

PUBLISHED IN FEBRUARY, MARCH, APRIL, AUGUST AND SEPTEMBER BY O. M. SCOTT & SONS CO., MARYSVILLE, OHIO

February 1939

TWELFTH YEAR

Number 53

### CHICKWEED

HERE is one weed pest that makes double-trouble for lawn owners by virtue of its ability to live on poor as well as rich soil. Therefore it may be found thriving on a worn-out dooryard plot or in turf that has received excellent care.

In the latter case it is often believed that the Chickweed has invaded the area with almost overnight rapidity. Ripened or partially ripened seed may be found on the plant at any time. The seeds of this pest, being continuously produced, are always present in the soil. Chickweed is rapidly scattered by this constant seed production. Although very tiny, the seeds retain their ability to germinate for many years. One experimental station has found that these seeds sprouted after



COMMON CHICKWEED (Stellaria media) showing spreading habit

In reality its general appearance has blended so well into the existing grass that it has been spreading unnoticed for some time. In this fashion Chickweed becomes well established before steps are taken to eradicate it. having been buried ten years. Another state extension circular reports that the seed of Chickweed has been known to remain alive buried in the soil for thirty years before germinating. With these facts in mind it is easy to understand Lawn Care:

that most soils are contaminated with seed accumulated from the previous crops of this pest. It is not unlikely, then, that the "overnight invasion" gets underway in the lawn of the unsuspecting home owner whenever this army of seeds is given favorable conditions for germination. It goes without saying that Chickweed is a most persistent lawn pest.

#### Two Varieties

There are two varieties of Chickweed which occur most frequently in our lawns. One, known as Common Chickweed, is an annual, while the other, Mouse-ear Chickweed, is a perennial. Common Chickweed, known botanically as Stellaria media, is also called Starwort, Starweed and Tongue-grass. The "star" prefix undoubtedly is based on the shape of its tiny white flowers. The Mouse-ear variety, Cerastum vulgatum, is probably so called because of the hairy condition of its foliage. This abundance of minute hairs covering the surface of the leaves and stems imparts a gray color to the entire plant. The soft hair resembles the fuzz of a mouse's ear, hence the name.

The Common variety is a "winter annual." Most annual plants are winter killed, but this one starts out in autumn, lives throughout the winter and completes its life cycle during the following spring and summer when it produces seed and dies. Its dead, brown foliage is unsightly in fine turf at that time. In the fall the new seed germinates and the pest starts life anew. On the other hand the roots and foliage of Mouse-ear Chickweed remain alive for an indefinite period and normally produce seed every year except the first.

#### Distinguishing Characteristics

The color and shape of the leaves distinguish these two Chickweeds from one another. The annual has smooth, sometimes glossy leaves, light green in color. They are opposite and almost heart-shaped, usually being about one quarter of an inch across. The perennial has a dull gray-green color. Its leaves are also opposite, but lance-shaped with rounded tips. They are about one-half inch in length.

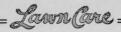


COMMON CHICKWEED

Note the heart-shaped leaves and dense mat

The blossoms of the two varieties are very similar. The tiny white, starshaped flowers have five petals set within a larger green star made up of the lance-like sepals. Actually these flowers are so small that they are almost insignificant. They both begin to flower very early in the spring, the annual blooming and producing seed right up to the time it dies. During hot midsummer the Mouse-ear variety rests from its profuse display of flowers, but blossoms out again at the first relief from the heat and continues to bloom into late fall and winter. The annual also continues to bloom and produce seed throughout the fall and winter even with snow on the ground.

Since they both belong to the Pink Family, they have many characteristics in common. Their creeping stems root at the joints as they spread out in all directions from the crown of the plant. The result is a close growing mat-like



formation that escapes the lawn mower and enjoys crowding out the grass. Both weeds grow in dense patches throughout the lawn and †f allowed to spread unmolested will form a solid turf 5 or 6 feet in diameter.

#### Control Measures

Due to the fact that neither of these weeds becomes dormant in cold weather, they may be successfully treated in late fall and winter without injuring the grass, which, being inactive, is less susceptible to treatment at this time. The same treatments are applicable to both varieties of Chickweed.

In any event it is good practice to prevent these plants from going to seed. This cultural method of control is carried out by raking up the prostrate stems before closely mowing the infested patches. Catch the clippings in the mower basket. Destroy the flowers and seed heads by burning them, otherwise they will mature and ripen even though removed from the plant.

Some greenkeepers stick by the old method of slashing an isolated patch of Chickweed in several directions with a sharp penknife. This cuts the spreading runners from the tap root and the plant is definitely discouraged. Following this simple operation, they reseed the spot to encourage a thick stand of grass in place of the weed.

When the ground is wet this pest may be pulled out easily as it has a relatively shallow root system. Carefully dig out the patches with a hoe or knife and reseed the spots. Do not allow pieces of the roots or stems to remain around the edges of the patches as this will permit the pest to completely reestablish itself. This method of control is tedious and should only be undertaken on small lawns where the plants are widely scattered.

Ammonium sulphate when dusted on the moist foliage burns this weed and at the same time serves as a source of nitrogen for the surrounding grass. For best results use ammonium sulphate or commercial fertilizer in the early morning when the dew causes it to cling to the foliage and the sun following completes the injury. If applied too heavily the grass blades might be burned considerably. This damage will only be temporary, however. Rake out the dead Chickweed and reseed the thin spots. Given time, the grass will usually fill in but the coverage is quicker if the spot is reseeded.

Another chemical control for Chickweed is to spray it with a dilute solution of iron sulphate. The best time to carry out such a treatment is in late October when the Common variety is just a seedling and especially susceptible to this chemical. Dissolve 1½ pounds of iron sulphate in one gallon of water. Apply only sufficient solution by means of a sprinkling can or spray pump to wet the foliage. For further information about the use of iron sulphate see Lawn Care issue Number 6 for August 1929 (revised).

A dilute solution of sodium chlorate applied to the Chickweed in somewhat the same manner is another method of control. Treated at monthly intervals during the winter the Chickweed is destroyed without the lawn grasses being killed. One ounce to a gallon of water is a sufficiently concentrated solution to do the trick. Detailed directions for the use of sodium chlorate will be found in the issue of Lawn Care Number 2 for September 1928 (revised).

With even less injury to the surrounding grass, calcium arsenate may be used to destroy Chickweed. This common insecticide, available in the form of a fine white powder, may usually be obtained at hardware and drug stores for approximately 25 cents per pound. By means of a perforated container this powder may be dusted on

the foliage while it is still moist with dew. The leaves of this weed turn brown and die while the chemical apparently has little or no effect on the intermixed grass blades. If properly applied this treatment may be made any time during the spring and fall. The following season it is well to feed the grass in the areas so treated with a complete grass food. This will tend to counteract any toxic effect the chemical may have had on the soil.

Lawn enthusiasts should look for Chickweed in their lawns at the earliest opportunity. The illustrations found on page one and two will help identify the pest. In case it is present any one of the above methods may be used to destroy it. Take steps now to keep the lawn on the weed-free side this season.

# Sow Early

The success of planting lawn seed in the spring quite frequently depends on giving it an early start.

The latter part of February or early March is usually a good time to take care of this spring seeding. Planted at this early date the grass is given a better chance to survive the heat and drouth of the approaching summer.

Plan to carry out this task while the soil is honeycombed with frost as suggested in Lawn Care for February 1937. This is before the surface soil thaws and becomes unfavorable to work on. To sow the seed on one of the last snows is also satisfactory As the snow melts the seed gradually settles into the soil without washing.

At this same time distribute a complete grass food. The freezing and thawing will allow this source of nourishment to move down to the roots in a natural manner. Early spring lawn feeding gives the established grass a head start over the weed pests which seem to react more slowly at that time of the year. It also promotes a stronger start for the seedling grass.

If this work is completed before frost is out of the ground it is not necessary to rake in the seed or fertilizer. Later on when the ground has thawed and the soil has dried at the surface, roll the lawn with a roller weighing not more than 100 pounds for each foot in width. The grass roots which have been heaved out of the soil during the winter will be gently pressed back in contact with the moist earth. Avoid rolling a lawn when the soil is saturated with water. That will tend to compact the clay so the roots will have difficulty in growing deeply. The shallow root system resulting will make the grass very susceptible to drouth injury.

## Chickweed Cures

"I had a large dose of Chickweed last fall from some topsoil that was used. I burned it with iron sulphate last fall; the pest disappeared and now the grass is better than ever. I can highly recommend iron sulphate for burning out Chickweed. There is nothing better or surer."—J. F. Ferguson 2735 South Cleveland Avenue, Philadelphia, Pennsylvania.

"It may interest you to know that a careful application of your Turf Builder kills chickweed and does not destroy the grass. No doubt you are fully aware of this feature."—Thomas P. Robbins, 4518 Lakeside Ave., Cleveland, Ohio.

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