

KEY FOR IDENTIFYING COMMON BROADLEAVED WEED SEEDLINGS IN PENNSYLVANIA

1. First true leaves alternate
 1. True leaves heart shaped
 1. True leaves densely hairy
 1. Cotyledons oval to round.....VELVETLEAF, *Abutilon theophrasti*
 2. True leaves hairless to sparsely hairy; cotyledons butterfly-wing shaped.....TALL MORNINGGLORY, *Ipomea purpurea*
 2. True leaves lobed, spade, star, pentagon shaped
 1. True leaves lobed
 1. All leaves lobed (first leaf slightly), cotyledons butterfly-wing shapedIVYLEAF MORNINGGLORY, *Ipomea hederacea*
 2. True leaves spade, arrowhead, star, pentagon shaped
 1. True leaves with ochrea
 1. Cotyledons lanceolate to ellipticWILD BUCKWHEAT, *Polygonum convulvulus*
 2. True leaves without ochrea
 1. True leaves spade shaped; cotyledons kidney-bean shaped
 1. True leaf margins parallel; leaf tip blunt.....FIELD BINDWEED, *Convolvulus arvensis*
 2. True leaf margins with distinct edges and not parallel; leaf tip pointedHEDGE BINDWEED, *Calystegia sepium*
 2. True leaves star or pentagon shaped; cotyledons large, spoon shaped
 1. True leaves star shapedWILD CUCUMBER, *Echinocystis lobata*
 2. True leaves pentagon shaped (five sided)BURCUCUMBER, *Sicyos angulatus*
 3. True leaves oval, ovate, elliptic, lanceolate, spoon shaped
 1. True leaves spoon shaped; cotyledons kidney-bean shapedMUSTARD species
 2. True leaves lanceolate to elliptic
 1. Distinctive odor when crushed
 1. Cotyledon midrib prominent.....JIMSONWEED, *Datura stramonium*
 2. Plants with ochrea; no odor.....PENNSYLVANIA SMARTWEED, *Polygonum pennsylvanicum*
 3. True leaves ovate
 1. True leaves covered with mealy white granules or frost.....COMMON LAMBSQUARTERS, *Chenopodium album*
 2. True leaves without white granules or frost
 1. True leaves with notched tip, reddish undersidesSMOOTH PIGWEED OR REDROOT PIGWEED, *Amaranthus* sp.
 2. True leaves without notched tip
 1. Spines or thorns present on petioles, midrib, and stems; perennialHORSENETTLE, *Solanum carolinense*
 2. No spines or thorns present on petioles, midrib, or stem
 1. True leaves sparsely to densely hairy with pointed tip
 1. Leaf underside purple; cotyledons small and ovate.....EASTERN BLACK NIGHTSHADE, *Solanum ptycanthum*
 2. True leaves smooth to sparsely hairy
 1. Stem purple; cotyledons if present small and ovate; perennial ..SMOOTH GROUND CHERRY, *Physalis subglabrata*
1. First true leaves opposite
 1. True leaves lobed
 1. True leaves with three to five major lobes; plants as large as a silver dollar at two-leaf stage GIANT RAGWEED, *Ambrosia trifida*
 2. True leaves with greater than five major lobes, lacy; plants as large as a quarter at two-leaf stage COMMON RAGWEED, *Ambrosia artemesiifolia*
 2. True leaves not lobed
 1. True leaves densely hairy, later leaves alternateCOMMON SUNFLOWER, *Helianthus annuus*
 2. True leaves hairless or sparsely hairy
 1. True leaves covered with white mealy granules.....COMMON LAMBSQUARTERS, *Chenopodium album*
 2. True leaves without white granules or frost
 1. True leaves rough textured; leaves alternate after first true leaves; cotyledons thick and waxyCOMMON COCKLEBUR, *Xanthium strumarium*
 2. True leaves smooth, waxy, may be slightly hairy; sap milky
 1. Cotyledons, if present, lanceolate to elliptic.....HEMP DOGBANE, *Apocynum cannabinum*
 2. Cotyledons, if present, oblongCOMMON MILKWEED, *Asclepias syriaca*