

COLTSFOOT

(Tussilago farfara)

SEEDLING DESCRIPTION

Coltsfoot usually emerges from overwintering root buds rather than from seed. The first shoots to appear from these buds are the flower stems, which are red, about 1/4 inch (3 mm) thick and shaped somewhat like small asparagus spears. They grow 3 to 12 inches (7.5 to 30 cm) tall and are covered with erect, alternately arranged pink scales and loose cottony fluff. Leaf stems, which emerge only after the flowers mature, are woolly and about the

same size as the flower stems, but they lack scales. The round or heart-shaped young leaves have coarsely toothed margins, a white woolly underside, and a smooth green upper surface.

BIOLOGY

Coltsfoot is a low-growing, succulent perennial in the Compositae, or Daisy, family. It reproduces by seed and by its horizontally spreading white roots. Coltsfoot flowers are among the earliest to appear in

the spring. They emerge long before the leaves, sometimes blooming in February, and rarely later than April. The bright yellow blossoms resemble dandelion flowers but are flatter and smaller (about 1 inch or 2.5 cm across).

1. Coltsfoot flowers emerge in early spring.
2. Flowers go to seed as leaves emerge.
3. The perennial roots are difficult to eradicate.
4. Distinctive leaves may measure 8" across.
5. Coltsfoot often covers roadside embankments.



Like dandelion, coltsfoot flowers turn into a fluffy white ball when the seeds mature. Each seed is attached to a parachute-like "pappus," which spreads the seeds wherever the wind blows. The seeds are about 1/8 inch long, glossy yellow or reddish-brown, cylindrical, and have many vertical ribs.

Leaf stems emerge in clumps, often after the flowers dry up. Each stem arises from a separate root bud and grows to 12 inches (30 cm) tall. Because the flowers and leaves seldom appear together, people often do not realize that the early yellow flowers and the later large green leaves belong to the same plant.

A single leaf grows from each stem. The leaves are 4 to 8 inches (10 to 20 cm) across, have large-toothed margins, and are round or slightly heart-shaped, somewhat in the form of a colt's foot. The upper surface of the leaves is a smooth sea-green. The lower surface is covered with soft, white, woolly fibers and veins that radiate like the fingers of an outstretched hand (palmate veins).

Coltsfoot reproduces mainly by its perennial root system, which forms an extensive underground network. The white roots are about the diameter of a pencil and spread laterally for several feet. Root-buds are specialized to produce either flower or leaf stems in the spring.

SIMILAR SPECIES

Although coltsfoot flowers resemble dandelion blossoms, the two plants are easily distinguished by their stems. Coltsfoot has red scales along its flower stems, while dandelion flower stems are completely smooth. In addition, dandelion flowers always emerge from a rosette of leaves, whereas coltsfoot blooms before any of its leaves emerge. The leaves of the two plants are entirely different. Coltsfoot has rounded, heart-shaped leaves, and dandelion has long, coarsely toothed leaves.

NATURAL HISTORY

Originally a European plant, coltsfoot arrived in North America with the early New England settlers. It now grows from Quebec to Minnesota, and south to Pennsylvania and Ohio.

Coltsfoot prefers cool, damp clay soil but can also grow in full sun. It grows along stream banks and dirt roads, on shaley cliffs and waste places, and it seems to thrive around dumps and landfills where little other vegetation can survive. Because of its perennial root sys-

tem, coltsfoot can spread over large areas of ground, often covering whole roadside banks with a thick mat of leafy growth. Such growth is very useful in preventing soil erosion, but it can be a nuisance if the weed becomes established in a perennial garden.

Gardeners may accidentally introduce coltsfoot to their plots when the soil that accompanies transplanted material contains bits of coltsfoot root. Some people plant coltsfoot on purpose, knowing it to be a useful herb. Those who wish to grow coltsfoot in an herb garden would be wise to confine it to its own pot.

Coltsfoot has been used for more than 2,000 years as a treatment for throat and lung ailments, including bronchitis, asthma, and chronic cough. The leaves are either smoked or made into a syrup or tea, and make such an effective medicine that the coltsfoot flower design has been used to advertise apothecary shops and pharmacies. In France, some druggists paint coltsfoot leaves on their front doors.

To make medicine from coltsfoot, plants should be gathered from an area that has not been sprayed with herbicides. The flower heads should be picked as soon as they open; the leaves, when they are fully mature in June or July. Syrup and candied cough drops are made by boiling 1 ounce of fresh leaves in 1 quart of water until the liquid is reduced to 1 cup. Strain, add 2 cups of sugar or honey, boil, bottle, and cap. To make cough drops, boil the above mixture to the hard ball stage (250°F or 121°C on a candy thermometer). Pour into a small pan lined with waxed paper, score into small squares, and allow to harden. Then crack the pieces apart and roll them in powdered slippery elm bark.

A soothing tea is made by simmering 2 ounces of dried leaves and flowers in 1 quart of water for fifteen minutes and then straining the liquid through a cheesecloth. The tea also acts as an astringent and may be used on the skin to treat inflammations, insect bites, ulcers, and burns.

The dried leaves may be crumbled, picked clean of stem pieces, and smoked to relieve asthma. Pliny, a Greco-Roman naturalist of the first century A.D., described one procedure that involved sipping wine between inhalations of smoke. While this additional treatment may help the patient relax, its effects should not be confused with those of coltsfoot. Some British herbal smoking mixtures use coltsfoot as a base. However, modern medical opinion considers smoke

of any sort a pollutant to the lungs, perhaps harmful enough to offset any possible benefit. A safer method of administering plant extracts is to inhale them in a cool vapor mist.

In the past, fluff from the underside of coltsfoot leaves was collected and used as tinder and for mattress stuffing. The leaves, dried and slowly burned to ash, can be used as a seasoning.

The common name *coltsfoot* derives from the shape of the leaf. The genus name *Tussilago* is of Latin origin and means "cough dispeller."

Coltsfoot is also called son-before-father (because its flowers bloom before its leaves appear), horsehoof, clayweed, dove dock, and ginger root.

CONTROL

Coltsfoot can usually be controlled by mechanical or cultural means. Clean cultivation normally eliminates coltsfoot, and good soil drainage discourages its growth since the weed grows especially well in wet soil. Where cultivation is not possible, as in a perennial flower garden or on rocky soil, spot treatment with a systemic herbicide is effective. Application should be made in late summer, when leaves are mature and actively translocating nutrients to the roots for winter storage. The entire leaf surface should be covered with the herbicide. Retreatment may be necessary, either later in the season if the leaves recover or the following summer if regrowth appears. A cardboard shield placed around coltsfoot during spray application protects desirable plants from herbicide damage.

For specific recommendations, consult your county Extension agent or the most recent *Weed Control Manual and Herbicide Guide*, available through Meister Publishing Company, 37841 Euclid Avenue, Willoughby, Ohio 44094. Follow label instructions for all herbicides and observe restrictions on grazing and harvesting procedures.

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