

AN
ILLUSTRATED GUIDE
TO
FLOWERING PLANTS
GEORGE T. STEVENS

AN ILLUSTRATED GUIDE
TO THE
FLOWERING PLANTS

OF
THE MIDDLE ATLANTIC AND
NEW ENGLAND STATES

(EXCEPTING THE GRASSES AND SEDGES)

THE DESCRIPTIVE TEXT WRITTEN IN FAMILIAR LANGUAGE

BY
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WITH MORE THAN 1800 ILLUSTRATIONS
FROM DRAWINGS BY THE AUTHOR



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PLATE 188

1. *Inula Helenium*. 2. *Polymnia uvedalia*. 3. *P. canadensis*. 4. *Eclipta alba*. 5. *Silphium perfoliatum*. 6. *Heliopsis scabra*. 7. *H. helianthoides*.

clusters, terminal to the main stem or to short branches along the stem. Common in low grounds. July-Sept.

4. *G. supinum*, L. (Fig. 4, pl. 187.) DWARF CUDWEED. Tufted, about 2 in. high; leaves mostly basal, linear or lance-shaped, with 1 or 2 along the stem. Whole plant white woolly. Heads 1 or more, when several, a spike-like arrangement. Flowers yellowish. Rare, summits of the White Mountains. July-Aug.

5. *G. purpureum*, L. (Fig. 5, pl. 187.) PURPLE CUDWEED. Simple or branched from the base, stem from 2 in. to 2 ft. high, woolly or silvery with a silky coat. Leaves narrow, almost linear, or the lower spatula-formed, green above, silky below. Heads attached almost directly to the stem, forming groups at the upper leaf-axils and an interrupted spike above. Involucre bracts brown or purple. Dry sandy soil, throughout our area. May-Sept.

25. INULA, L.

Our only species a tall, coarse herb with large, alternate leaves and large yellow ray flowers. Plant not floccose-woolly, but decidedly downy or hairy. Involucre of overlapping scales; receptacle flat or convex, naked; ray flowers bearing pistils, disk flowers bearing both stamens and pistils. Anthers arrow-formed at base; aigrette simple.

1. *Helenium*, L. (Fig. 1, pl. 188.) ELECCAMPANE. Stems in tufts, 2 to 8 ft. high, downy above. Leaves large, the lower egg-shaped, those of the stem more or less heart-shaped at base and clasping the stem, woolly beneath. Rays very numerous, narrow, yellow. Head, including rays, 2 to 4 in. broad. Along roadsides and in fields. An introduced plant. July-Aug.

26. POLYMNIA, L.

Tall clammy herbs with opposite leaves and yellow flowers. Leaves broad, lobed or angled, the lowest sometimes alternate. Heads in terminal clusters; involucre of about 2 rows of bracts, the outer of about 5 rather broad ones, leaf-like, the inner narrower and more numerous. Ray flowers bearing pistils and producing seeds, the disk flowers with both stamens and pistils but producing no fruit. Receptacle flat, chaffy.

1. *P. uvedalia*, L. (Fig. 2, pl. 188.) YELLOW LEAF-CUP. Stout, rough, 3 to 10 ft. high. Leaves broadly egg-shaped, angled and somewhat lobed, the lower leaves sometimes a foot long, narrowed to a winged leaf-stalk. Rays 10 to 15, yellow, $\frac{1}{2}$ to 1 in. long, apex 3 toothed. Rich woods, southern part of our area, New York, and southward. July-Oct.

2. *P. canadensis*, L. (Fig. 3, pl. 188.) SMALL-FLOWERED LEAF-CUP. Less stout than the preceding, viscid downy, 2 to 5 ft. high. Upper leaves deeply 3- to 5-lobed with sharp angles, the lower large, the terminal lobe rounded. Heads small; rays 5, small, shorter than the involucre bracts, or minute or wanting, whitish yellow. Moist shaded places, southern part of our area, New York, and southward. June-Sept.

27. SILPHIUM, L.

Tall, rough, coarse perennial herbs with resinous juice, with opposite or alternate leaves and with clusters of yellow-flowered heads. Heads with numerous rays bearing pistils and producing fruit. Disk flowers with stamens and pistils producing no fruit. Scales of the broad involucre over-

lapping, in several series. Receptacle flat, chaffy, the chaff subtending the ray flowers.

1. *S. perfoliatum*, L. (Fig. 5, pl. 188.) CUP PLANT. Stem square, stout, branched above, 4 to 8 ft. high. Leaves opposite, the upper united by their bases, the lower contracted to margined leaf-stalks, egg-shaped, coarsely toothed, 6 to 15 in. long, 4 to 8 wide. Heads numerous, 2 to 3 in. broad, with 20 to 30 yellow rays. July-Sept.

2. *S. trifoliatum*, L. WHORLED ROSIN-WEED. Stem 4 to 7 ft. high, branched at the top. Leaves lance-shaped, toward the middle of the stem in whorls of 3 or 4, usually with quite short leaf-stalks. Heads several, often numerous, 1½ to 2 in. broad. Rays 15 to 20. Woods, dry plains, Penna., westward and northward. July-Sept.

28. HELIOPSIS, Pers.

Perennial herbs with opposite leaves and large showy heads with yellow disk and ray flowers. Leaves on leaf-stalks, 3-ribbed. Heads on rather long flower stems, terminal or axillary; involucre of 2 or 3 series of scales, nearly equal, the outer leaf-like; receptacle convex or conic, chaffy. Ray flowers bearing pistils, and producing fruit, disk flowers with stamens and pistils.

1. *H. helianthoides*, (L.) BSP. (Fig. 7, pl. 188.) FALSE SUN-FLOWER. Stem 2 to 5 ft. high, nearly smooth. Leaves opposite or occasionally in 3s, lance-shaped to egg-shaped on moderately long or on short leaf-stalks, 3 to 6 in. long. Heads about 2 in. broad, on long flower stems; rays linear, showy. Involucre scales oblong, or linear. Open places, throughout our range. July-Sept.

2. *H. scabra*, Dunal. (Fig. 6, pl. 188.) ROUGH OX-EYE. Rough, at least above, especially the leaves. Otherwise similar to the preceding. Dry open places, through all but the southern third of our range. June-Sept.

29. ECLIPTA, L.

A rough branching herb, annual, with opposite leaves, hairy, with heads of flowers terminal or axillary and with small, nearly white, ray flowers. Leaves without leaf-stalks. Receptacle flat or convex, chaffy; ray flowers bearing pistils and producing fruit; disk flowers bearing both stamens and pistils, also fertile.

E. alba, (L.) Hassk. (Fig. 4, pl. 188.) ECLIPTA. A rough plant with a procumbent or erect branching stem ½ to 3 ft. high, and lance-shaped leaves with low teeth at the margins, 1 to 5 in. long. Heads on very short flower stems, numerous, about ½ in. broad, with short white rays. Along streams and in waste places. Naturalized. July-Oct.

30. RUDBECKIA, L.

Mostly rough herbs with rigid stems and leaves, the latter alternate and showy, terminal heads with conspicuous yellow rays. Leaves, lobed or not, the lower on leaf-stalks, the upper without leaf-stalks. Heads with many ray flowers; the disk flowers tubular, purple; receptacle conical or in form of a column, chaffy. Involucre scales leaf-like in about 2 or more series. Ray flowers producing no fruit, disk flowers with stamens and pistils, fruit producing.