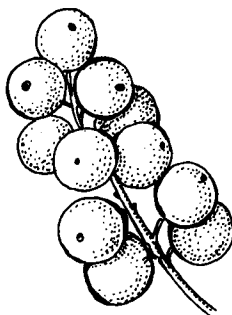
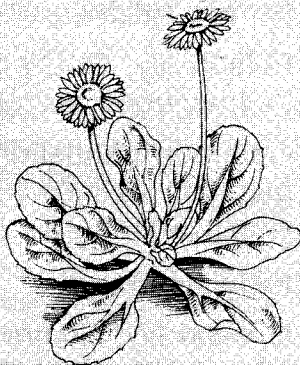
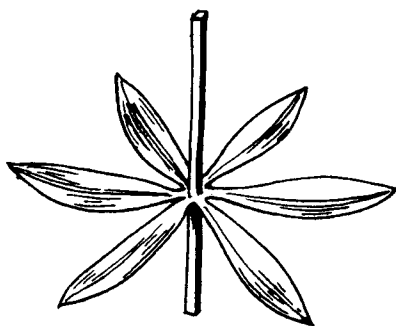
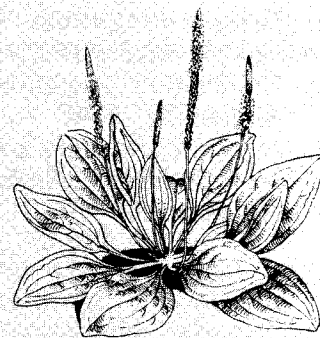
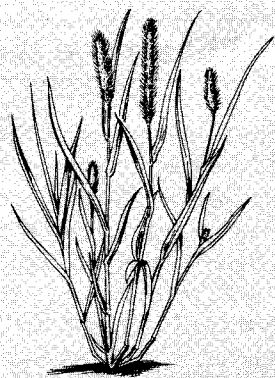


# Weeds in Ornamental Plantings

AN EXTENSION PUBLICATION OF THE NEW YORK STATE COLLEGE OF AGRICULTURE AND LIFE SCIENCES,  
A STATUTORY COLLEGE OF THE STATE UNIVERSITY, AT CORNELL UNIVERSITY, ITHACA, NEW YORK



## Authors

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The majority of the line drawings in this publication were originally created by Marion R. Sheehan for the New York State Turf Association, and printed in 1951 by John Cornman, then editor of the turf association bulletins. The following drawings were done by Marion R. Sheehan for this publication: field bindweed, *Galinsoga*, goutweed, groundsel, henbit, mugwort, poison ivy, quackgrass, and violets.

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# Weeds in Ornamental Plantings

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## What is a weed?

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A weed is a plant growing where it is not wanted. The homeowner and gardener may not like a weed because it detracts from the appearance of other plants. Poison ivy is harmful to touch. Common ragweed and goldenrod produce pollens that irritate some people. Many plants are undesirable because they compete with desirable plants for water, nutrients, light, and carbon dioxide. Weeds can be a catching place for rubbish or the host and hiding place for insects, diseases, and viruses that can harm nearby ornamental plants or turf. Weeds can be native or introduced plants. Wild flowers and other plants that are not a nuisance are not considered weeds.

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## Why weeds are successful

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Weeds are a serious problem if they can compete successfully with the turf and ornamental plants under given growing conditions. A vigorous turf shades weeds; but a poor stand of grass does not give the weeds adequate competition, and the weeds take over the area. To control weeds, a gardener must understand how both the crop

and the weeds grow. Successful weeds are usually vigorous growers, propagate rapidly, and are difficult to control. Weeds are classified as to the length of their life cycle.

**Annual (A).** A plant that grows from seed, flowers, produces new seeds, and dies in a single growing season.

**Winter annual (WA).** A plant that starts from seed in the fall, lives through the winter, flowers, forms seed, and dies before the end of the summer.

**Biennial (B).** A plant that starts from seed in the summer and produces a rosette of leaves, flowers, and produces seed the following summer, taking two growing seasons to complete its life cycle.

**Perennial (P).** A plant that grows for more than two seasons, overwintering as an entire plant or by roots, underground stems, bulbs, corms, or tubers, which start growth the next season. A perennial can flower and produce seed year after year.

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## How weeds are spread

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Weeds can be spread by seeds, bulbs, tubers, corms, pieces of underground stems or roots, or

creeping stems. Dispersal of weeds is aided by wind, water, and people, moving seeds and soil containing seeds or weed plants from one location to another. Weed seeds could come in lawn seed or in the soil you bring with a choice plant from a friend's weed patch. Seeds may germinate when the soil is disturbed in making a new lawn or digging holes to put in new plants.

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## Control measures

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Weeds can be controlled by many cultural and chemical methods. A vigorous turf mowed at a height of 2 inches will have much less of a weed problem than turf cut short or thin from disease, insects, or poor cultural practices. Some weeds are best controlled in small garden areas by hand pulling or cultivation as long as it does not damage the roots of desirable plants. If the entire dandelion root is not removed, any remaining piece can produce a new plant. Hand pulling of chickweed or crabgrass in a large lawn is an endless task. In most lawns the use of a chemical weed killer (herbicide) is more practical.

For the latest herbicide recommendations, see Cornell Miscellaneous Bulletin 74, *A Guide to Safe Pest Control around the Home*, or consult your county

agricultural Extension office. For determining the most effective and safe control measures, proper identification of the problem weed is essential.

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## Weed identification

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One of the most practical methods of weed identification is to compare the weed with labeled pictures. Line drawings of weeds accentuate details that are helpful in identification. If you cannot match your weed with pictures in this bulletin, it may not have been included, and you will have to look in a book that includes more weeds. Or you can bring or send the weed to your Cooperative Extension agent or nearby botanical garden for identification.

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## Weeds in this bulletin

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A survey of county agricultural agents in New York State was the basis for selecting the weeds covered in this bulletin. Some weeds are considered important because they occur in large numbers; others, because they are difficult to control.

Weeds are arranged in this bulletin according to leaf shape and growth habit. The accepted common name is followed by other frequently used names and the scientific name, for example:

**Yellow nutsedge**, nutgrass  
(*Cyperus esculentus*)

Growth habit is the first step in weed identification. Is the weed an upright plant, with narrow, long leaves, reminding you of a grass? Some weeds grow as single plants in a clump; close inspection will show many individual plants crowded to-

gether. Many problem weeds grow flat on the ground, sending out shoots in all directions. These shoots may root and form a dense mat, killing desirable low growing plants. A few persistent weeds grow long vines, which use upright plants as supports. These plants tend to twine around and around any narrow upright support, such as plant stems. Some weeds form a rosette of leaves, which stay nearly flat on the ground. As the plant matures, a seed stalk seems to shoot up overnight. Some weeds infest areas where moisture collects; others thrive in dry soil situations.

For identification, notice the general growth habit—upright, a rosette of leaves, a mat-forming growth, or a vine. Growth habit may vary as to location. In mowed areas, weeds will adapt to a low, flat growing habit. In cultivated gardens, the same weed will be almost upright and appear as a different plant. The dandelion is one example. Weeds in fertilized areas grow more profusely and much larger than

those along roadsides.

Grasslike-leaf weeds come first in this bulletin (pp. 3-5). Then come those with dissected, or cut, and divided leaves. Usually the leaves are of 3 to 5 parts or lobes, joined in one true leaf. Poison ivy through black medic are weeds with such a leaf form (pp.5-6). Dandelion through shepherd's purse have entire leaves in a base rosette or clump (pp.7-8). Field bindweed is a twisting, climbing vine with single (entire) leaves (p. 8). Ground ivy through common purslane are weeds or escaped ornamentals, having leaves usually less than an inch long and tending to grow as clumps or mats (pp. 9-12). Curly dock through yellow rocket grow thick, upright stems; leaves are 1 to 10 inches long (pp.12-14). Japanese bamboo grows to shrub proportions (p. 14).

When gathering a weed for identification, note its general growth habit, location, and leaf form. Be sure you know poison ivy BEFORE you collect any plant material.

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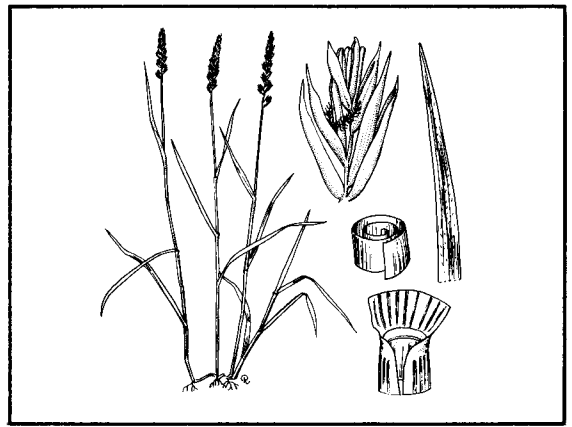
## Terms Used

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- Creeping.** A trailing shoot that takes root throughout its length  
**Crown.** The junction of stem and root of a plant  
**Garden.** Any vegetable or landscape nonlawn area  
**Lawn.** A predominantly mowed grass area  
**Prostrate.** Lying flat upon the ground  
**Rhizome.** Underground stem, *rootstock*  
**Rootstock.** Underground stem, *rhizome*  
**Runner.** A slender trailing stem taking root at the nodes  
**Sap.** The juice of a plant  
**Taproot.** One with a stout tapering body, usually vertical  
**Turf.** Grass area  
**Vine.** Any plant whose stem requires support  
**Weed.** Any plant growing where it is not wanted

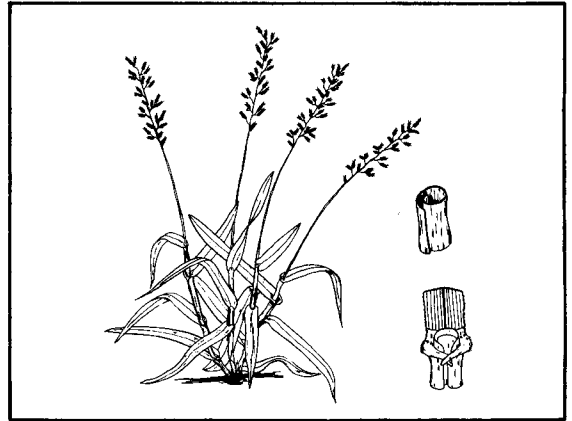
**Quackgrass, couch grass, witchgrass (*Agropyron repens*)**

An upright perennial, spread by seeds and creeping, jointed underground rhizomes, which have fibrous roots and can send up shoots at every node. It is common in gardens where it is easily spread by moving soil and cultivating, but can occur in lawns. Quackgrass in lawns can be pulled out or spot-treated with a grass killer.



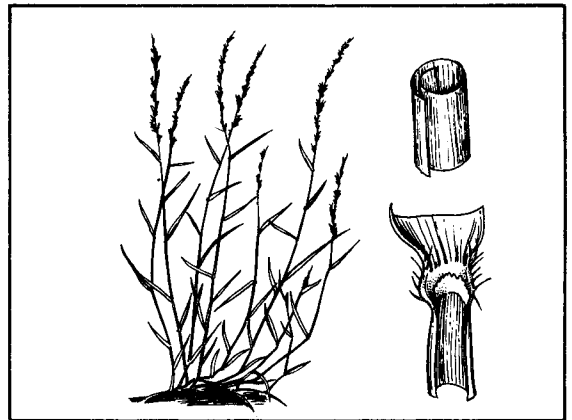
**Tall fescue, meadow fescue (*Festuca arundinacea*)**

An undesirable perennial grass in lawns because of its tall, coarse growth. It usually is spread by seeds mixed in grass mixtures.



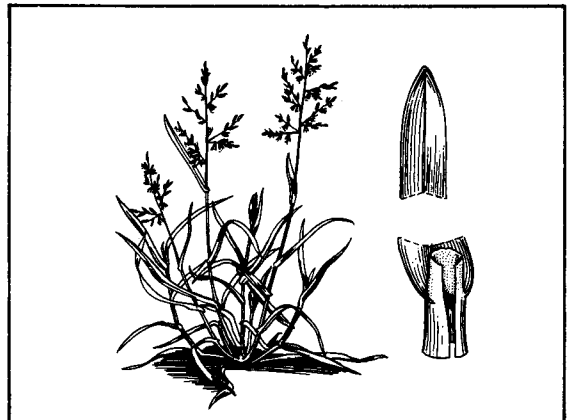
**Nimblewill, wire grass (*Muhlenbergia schreberi*)**

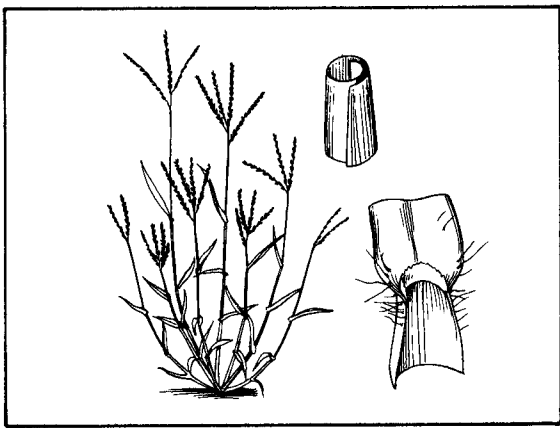
A thin, much-branched, vigorous perennial grass, rooting at the lower nodes. It has short, gray green leaves on wiry stems. It occurs in lawns and shrub borders and grows 1-2½ feet high.



**Annual bluegrass, spear grass (*Poa annua*)**

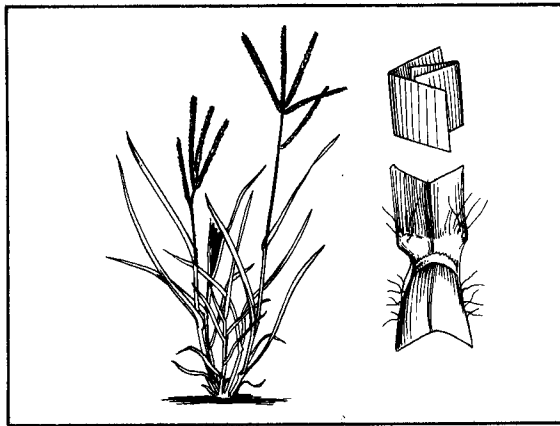
A common winter-annual weed, spread by seeds and growing in tufts 4-8 inches high. It has soft, apple-green leaves, but the many seed heads are hard to cut with a dull mower. It grows best in cool, moist weather.





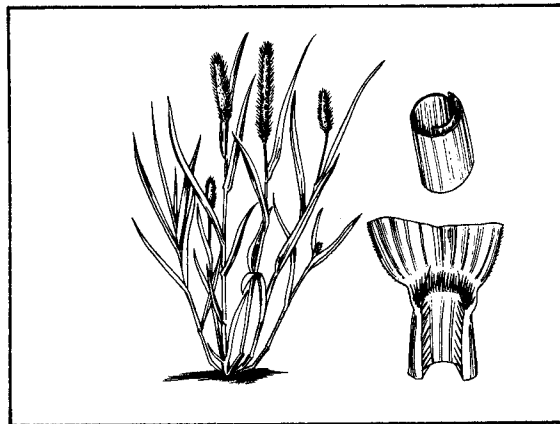
**Smooth crabgrass**, small crabgrass (*Digitaria ischaemum*)

Smooth crabgrass and the similar HAIRY CRABGRASS are the most common summer-annual weeds in lawns. They germinate in the spring about the time *Forsythia* finishes flowering and are killed by the first frost. The large, crab-shaped, much-branched plants root at the lower nodes; as a result pulling is difficult. Chemical control is best carried out with preemergent sprays.



**Goosegrass**, silver crabgrass (*Eleusine indica*)

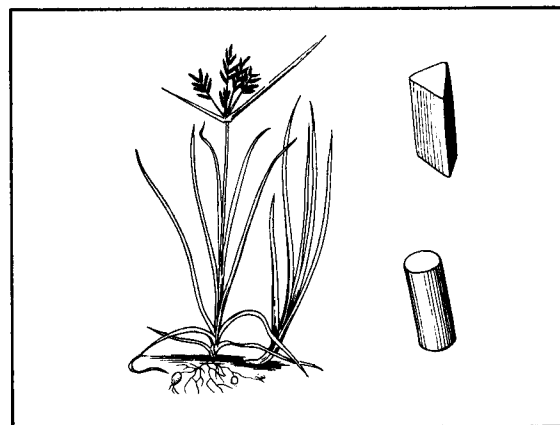
An annual grass, found in lawn areas where the soil is compacted and along walks. The stems are flattened, silvery at the base, and grow close to the ground like crabgrass. Goosegrass germinates about a month later than crabgrass.



**Yellow foxtail** (*Setaria glauca*)

**Green foxtail** (*Setaria viridis*)

Summer-annual weeds of cultivated areas, growing in branched tufts 1 to 4 feet high. They may appear in newly seeded lawns, but die with the first frost and are not a problem in an established lawn.



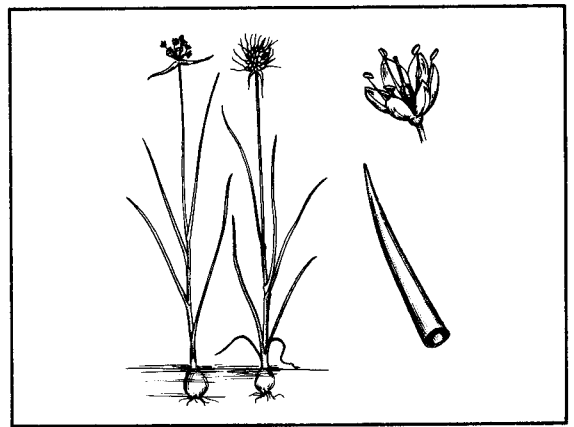
**Yellow nutsedge**, nutgrass (*Cyperus esculentus*)

A grasslike perennial, spread by seeds and tubers. It is easily spread to lawn and garden areas by moving infested topsoil. Nutgrass has yellow green leaves and grows 1 to 3 feet high. The nutlike tubers can remain dormant in the soil for several years; this makes control difficult.

**Wild garlic** (*Allium vineale*)

**Wild onion** (*Allium canadense*)

Perennials, propagated by bulbs and bulblets, rarely by seed. They form tall clumps early in the spring before grass is cut. Onions have hollow, round stems with bulbs covered with a fibrous membrane. The underground bulbs can remain dormant for several years; this makes control difficult.



**Poison ivy** (*Rhus radicans*)

A well-known poisonous, woody perennial, reproducing by seeds and creeping rootstocks. It grows as a shrub or a vine, climbing over trees and walls. The leaf form is variable and may be smooth or toothed. All plant parts contain the poison that causes skin blistering.



**Goutweed** (*Aegopodium podagraria*)

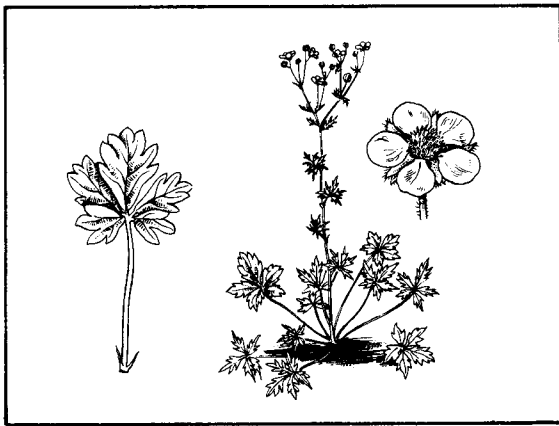
A vigorous perennial vine, spread by seeds and new shoots, which develop from the creeping rhizomes. This is a difficult weed to control in landscape plantings. Variegated forms have been used as ground covers, but soon grow out of control.



**Wild carrot, Queens Anne's lace** (*Daucus carota*)

A common roadside biennial, which can invade new lawns by seed, but does not survive in well-managed lawns or gardens.

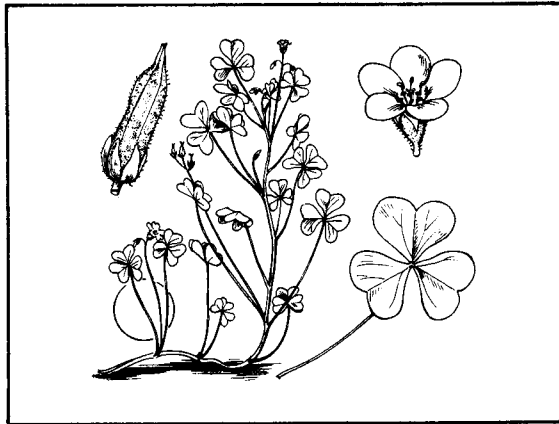




**Silvery cinquefoil** (*Potentilla argentea*)

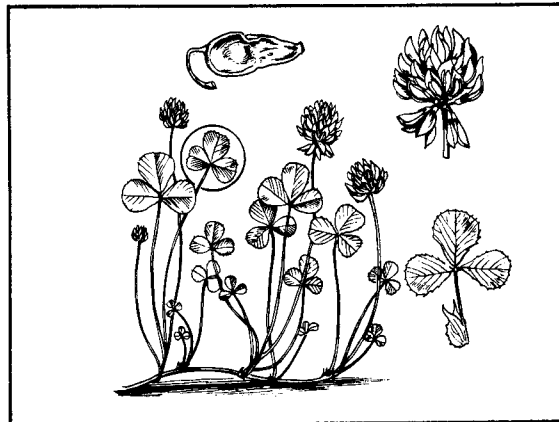
Common cinquefoil (*P. canadensis*) has larger leaves, which are not silvery underneath.

A perennial lawn weed in dry gravelly soils, spread by seeds. The plant resembles a wild strawberry with 5 leaflets, but has yellow flowers.



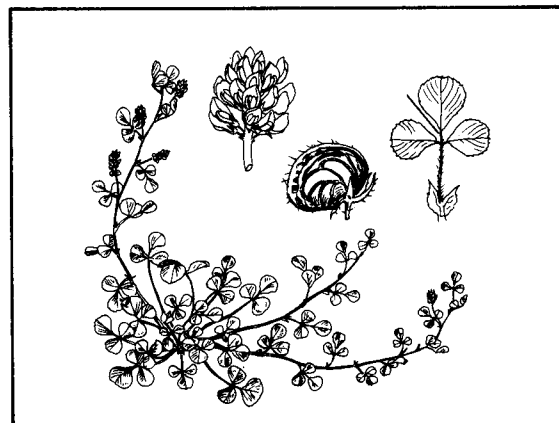
**Yellow wood sorrel, sourgrass** (*Oxalis stricta*)

An annual lawn or garden weed, spread by seeds shot from the elongated seed pods when ripe. Leaves resemble clover leaves.



**White clover** (*Trifolium repens*)

A perennial lawn weed, spread by seeds and creeping stems. White clover is desirable because of drought and insect resistance and the ability to fix its own nitrogen. Some deem it undesirable because of its texture and slow start in the spring. Leaves stain clothing, and the flowers attract bees, which are a danger to barefoot children and others allergic to bee stings.



**Black medic** (*Medicago lupulina*)

An annual or winter annual, spread by seeds. The stems are prostrate and branching, forming dense mats. Usually black medic is not competitive for any length of time in a well-cared-for lawn.



**Common dandelion (*Taraxacum officinale*)**

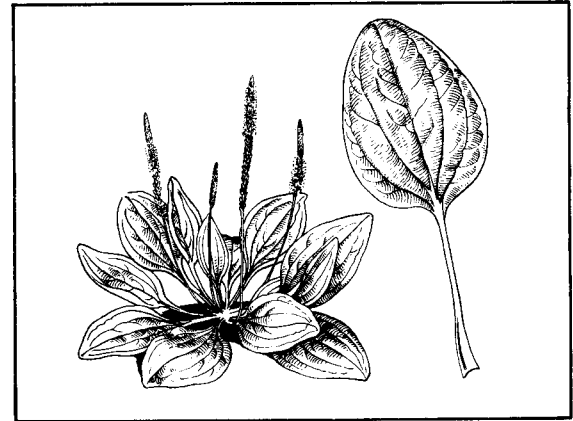
One of the most common perennial lawn weeds, spread by seeds, which are blown considerable distances. Any part of the deep fleshy taproot can regenerate a new plant; thus, mechanical removal is difficult. Dandelion is easily controlled by chemicals.



**Broadleaved plantain (*Plantago major*)**

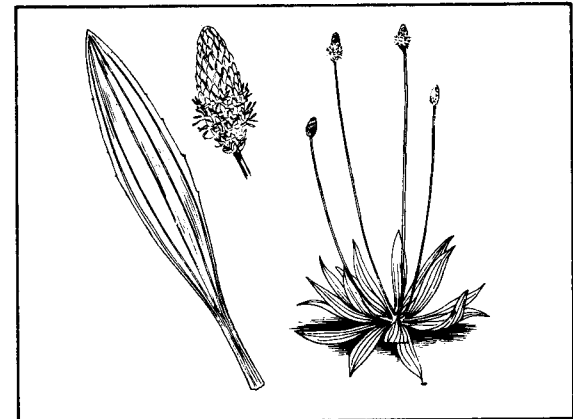
*Plantago rugelii*, called black-seeded plantain, is as common as and similar to *P. major*.

Both are perennial, spread mostly by seeds from wiry spikes. New shoots grow from the roots.



**Buckhorn plantain, narrow-leaved plantain (*Plantago lanceolata*)**

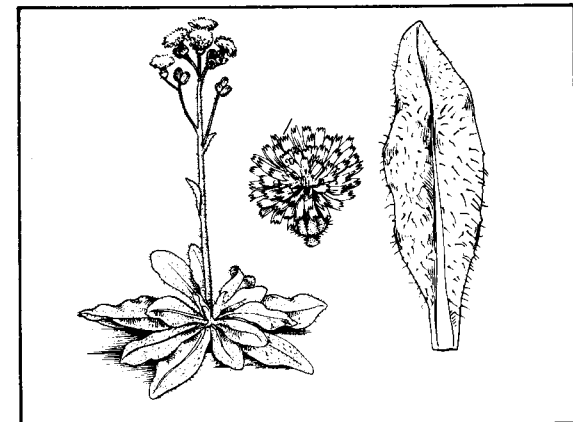
A perennial spread by the many seeds on the wiry stalks and new shoots from the thick, fleshy roots. Numerous lateral shoots make it difficult to remove. Seeds are spread by lawnmowers and wet shoes.

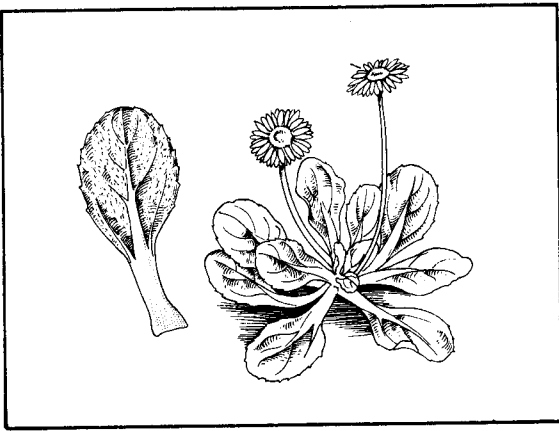


**Orange hawkweed, orange paintbrush (*Hieracium aurantiacum*)**

**Yellow hawkweed (*H. pratense*)**

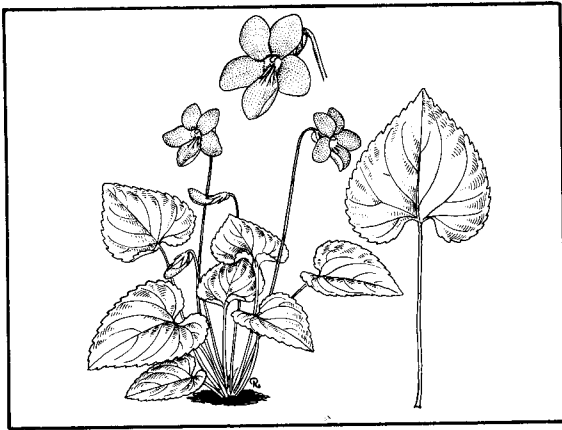
Perennials on infertile soils, spread by seeds and runners. Good lawn management will control the weed by making it more susceptible to chemicals through competition with desirable grasses.





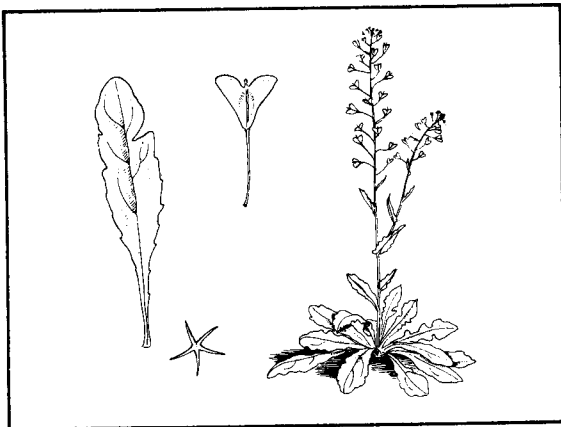
**English daisy (*Bellis perennis*)**

A low growing perennial, introduced from Europe, which thrives in moist soil or damp locations. English daisy can be spread by seeds mixed with lawn seed.



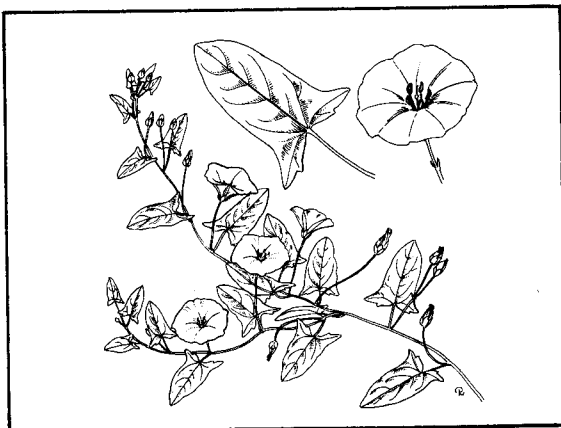
**English violet (*Viola odorata*); also other violets**

Escaped ornamentals, spread by seeds and runners.



**Shepherd's purse (*Capsella bursa-pastoris*)**

A summer or winter annual, spread by seeds. It usually grows on open ground and not in a reasonably dense turf.

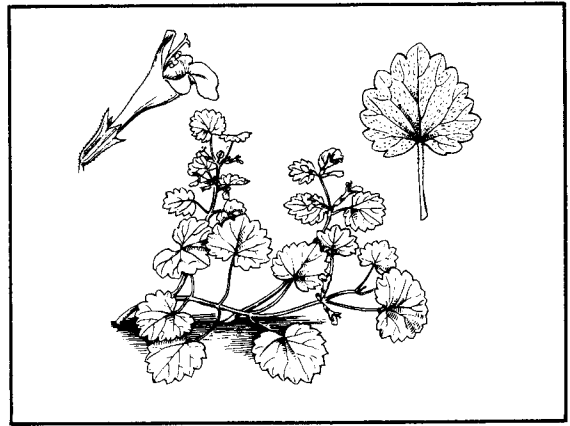


**Field bindweed (*Convolvulus arvensis*)**

A perennial, reproducing by seeds or vigorous creeping roots. This vigorous twining vine grows over the soil surface or plants. It is difficult to remove mechanically. The flowers look like morning glory.

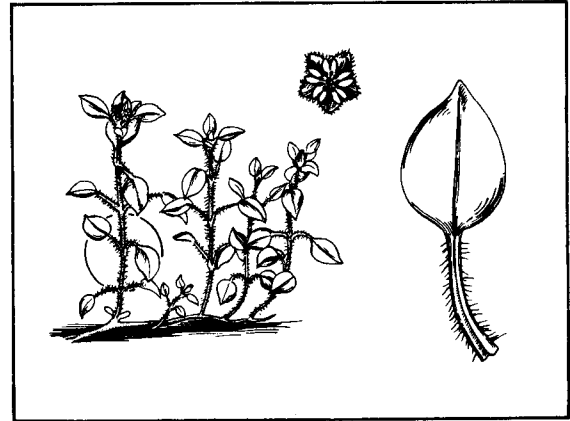
**Ground ivy, creeping charlie (*Glechoma hederacea*)**

A common, creeping perennial lawn weed, spread by seeds and the stems, which root at the joints. It forms dense patches in sun or shade. This square-stemmed mint has small, blue purple flowers. The nearly round, scalloped leaves are heavily veined and rough on the upper surface.



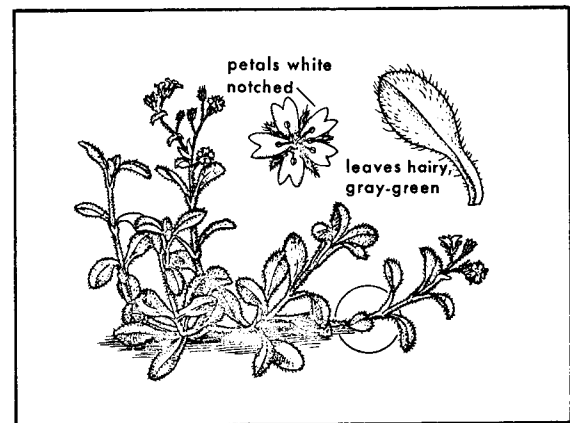
**Common chickweed (*Stellaria media*)**

A winter annual or summer annual, spread by seeds and creeping stems. The plant thrives in cool weather.



**Mouse-ear chickweed (*Cerastium vulgatum*)**

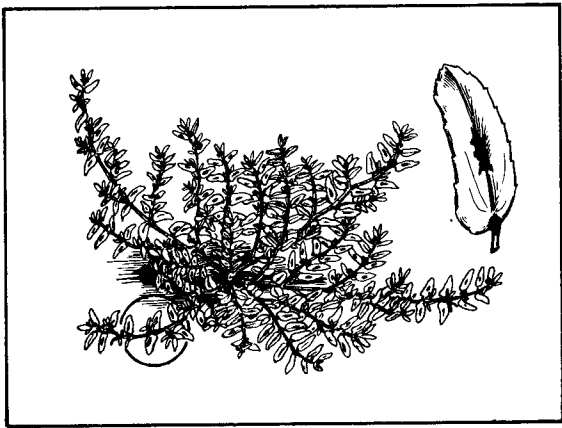
A perennial, spread by seeds and creeping stems. The hairy, dark-green leaves are shaped like mouse ears. Chickweed forms dense mats, which can smother grass in lawns.



**Prostrate knotweed (*Polygonum aviculare*)**

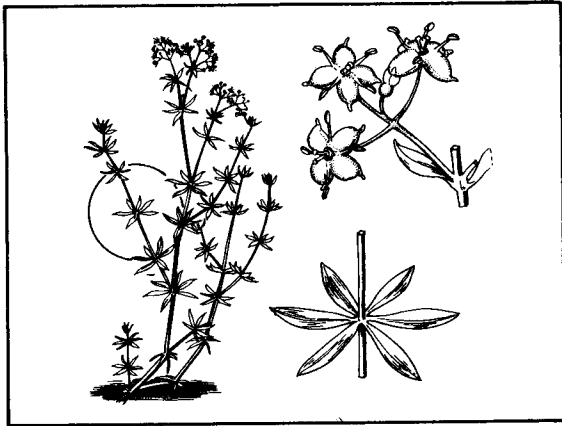
A gray green summer annual, propagated by seed and thriving on compacted soil. Young plants look like grass when mowed. By midsummer the wiry stems can cover large areas of well-trampled turf areas. It is killed by frost and turns reddish.





**Prostrate spurge** (*Euphorbia supina*)

A small-leaved summer annual, spread by seeds and growing in well-fertilized or poor lawns, forming a mat that covers the grass. The leaves are dark green to purplish, often with a purple spot on the upper surface. The sap is milky.



**Smooth bedstraw** (*Galium mollugo*)

A perennial, spread by seeds and rootstocks. Leaves are in whorls on square stems.



**Heal-all** (*Prunella vulgaris*)

A perennial mint with square stems and purplish flowers. Heal-all spreads rapidly by seeds and rootstocks. The plants form dense, oval-shaped mats of foliage.

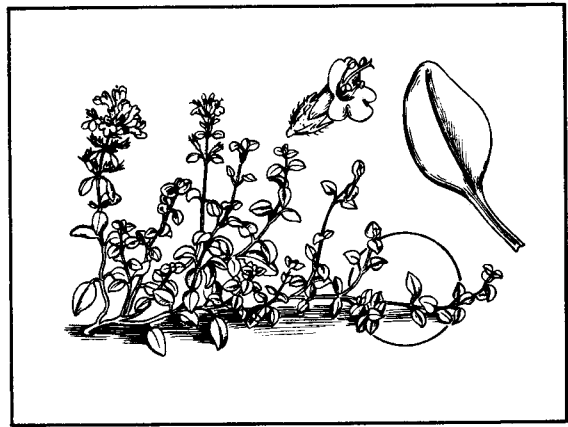


**Red sorrel, sheep sorrel** (*Rumex acetosella*)

A perennial, spread by seeds and rootstocks in lawns and gardens. It is competitive in acid, low-nutrient soils. Plants flower in the spring. The name red sorrel derives from the reddish brown female flowers and the sour taste of the leaves.

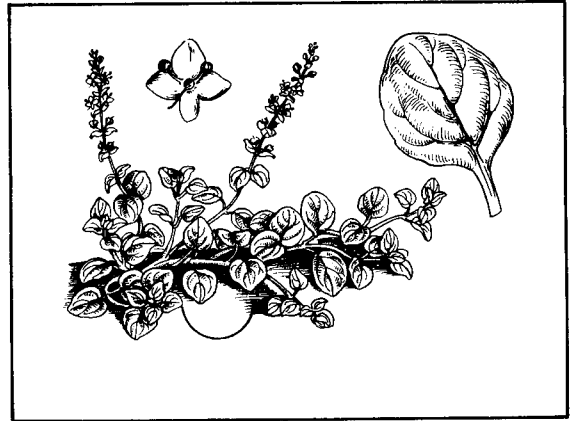
**Creeping thyme (*Thymus serpyllum*)**

A fragrant perennial, spread by seeds and creeping stems. The plant is an attractive rock garden plant. It becomes a nuisance in dry or limestone soils.



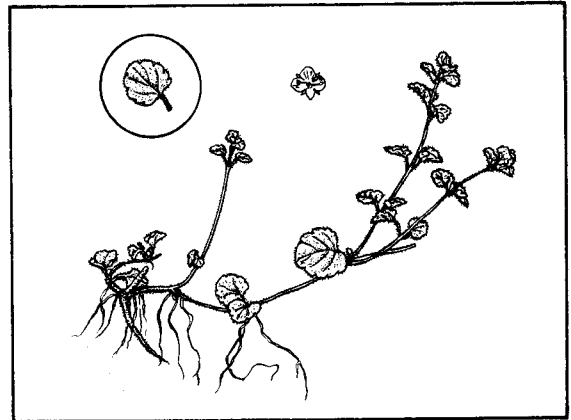
**Thyme-leaved speedwell (*Veronica serpyllifolia*)**

A perennial, spread by creeping stems. Speedwell forms dense, grass-free patches, which thrive under turf maintenance conditions.



**Creeping speedwell (*Veronica filiformis*)**

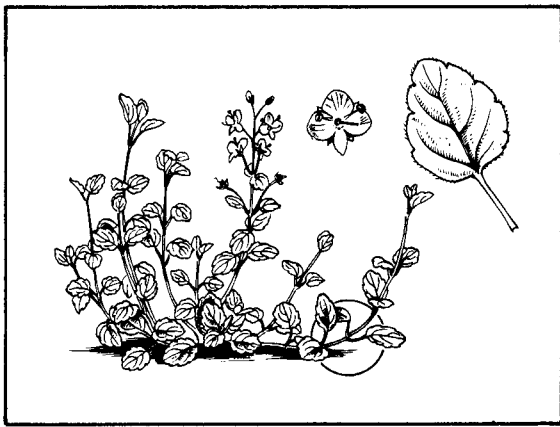
A tiny-leaved, creeping, perennial lawn weed, spread only by creeping stems. Stems cut by lawn mowing spread and root quickly. It is difficult to control.



**Common speedwell (*Veronica officinalis*)**

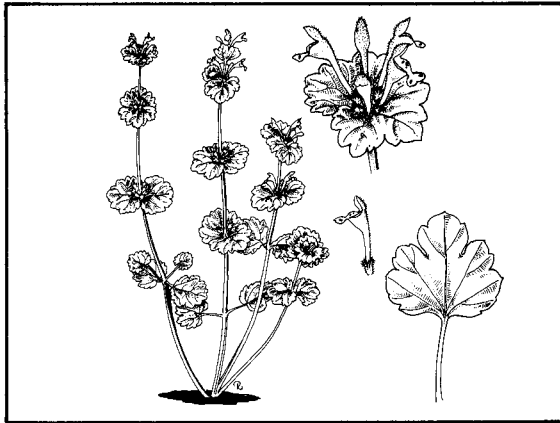
A perennial, spread by seeds and creeping stems. Survival is better in abandoned fields than in well-maintained lawns where it rarely lasts long.





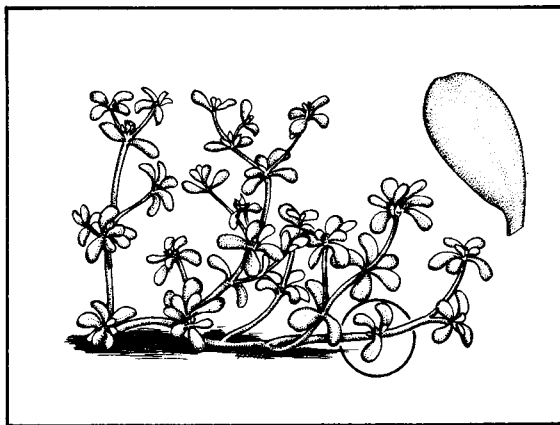
**Birds-eye speedwell** (*Veronica persica*)

A cool season or winter annual, spread by seeds. It looks like creeping speedwell and requires similar control measures.



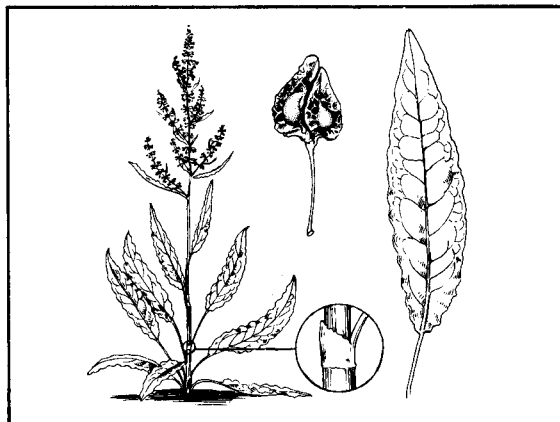
**Henbit** (*Lamium amplexicaule*)

A widespread, winter-annual or biennial, garden and landscape weed. It spreads by seeds and rooting stems.



**Common purslane** (*Portulaca oleracea*)

A fleshy leaved summer annual of gardens, spread by seed and rooting stems. It can be a weed in lawns newly seeded in spring or summer. Red stems are distinctive. It is an escaped vegetable.

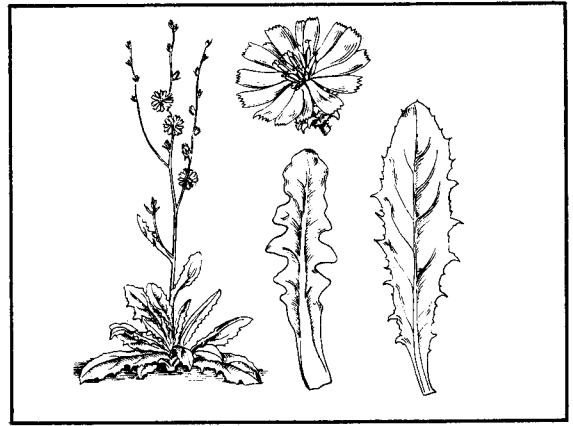


**Curly dock** (*Rumex crispus*)

A perennial with a deep taproot, spread mostly by seeds. It occurs in gardens and occasionally in lawns.

**Chicory (*Cichorium intybus*)**

An occasional, roadside, perennial weed, propagating by seeds and roots. The dried roots are ground and used as a coffee supplement or substitute.



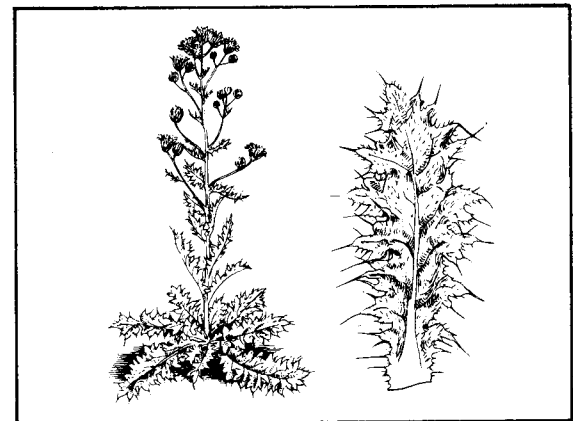
**Mugwort, chrysanthemum weed (*Artemisia vulgaris*)**

A common, garden and lawn, perennial weed, spread by rootstocks and rarely by seeds. This persistent weed has been dispersed by moving soil and ornamental plants with soil balls.



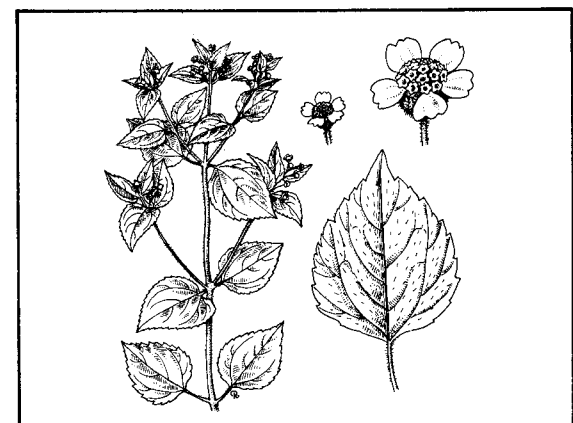
**Canada thistle (*Cirsium arvense*)**

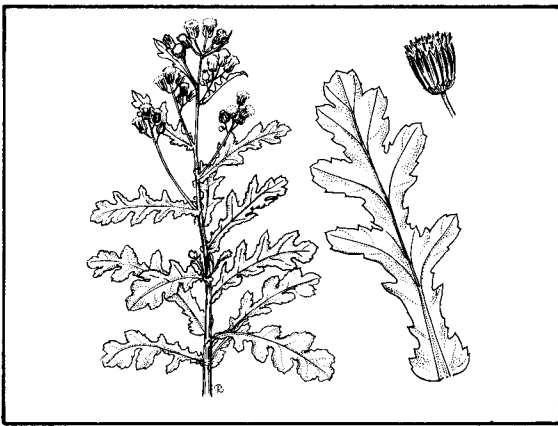
An obnoxious perennial, spread by seeds and creeping roots. It has prickly, gray green leaves. It is one of the most serious farm weeds and should not be allowed to become established in a garden. In the rosette state, it is a lawn weed.



**Small flower Galinsoga (*Galinsoga parviflora*)**

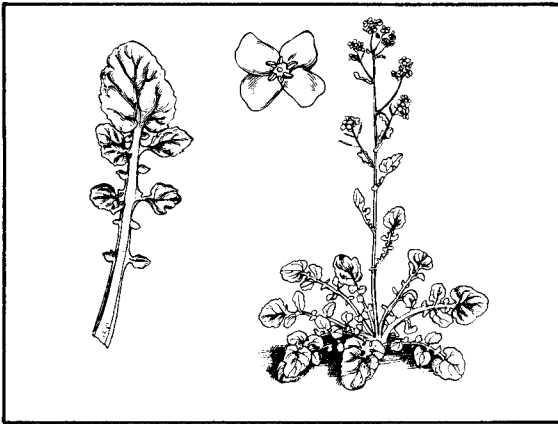
Hairy Galinsoga (*G. ciliata*) is very similar.  
Common annual garden weeds, spread by seeds and partially by rooting stems. Keep Galinsoga under control by cultivation.





**Common groundsel** (*Senecio vulgaris*)

A common, annual or winter-annual, garden weed, spread by seeds.



**Yellow rocket** (*Barbarea vulgaris*)

A "mustard", common in grain fields. The bright-yellow flowers show in midsummer. The rosette form is found in gardens, but usually does not persist in lawns. This perennial or biennial is mainly spread by seeds, but sometimes by new shoots from old crowns.



**Japanese knotweed, Japanese bamboo**  
(*Polygonum cuspidatum*)

A perennial, reproducing by long, stout rhizomes and also by seeds. Plants grow 3 to 9 feet tall. This coarse, vigorous escaped ornamental is found on roadsides and other waste places. Control is difficult. Its rampant growth has made it undesirable.

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