, simple, entire or lobed | erect or twining, smooth to hairy | funnel-shaped, sepals 5, petals 5 | capsule |
| Sedge <i>Cyperaceae</i> | 3-ranked, yellow-green with closed sheaths, blades narrow | solid, triangular, greenish-yellow | straw-colored to brown clusters that spread horizontally | achene |

| FAMILY | LEAVES | STEM | FLOWERS | FRUIT |
|--|--|---|--|---------|
| Lily <i>Liliaceae</i> | mostly basal, parallel veined, blue-green | round, hollow, blue-green | tepals 6 (3 sepals, 3 petals) stamens 6 | capsule |
| Plantain <i>Plantaginaceae</i> | basal, entire, parallel veination | usually leafless, slender | inconspicuous, in dense, terminal clusters | capsule |
| Buckwheat <i>Polygonaceae</i> | alternate, simple with a papery sheath around the stem and leaf stalk base | smooth, often swollen at the nodes, reddish-green | in dense, slightly nodding, cylindrical clusters | achene |
| Rose <i>Rosaceae</i> | alternate, compound with stipules | round, some woody, often with prickles | 5 united sepals at base, 5 separate petals, numerous stamens | achene |
| Nightshade <i>Solanaceae</i> | alternate, simple entire, lobed or toothed, some with prickles | erect or twining, round, smooth to hairy, herbaceous to slightly woody | wheel-shaped, sepals 5, petals 5, flaring | berry |

Glossary

- Capsule**— A dry, dehiscent (opening) fruit made up of 2 or more carpels.
- Achene**— A dry, 1-loculed, 1-seeded indehiscent (not opening) fruit with the seed attached at 1 place.
- Berry**— A fleshy, pulpy, many-seeded fruit with immersed seeds.
- Follicle**— A dry fruit with 1 carpel and splitting down 1 side only.

The following 18 species of perennials are common throughout Kentucky.

References

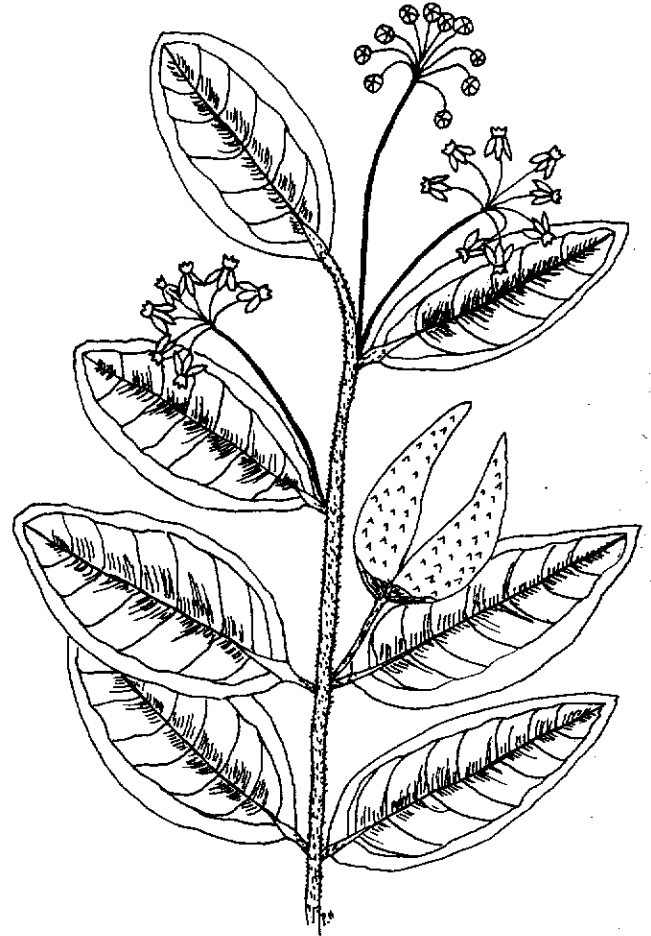
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Dogbane Family

(Apocynaceae)

Milkweed Family

(Asclepidaceae)



Hemp Dogbane

Scientific name: *Apocynum cannabinum* L.

Stems: slightly woody at the base, branched, 3-5 ft tall, with a milky sap.

Leaves: opposite, simple, oblong to narrow, distinctly veined, dark-green above and pale beneath.

Flowers: bell-shaped, greenish-white, small, in dense terminal clusters.

Fruits: consists of 2 slender, reddish-brown pods (follicles) that develop from each flower; seeds with silky hairs.

Location: roadsides, waste places, dry woodland borders, streambanks. This species can be found in both tilled and no-till fields and is often found in small communities.

Common Milkweed

Scientific name: *Asclepias syriaca* L.

Stems: stout, unbranched, covered with short downy hairs, and contains a milky sap, 2-5 ft tall.

Leaves: opposite or whorled, oblong, 4-8 inches long, pale green above, whitish beneath, veins prominent.

Flowers: purplish-pink to green, bell-shaped, in clusters hanging from the tips of the branches and in the leaf axils.

Fruits: a thick warty pod (follicle) that contains brownish, winged seeds with tufts of long silky hairs.

Location: roadsides, borders of woods, thickets, waste places, fencerows, tilled and no-till fields.

Milkweed Family

(*Asclepidaceae*)



Honeyvine Milkweed

Scientific name: *Ampelamus albidus* (Nutt.) Britt.

Stems: twining, smooth, slender, without milky juice.

Leaves: opposite, long-stalked, heart-shaped with a wide basal sinus, veins prominent.

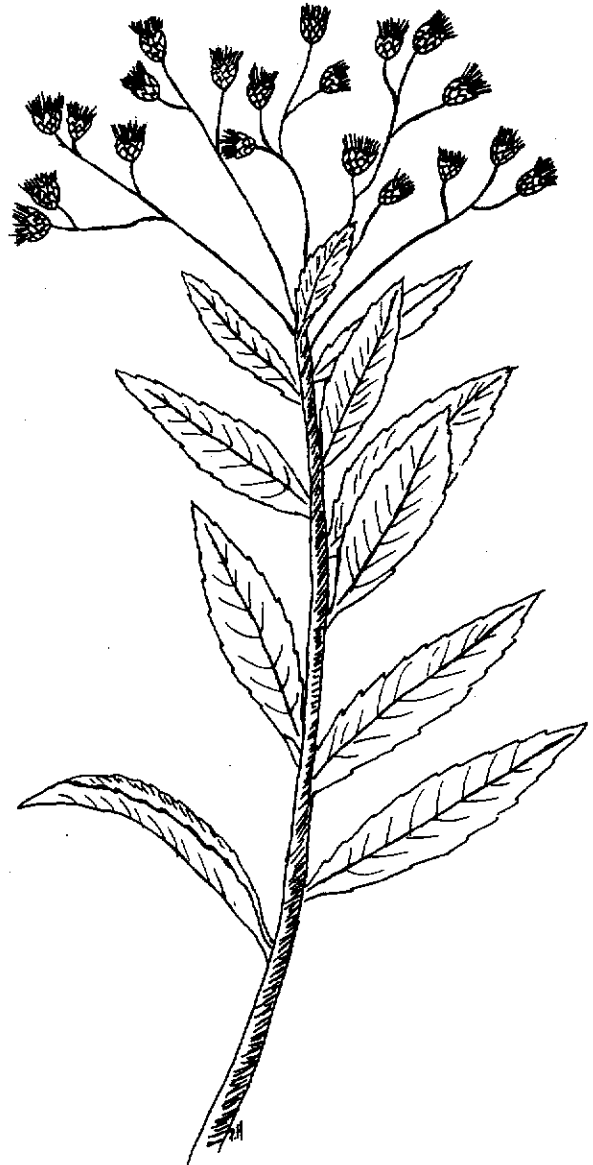
Flowers: whitish-green, star-shaped, borne in clusters on long stalks in the leaf axils.

Fruits: a long, smooth, slender green pod (follicle) that opens along one seam; seeds winged, tipped with silky hairs.

Location: roadsides, waste places, fencerows, thickets, pastures, tilled and no-tilled fields.

Aster Family

(*Asteraceae*)



Tall Ironweed

Scientific name: *Vernonia altissima* Nutt.

Stems: stout, loosely branched at the top, 3-6 ft tall.

Leaves: alternate, loosely spreading, narrow, sharply toothed, rough on the surface below.

Flowers: heads small, made up of many deep purple, tubular flowers, $\frac{3}{8}$ inches wide, that bloom from the center outward.

Fruits: ribbed "seedlike" achenes, crowned with a tuft of light brown hairs.

Location: pastures, roadsides, waste places, damp meadows, vacant lots, barnyards, and fallow fields. Rarely found in tilled fields.

Aster Family (Asteraceae)



Dandelion

Scientific name: *Taraxacum officinale* Weber

Stems: smooth, short, underground, with a milky latex.

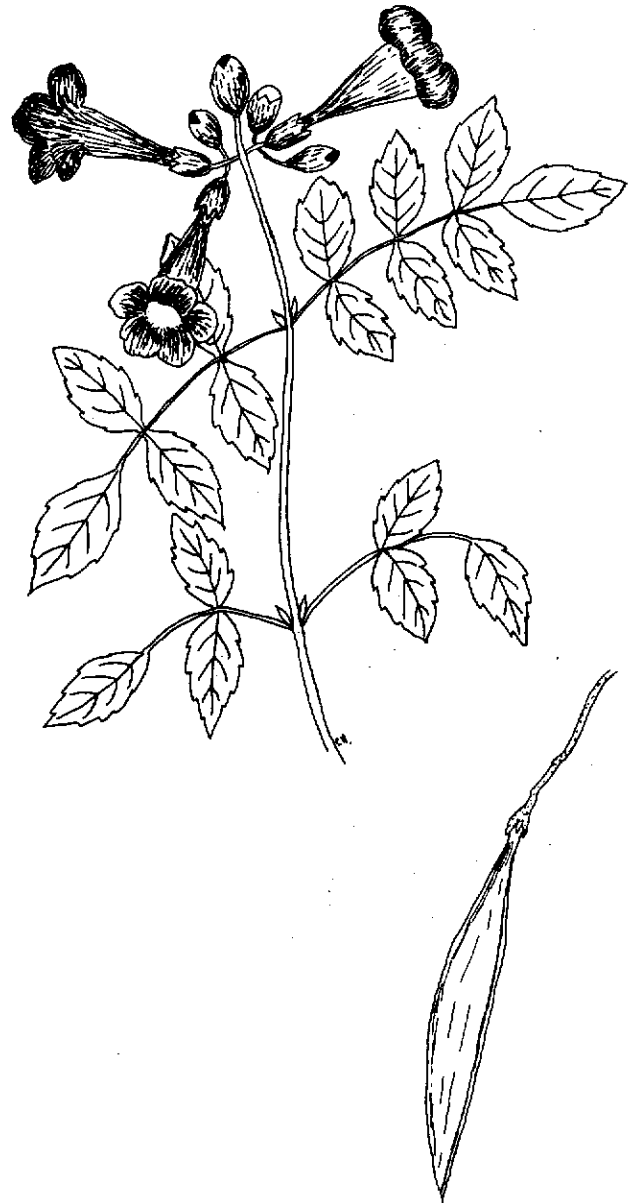
Leaves: basal, 3-10 inches long, varying in shape from oblong to spatulate, deeply incised to slightly lobed; largest lobe at the tip.

Flowers: solitary, in bright yellow heads at the summit of the stem.

Fruits: a yellowish-brown "seedlike" achene with a beaked tip that expands into a fluffy ball.

Location: roadsides, turf, pastures, gardens, waste places, no-till and fallow fields.

Bignonia Family (Bignoniaceae)



Trumpet creeper

Scientific name: *Campsis radicans* (L.) Seem.

Stems: smooth, woody, vining, 20-40 ft long

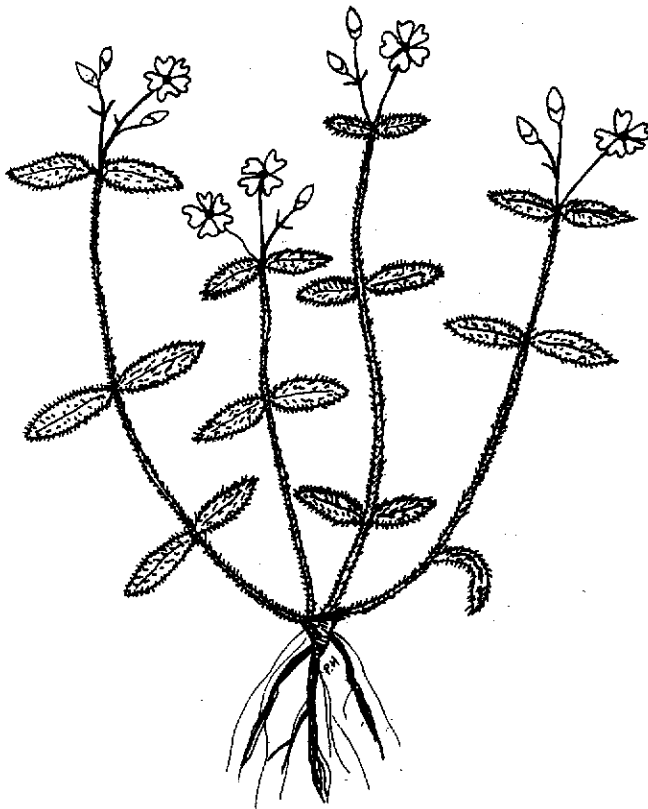
Leaves: opposite, pinnate with 5-11 ovate leaflets, sharp-pointed, toothed.

Flowers: showy, 2½ inches long, reddish-orange, tubular with 5 spreading lobes.

Fruits: a cigar-shaped capsule with 2 longitudinal ridges that split open along 1 seam.

Location: waste places, woodland borders, pastures, fencerows; often on trees. Usually found in no-till fields more than in tilled fields.

Pink Family
(Caryophyllaceae)



Mouseear Chickweed

Scientific name: *Cerastium vulgatum* L.

Stems: sticky, hairy, slender, erect or spreading, often rooting at the lower nodes.

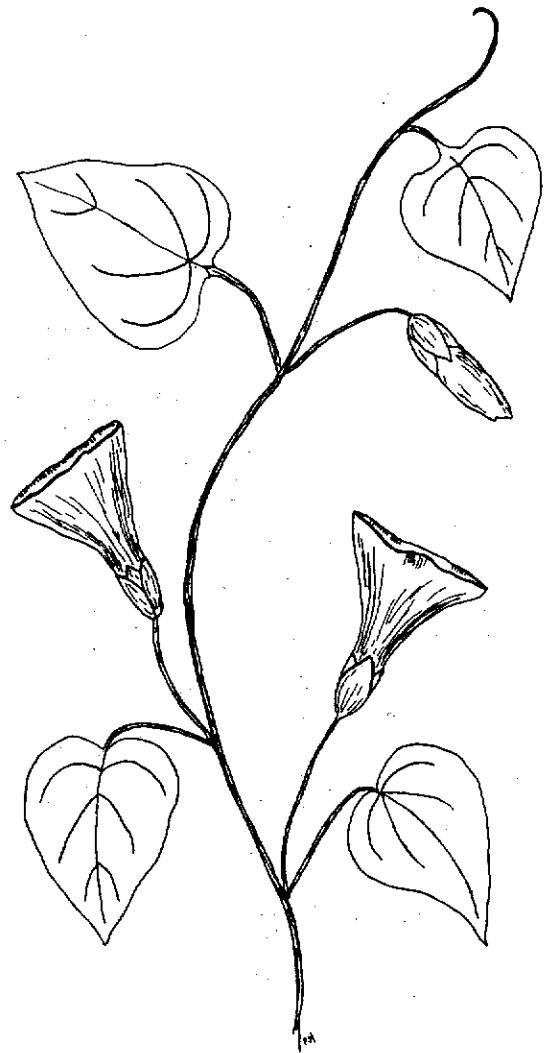
Leaves: opposite, in pairs of 3-7, oval, hairy, 1-nerved.

Flowers: small, sepals 5, petals 5, white, notched at the tip.

Fruits: a cylindrical capsule that contains many minute, reddish-brown seeds.

Location: turf, gardens, pastures, old fields, woods, moist meadows, and roadsides. Occasionally found in no-till fields.

Morningglory Family
(Convolvulaceae)



Bigroot Morningglory

Scientific name: *Ipomoea pandurata* (L.)

G. R. W. Mey

Stems: trailing or twining, purplish, smooth to slightly hairy, 2-10 ft long.

Leaves: alternate, entire, long-stalked, heart-shaped at the base, sharp-pointed at the tip.

Flowers: showy, petals white, funnel-shaped with a purple center, 2-3 inches long.

Fruits: a capsule that contains dark brown, wedge-shaped to flattened seeds.

Location: roadsides, riverbanks, thickets, gardens, fencerows, fallow, no-till fields.

Morningglory Family

(Convolvulaceae)



Hedge Bindweed

Scientific name: *Calystegia sepium* (L.) R. Br.

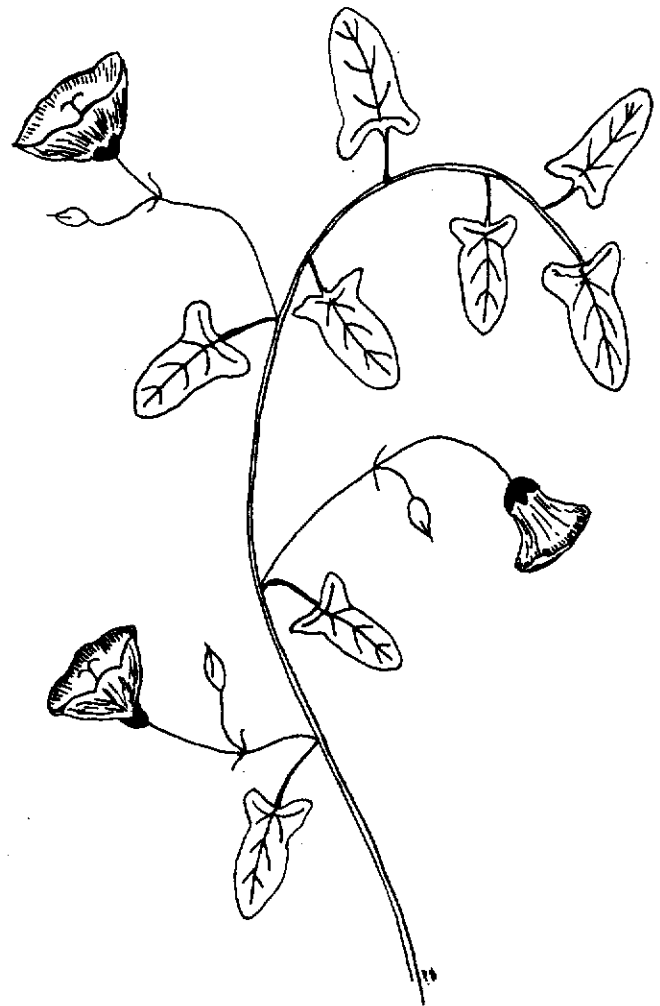
Stems: smooth to hairy, twining or trailing, 3-10 ft long.

Leaves: alternate, simple, long-stalked, heart-shaped to triangular with 2 broad basal lobes.

Flowers: produced on long angular stalks; showy, 1½ to 2 inches wide, funnel-shaped, white to rose-colored, bracts 2, large, green, below the flowers.

Fruits: a 3-angled capsule that contains 2-4 grayish-black seeds.

Location: roadsides, turf, gardens, fencerows, waste places, thickets, bottomlands, no-till and tilled fields.



Field Bindweed

Scientific name: *Convolvulus arvensis* L.

Stems: smooth to hairy, slender, prostrate or twining.

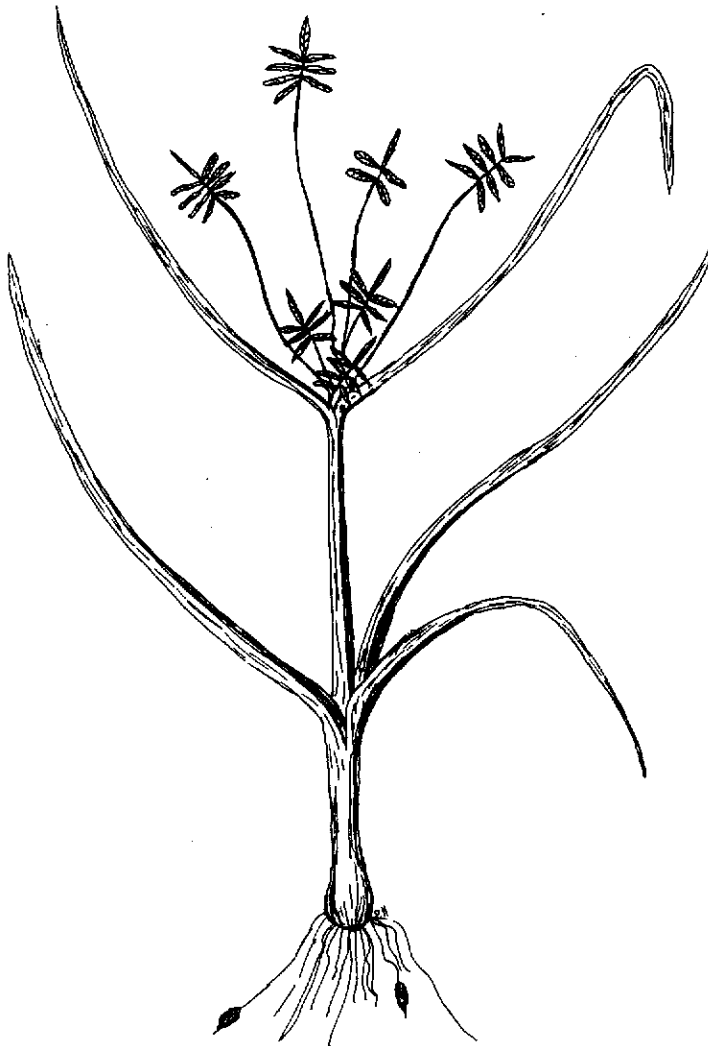
Leaves: alternate, simple, long-stalked, with triangular to arrow-shaped basal lobes.

Flowers: funnel-shaped, sepals 5, petals 5, white or pink; bracts 2, minute, below each flower.

Fruits: a grayish-green, 3-angled capsule that contains 2-4 seeds.

Location: roadsides, waste places, fencerows, rare tilled, turf and no-till fields.

Sedge Family (Cyperaceae)



Yellow Nutsedge

Scientific name: *Cyperus esculentus* L.

Stems: simple, yellowish-green, triangular in cross-section.

Leaves: mostly basal, 3-ranked, narrow, with a closed sheath at the base.

Flowers: made up of straw-colored or brown clusters, 2-ranked, flattened and spread horizontally.

Fruits: a yellowish-brown, narrow, 3-angled "seedlike" achene.

Location: gardens, turf, waste places, roadsides, rare, meadows, streambanks, pond edges, and tilled and no-till fields.

Lily Family (Liliaceae)



Wild Garlic

Scientific name: *Allium vineale* L.

Stems: slender, leafy, bluish-green with sheathing bases, 1-3 ft tall.

Leaves: 2-ranked, smooth, bluish-green, hollow, cylindrical and tapering at the ends.

Flowers: umbels made up of either flowers and bulbs or only bulbs; flowers pinkish-purple, perianth segments 6.

Seeds: dull black and covered with minute bumps on the surface.

Location: small grains, hay, turf, waste places, and tilled and no-till fields after crop harvest in the fall.

Plantain Family

(Plantaginaceae)



Blackseed Plantain

Scientific name: *Plantago rugelii* Dcne.

Stems: thin erect, leafless, 6-13 inches tall.

Leaves: all basal, simple, broad, egg-shaped, distinctly veined, purplish at base.

Flowers: numerous, inconspicuous, in spikes at the ends of the stems.

Fruits: a cylindrical capsule that splits across the lower half.

Location: turf, pastures, waste places, barnyards, gravelly paths, old fields, fallow and no-till fields.

Buckwheat Family

(Polygonaceae)



Curly Dock

Scientific name: *Rumex crispus* L.

Stems: smooth, ridged, with enlarged nodes.

Leaves: mostly basal, alternate above, bluish-green, simple, narrow, wavy margined, with a papery sheath at the base of the leaf stalk and stem.

Flowers: in whorls crowded in dense clusters; sepals 6 with 3 larger ones bearing a plump "grain" at the base.

Fruits: a glossy, reddish-brown, triangular "seedlike" achene.

Location: turf, gardens, pastures, hay crops, roadsides and no-till fields.

Rose Family

(Rosaceae)



Multiflora Rose

Scientific name: *Rosa multiflora* Thunb.

Stems: arching or trailing, usually growing erect and then the tips droop almost to the ground, with thorns.

Leaves: alternate, pinnately compound with 7-9 leaflets, elliptic to obovate, paler green beneath; stipules green, membranous.

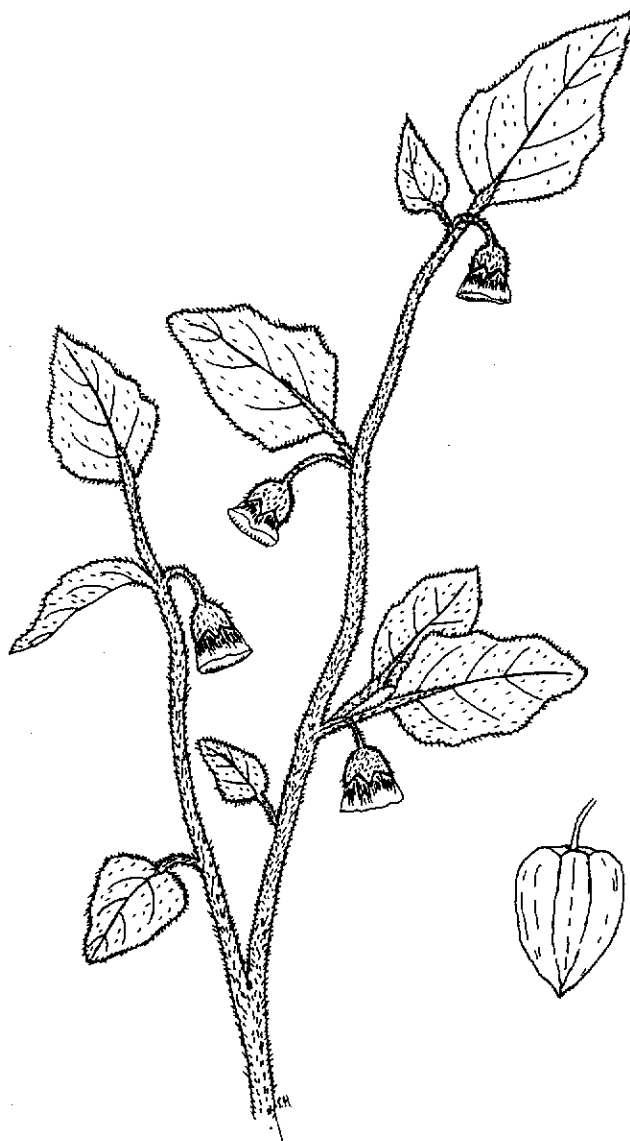
Flowers: in clusters; sepals 5, petals 5, white or pinkish, stamens yellow, numerous.

Fruits: bright red, enclosing several "seedlike" achenes.

Location: fencerows, pastures, clearings, roadsides, borders of woods and waste places.

Nightshade Family

(Solanaceae)



Clammy Groundcherry

Scientific name: *Physalis heterophylla* Nees

Stems: hairy, glandular, sticky, branched, 1-3 ft tall.

Leaves: alternate, broadly ovate, hairy, with irregular wavy or bluntly toothed margins, 2-3 inches long.

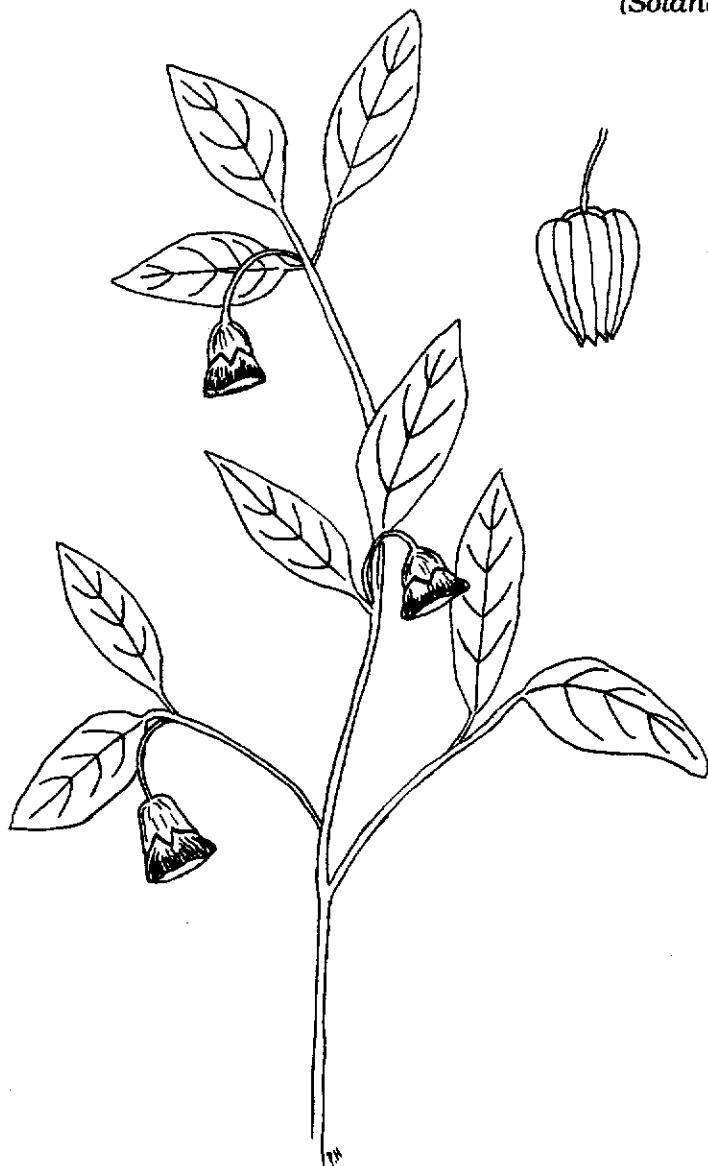
Flowers: produced in the leaf axils; solitary, wheel-shaped, drooping, petals 5, dull yellow with dark purple spots in the center.

Fruits: a round, yellow berry surrounded by an inflated calyx.

Location: roadsides, old fields, pastures, waste places and no-till fields. Rarely found in tilled fields.

Nightshade Family

(Solanaceae)



Smooth Groundcherry

Scientific name: *Physalis subglabrata* Mack & Bush

Stems: hairy when young, smooth when older, erect, slightly branching, 1-3 ft tall.

Leaves: alternate, thin, long-stalked, ovate to narrow, coarsely toothed, 2-3 inches long.

Flowers: produced in the leaf axils; solitary, wheel-shaped, drooping, petals 5, dull yellow with purplish spots in the center.

Fruits: a round, purplish berry enclosed by an inflated calyx.

Location: roadsides, old fields, pastures, waste places and no-till fields. Rarely found in tilled fields.



Horsenettle

Scientific name: *Solanum carolinense* L.

Stems: erect, loosely branched, prickly, 1-4 ft tall.

Leaves: alternate, oblong to ovate, coarsely toothed, with straw-colored prickles on the midrib and stalks.

Flowers: in clusters on prickly stalks at the ends of the branches; sepals 5, petals 5, pale-violet, and stamens 5, yellowish-orange.

Fruits: a smooth, round, orange berry with a juicy pulp.

Location: roadsides, gardens, waste places, pastures, barnyards, tilled and no-till fields.

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