

COMMON CHICKWEED

(*Stellaria media*)

SEEDLING DESCRIPTION

Common chickweed seedlings are light green or yellow-green. The hypocotyl (stem below the seed leaves) is smooth and slender, about $\frac{1}{8}$ inch (8 mm) long, and often lies flat soon after leaves begin to form. The two seed leaves (cotyledons) are smooth, oblong to lanceolate, and $\frac{1}{8}$ to $\frac{3}{8}$ inch (3 to 9 mm) long. Cotyledons are attached to the stem by leaf stalks (petioles) about $\frac{1}{8}$ inch long.

True leaves are arranged in opposite pairs and are only $\frac{1}{8}$ to $\frac{1}{2}$ inch long. They are broadly oval or nearly round and have a rounded base and pointed tip. The leaves have smooth, bright green surfaces and are attached by a slightly hairy petiole.

BIOLOGY

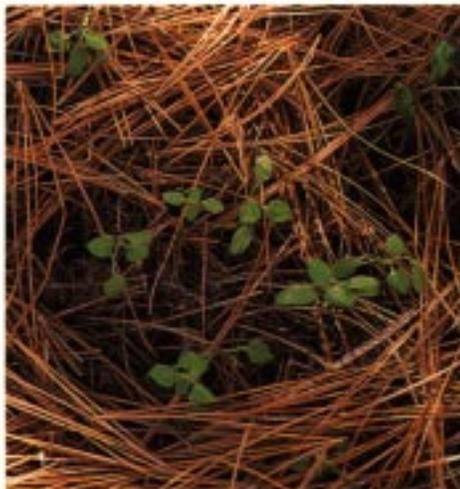
Technically, common chickweed is an annual, but it tolerates cold weather so well that it can survive winter in mild climates. A member of the Pink or Carnation family (Caryophyllaceae), it is related to some of our prettiest wildflowers. It has a shallow, fibrous root system, reproduces by seed, and grows in a thick, springy mat as its stems spread over the ground and form roots at the nodes.

Stems grow 3 to 15 inches (8 to 38 cm) long and are widely branched. The stems are limp and prostrate or only slightly erect, so chickweed must lean on other plants for support. A single line of white hairs grows along the stem. The line is not continuous, but alternates between nodes

from one side of the stem to the other.

Mature leaves grow about $\frac{1}{2}$ inch (12 mm) long. Leaf surfaces are smooth and their margins may be hairless or may have a few scattered hairs. At night, each pair of leaves closes up around the stem, the last set folding up around the growing tip of the shoot.

Flowers form on long stalks that emerge from leaf axils, either singly or in clusters called cymes, in which the central flower opens first. Although the delicate white flowers are only $\frac{1}{4}$ inch (6 mm) across, their starburst shape is conspicuous against the bright green leaves. Flowers consist of five petals so deeply indented that they appear as ten. They last for one day and open fully only under sunny skies.



1. Seedlings emerge during cool weather.
2. Leaves are smooth, stems are hairy.
3. Note single line of hairs along stem.
4. Chickweed provides a loosely matted ground cover.
5. Flowers have 5 deeply notched petals.



Some flowers lack petals; the central parts are surrounded only by five green leaflike sepals.

Each plant produces 2,500 to 15,000 seeds. The seeds are less than $\frac{1}{16}$ inch (1 mm) long, and dull red or dark brown. They ripen five to seven weeks after the parent plant germinates. Seeds that ripen in warm weather are not dormant and can sprout immediately. Those that ripen in cold weather must wait until the following spring, when alternating temperatures break their dormancy. Seeds may remain viable in soil for up to ten years.

Seeds germinate best when very close to the soil surface, and not at all when below $\frac{3}{4}$ inch (2 cm) deep. Although common chickweed grows most successfully in moist soil, its seeds can also sprout in dry soil.

SIMILAR SPECIES

Mouse-ear chickweed (*Cerastium vulgatum*) is similar to common chickweed in size and growth habit, but its leaves are dark grey-green, elongated rather than round, and densely covered with soft white hairs. Field chickweed (*C. arvense*) has very elongated leaves and lacks hairs entirely. Common chickweed can best be identified by its round, smooth, bright-green leaves, and the single line of short, erect, white hairs along its stem.

NATURAL HISTORY

Common chickweed is a native of Europe and is now found throughout the world. Quite adaptable to cold climates, it grows in Alaska, Iceland, near the Arctic Circle, and at high altitudes near the equator.

Anthropologists have discovered that early European civilizations used chickweed for food. Buried in acidic peat bogs since the 5th century A.D., the remains of some of these ancient people are so well preserved that the contents of their stomachs can be identified; their last meals included chickweed seeds.

Common chickweed grows vigorously in cold weather, surviving air temperatures as low as 14°F (-10°C) and, in mild climates, blooming all winter. It prefers shady, moist locations and rich, neutral soil, and produces luxuriant growth when soil nitrogen is plentiful. It occurs naturally in woodlands, meadows, and waste places. When introduced to such an area it can adapt quickly, but it needs disturbed ground to become established. It is a common weed under trees and shrubs, on cultivated land, and in gardens, lawns, alfalfa

fields, strawberry beds, and vineyards. Because of its ability to withstand cold temperatures, it often overwinters in orchards, small fruit crops, and nurseries, and may be well established by spring.

Common chickweed is a serious weed in cereal crops in Alaska and England. In the continental United States, it is a problem in alfalfa, pastures, gardens, and lawns, often spreading over turfgrass in large dense patches. It emerges at the same time as many vegetable seeds and often invades gardens, where it serves as an alternate host for beet yellows virus. Chickweed finds the perfect growing conditions in overwintering perennial crops, winter and spring cereals, and early planted crops such as peas, spinach, and onions. Weed seedlings emerge easily and grow fast in the cool wet weather of early spring, and are often well along when the soil is still too wet to cultivate for weed control.

Not everyone considers common chickweed an undesirable weed. In the Rhine Valley of Germany, many of the vineyards are planted on extremely steep slopes. Farmers plant chickweed on the slopes to hold soil in place, to conserve water, and to help keep soil temperature constant. Scandinavian orchardists encourage chickweed as a groundcover under their trees, believing that it brings better yields and higher quality fruit.

Common chickweed is an important food for wildlife. Because it flowers in cool weather, it provides seed for songbirds and gamebirds in early spring. The tender leaves are eaten by many mammals, from rabbits to mountain sheep, and by ground-feeding birds such as quail and doves.

Freshly washed chickweed leaves are an acceptable addition to salads. The plant also has some medicinal properties. Strained and cooled, chickweed tea makes a refreshing bath for tired eyes. Flavored with honey and lemon, the tea is a tonic for constipation. A poultice for abscesses is made by boiling several handfuls of fresh leaves in a small muslin bag for two minutes. The hot bag is then applied to the infection.

The common name of the weed refers to its use as a starter food for baby chicks and canaries. Its Latin name, *Stellaria*, means "starlike," referring to the shape of the flower, and *media* translates simply as "medium-sized." Other names are starweed, star chickweed, starwort, winterweed, satinflower, and tonguegrass.

CONTROL

Specific weeds may become a problem when the same crops are grown year after year on the same piece of ground. Practicing crop rotation disrupts the growth cycle of chickweed and helps to prevent its establishment. Rotating to crops that allow spring cultivation when the crop is still small is a good cultural control.

In gardens and row crops, clean cultivating early — when both vegetable and weed seedlings are small — is effective. This control method is especially important for crops that are extremely sensitive to competition when young, such as onions.

In small grains, with or without legumes, common chickweed can be controlled by applying a chemical herbicide post-emergence in fall or spring, up to the four-leaf stage of the small grain.

In established forages that include legumes, the best time to control chickweed is in fall when legumes are dormant and chickweed is still growing, or in early spring when legume regrowth is less than 2 inches (5 cm) tall.

In lawns, establishing and maintaining healthy sod is the best defense against chickweed. If chickweed becomes a widespread problem in turfgrass, it can be controlled by chemical herbicides. To rid a lawn of a few scattered plants, any soluble nitrogen fertilizer will do. Crushing the chickweed slightly by stepping on it and then sprinkling on a little fertilizer will burn the weed enough to kill it. Some grass tips may be burned in the process, but the grass will revive because its roots are perennial. The chemicals then wash down into the soil and fertilize the lawn.

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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