

COMMON DANDELION

(Taraxacum officinale)

SEEDLING DESCRIPTION

Common dandelion seedlings emerge in early spring in lawns, pastures, gardens, and waste areas. The stem below the seed leaves (hypocotyl) is smooth, light green to white, and so short as to be barely noticeable. It does not elongate and seems to

disappear as the plant matures.

Seed leaves (cotyledons) are oval or spoon-shaped, about $\frac{1}{16}$ inch (5 mm) long, and yellow-green. The lower surface is slightly paler than the upper surface, and the margins are perfectly smooth.

The first true leaf is round to oval and about $\frac{3}{8}$ inch (1 cm) long. Margins have a few very small teeth that point back toward the base of the leaf. The midvein is prominent on the lower surface. Later leaves are more elongated and soon assume the toothed margins and rosette arrangement typical of the mature plant.



1. True seedlings showing cotyledons.
2. Young plant emerged from a rootstock; note absence of seed leaves.
3. Leaves become more toothed as the plant matures.
4. Composite flower head.
5. Mature seed head.
6. A healthy stand of dandelion.



main stem never elongates, they form a rosette at the soil surface. The leaves are divided into toothlike lobes that point back toward the base.

Dandelions flower in spring and fall, when day length is less than twelve hours, or in summer if there is sufficient shade. Most plants have several flower heads, each one carried separately on a long, bare, hollow stem (scape) that secretes a thick white juice when broken. Each flower head is a bright yellow tuft that appears as a single flower measuring $\frac{3}{4}$ to $1\frac{1}{2}$ inch (2 to 4 cm) across. One dandelion flower head may have 100 to 300 "petals," and each one is actually a complete flower. This type of flower — a compact mass of many petallike flowers — is called a "composite." While bees find the flowers a favorite source of food, these insects do not pollinate common dandelion. Rather, the seeds develop apomictically — without being fertilized. In fact, most of the pollen grains are infertile.

The flower bud develops on a short stem near the ground for about one week. Then the stem quickly elongates, lifting the bud above the leaves. The flower opens early in the morning and closes the same evening. The stem droops and the closed head rests near the ground for several days while the seeds mature. The stem straightens again and the flower reopens as the familiar fluffy white ball of "parachutes." These are actually individual seeds, each with an attached cluster of hairs called a "pappus." The pappus breaks off easily and, with the seed still attached, is carried away by the breeze.

Common dandelion also propagates by its fleshy taproot. When the taproot is broken, each remaining piece can send up from two to five new shoots.

Common dandelion can survive in almost any climate and at elevations ranging from sea level to 12,000 feet.

SIMILAR SPECIES

Spotted catsear (*Hypochaeris radicata*), also called false dandelion, is a common lawn weed in the northwestern United

a tall, leaf-covered stalk from the middle of its rosette, while dandelion does not. By the time chicory blossoms, its bright blue flowers leave no doubt that it is not a dandelion.

Coltsfoot (*Tussilago farfara*) produces a flower much like that of dandelion, except that its flower stem has reddish scales, while dandelion has a perfectly smooth stem. Coltsfoot blossoms in early spring before its leaves emerge. Leaves appear later and are large and round rather than long and narrow like dandelion leaves.

NATURAL HISTORY

A native of Eurasia, common dandelion was probably intentionally introduced to America for its nutritional and medicinal value. It is found worldwide except in the polar regions and the driest deserts. Mainly a problem in lawns or turf and in overgrazed pastures, it is difficult to control by mowing because of its extremely low growing habit. The jagged appearance of dandelion leaves has given this weed its common name, which derives from the French *dent de lion*, meaning "lion's tooth."

Dandelion is a heavy feeder, absorbing three times more iron than do other garden plants, as well as high amounts of copper and other nutrients. This absorption capacity makes dandelion very competitive in the garden but also makes the leaves a nutritious food for humans. Dandelion leaves contain more vitamin A than almost any other fruit or vegetable; they also have large amounts of iron, calcium, phosphorous, and potassium. The young greens are most tender in the spring and are tasty when cooked "sweet and sour" or served raw in a salad. The blossoms can be made into wine, and the roots, roasted and ground, are often used as a coffee substitute.

All parts of the plant have been used for medicinal purposes, especially as a tonic for various digestive disorders. The medicinal use is reflected in the species name, *officinale*, from the Latin *officina*, which means "laboratory."

growth. However, it is very difficult to get the whole root, especially if the plants are large or the ground is dry, and any portion left in the ground can sprout at least one new plant. Mowing the flower heads as soon as they open helps reduce seed formation.

If the problem is too pervasive to control by mechanical means, proper chemical treatment provides effective control. In lawns, the best choice for chemical control is 2,4-D, unless other weeds present are resistant to this herbicide. This is often true when dandelions are a problem in turf, in which case either MCPP or Dicamba may be used. Plants should not be watered for twenty four hours before or after treatment. The herbicide 2,4-D may also be used in non-legume pastures. Directions for time of application and grazing restrictions should be followed closely.

In small grain crops, MCPA and/or 2,4-D are recommended. Roundup may be applied in the fall or spring during a fallow period. In soybeans and perennial legume crops, metribuzin (Sencor or Lexone) may be used.

Hexazinone (Velpar) is recommended for perennial legume crops such as alfalfa and the clovers, but it is not approved for soybeans.

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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