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ELEVENTH YEAR

#### THE DANDELION

DEOPLE become Dandelion conscious at about the age of three. What little youngster upon first venturing into the yard on a bright spring morning has not toddled joyfully back into the house with a gorgeous bouquet of beautiful, yellow flowers which seemed to be growing everywhere? That early admiration later turns to consternation.

# Why It Persists

Man seems not to have made the slightest inroads upon the annual crop of Dandelions. The weed is downright

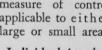
insolent. Botanists tell us that wherever civilized man has established himself he has carried and sown this weed. Once in the soil, it can be depended upon to hold on. Drouth doesn't affect it because the large, fleshy root drives deeply into the soil, sometimes to a depth of 20 inches. Cutting the crowns from the roots will not kill this pest as it will many deeprooted species. Any part of the root will sprout leaves and make a plant if buried in warm, moist soil.

The Dandelion is a perennial and propagates by seeds. It will bloom at all months of the year when weather is not at the freezing point. Of course, it is most abundant in the spring. The seeds are ready for dispersal within three weeks after the unfolding of the flower. The parachute-like equipment for spreading the seeds to the four winds is well known.

# Methods of Control

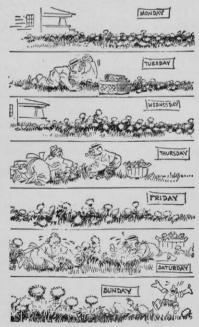
On a small area it is customary to attack Dandelions individually. Where a large area is infested, suppressing with

> chemicals is more practical. Cutting of the blossoms to prevent seed from maturing is another measure of control applicable to either large or small areas.



# Individual Attack

The most commonly used fluid for injecting into the plant is gasoline. There are a number of plunger-type appliances on the market. By this plan the fluid is squirted into the crown of the plant. No stooping is involved. There are many variations of the non-stooping



principle. Mr. Joseph K. Bye of Columbus, Ohio, likes this device:

"For a stabber or spear use a 30-inch metal plant stay obtainable at most garden supply stores. It is already sharpened. Fill a half-pint glass jar having a full open top with concentrated Sulphuric Acid. Attach a wire handle the same length as the metal plunger. One may then walk over the infested area and kill each Dandelion by dipping the spear-head into the acid jar and then inserting it about one inch into the crown of the plant."

Various commercial Dandelion killers with hollow cylinders for the discharge of fluids are available.

Another plan of individual attack involves cutting off the plant with a spud or knife just below the ground. The plants sprout again and require a second cutting but if no leafy growth is allowed to feed the roots even the old ones will finally starve. A pinch of dry salt or a few drops of acid or gasoline will retard the recovery and often kill the plant entirely.

A third suggestion, differing slightly from either of the above, came from a Colonel in the Field Artillery. He reported an almost complete kill by simply dropping Hydrochloric Acid on the crown of the plant. He says:

"I can place a drop or two in the eye of a Dandelion with perfect accuracy and it never lives to tell the story. An ordinary medicine dropper is used and commercial Hydrochloric Acid is only 25 cents per quart."

Hydrochloric and Sulphuric Acid are highly caustic and should be handled carefully.

An early issue of "Lawn Care" contained a suggestion by Mr. E. P. Deatrick of the West Virginia University which will bear repeating here. He referred to it as the "Spotting Method of Weed Eradication." Rather than administer a poison to weeds, he advo-

cates an overdose of fertilizer. You apply to the crown of the weed as much Nitrate of Soda or Sulfate of Ammonia as can be held between the thumb and fingers. If this spotting is done in early spring or late fall, best results are obtained. The weed disintegrates but the surrounding grass is actually stimulated so that, as Mr. Deatrick reports, "a fairy ring of thrifty grass replaces the ugly weed in about two weeks' time."

### Mass Attack

The large area that is Dandelion infested presents the most serious problem. It is difficult to outline the dimensions of the plot which may permit individual Dandelion treatment, assuming then that all larger spaces qualify for collective attack. Much will depend upon the seriousness of the infestation and perhaps more than that upon the disposition of the owner to do the work personally or to hire it done.

### Iron Sulfate

Reports coming to us indicate that Iron Sulfate (copperas) is thus far the most commonly used chemical killer and incidentally it is likely to have a suppressing effect upon many other weeds even though Dandelion eradication may be the specific objective. The best way to apply Iron Sulfate is to spray it on the plants. If this is not convenient, it can be put on with a sprinkling can, although this is not as efficient or effective. To make a solution for spraying, use 11/2 pounds in 2 gallons of water. This should cover 350 square feet of area. If the solution is to be sprinkled on, use 1 pound to 2 gallons of water for each 200 square feet.

#### Caution

On stone, cement, metals and cloth, Iron Sulfate solution produces a conspicuous yellowish-brown rusty stain which is extremely difficult to remove. Accordingly, care should be taken to avoid getting any of the spray on one's

clothing or on sidewalks, building foundations, monuments, curbstones, and the like.

Iron Sulfate blackens all leaves but does not kill grass blades. If the lawn is cut a few days after being sprayed, the blackened ends of grass blades will be removed. It is unwise to use any spray during the hot weather of late July and the first weeks of August.

# Kerosene Spray

Other effective spray materials are repeatedly coming to our notice. At the Iowa Experiment Station good results have been obtained with kerosene as the following account illustrates:

"During the latter part of September a spray of straight kerosene was applied to the lawn at the rate of one gallon to each two hundred square feet of lawn. Best results were secured when the spray was applied during damp, foggy weather or in late afternoon after the sun had set. The longer the kerosene can stay on the foliage without evaporating, the better the results. This kerosene spray will cause the grass to discolor slightly but an application of Ammonium Sulfate will green the grass up in a few days. From then on the regular lawn care procedure is followed, such as seeding and the use of a complete fertilizer in the following years. This spray should destroy the entire Dandelion plant."

# Arsenic Effective

In the East it is reported that kerosene has not been successful whereas Sodium Arsenate or Arsenic Acid has shown considerable promise. The Dandelion does not like Arsenic (neither does Chickweed). The chief difficulty with Arsenic is the fear of using it because it is such a virulent poison. The advantage is that it is cheap. Arsenic Acid or Sodium Arsenate may be used in the dry form with sand or fertilizer or in a liquid form as a spray. Sodium Arsenate is preferable for the dry

method or liquid Arsenic Acid can be readily mixed with dry sand. The rates vary from 2 to 6 ounces when applied as a spray and from 8 to 18 ounces to each 1000 square feet when applied dry. The lighter rates, of course, cause less damage to grass but must be repeated more often than is required with the heavier rates. Where a serious burn is not objectionable, the heavier rate should be used. Where discoloration of turf must be held to a minimum, the lowest rates must apply.

### Arsenic Acid Precautions

Pennsylvania State College reports that Arsenic Acid has worked well in their Dandelion control tests. They recommend the following:

"The normal safe rate of application has been 4 to 6 ounces of Arsenic Acid in about 5 gallons of water evenly distributed as a fine mist-spray upon 1000 square feet. These considerations should be carefully observed:

- 1. Rate of application must be accurate.
  - 2. Distribution must be uniform.
  - 3. Soil must be fairly moist.
- 4. Late afternoon is better for treatment than morning, due to greater humidity in the evening.
- 5. Fall and spring are the best times to treat; avoid hot, dry weather.
- 6. Allow three to four weeks between applications so that grass has a chance to recover.
- 7. Avoid very late fall treatment. If frost comes soon after the last application, the grass may not have a chance to recover and may suffer severely.
- 8. Spray in the spring about a week before blooming.

If Arsenic Acid cannot be obtained readily, Sodium Arsenate may be used in the same way and at the same rate. we have found that 1 pound of Sodium Chlorate to 1000 square feet in addition

to the 4 ounces of Arsenic Acid, effects better control than Arsenic Acid alone.

### Sodium Chlorate

While Sodium Chlorate has been more often used to combat Crabgrass it has, as reported above, been noticeably offensive to Dandelions. A Minneapolis resident writes:

"I purchased 4 ounces of Sodium Chlorate from my neighborhood drugstore, mixed it in a barrel and sprayed it on with the lawn hose by means of a proportioner. I used 2 pounds to 10 gallons of water on the front lawn and the same on the back (front 40x30; rear lawn 50x40). The Crabgrass was badly scorched but the Bluegrass remained unharmed. The Dandelions, although they were a secondary consideration, have completely dried up."

### An Extra Word of Caution

It has already been pointed out that spraying with chemicals involves some risk of injuring the turf. Kerosene, Sodium Chlorate and Arsenic sprays are all likely to harm grass if conditions are other than favorable. Experiments indicate that the cool weather of spring or normal fall weather in advance of frost provides safe periods for a weed-spraying campaign.

# Suppressing Dandelions by Cutting

When Dandelion heads are mowed or pulled off while in full bloom, the question arises, will seeds mature? Carl D. La Rue, botanist at the University of Michigan, wanted to know the answer and he found it. He selected Dandelion heads in various stages of bloom, from some just opening to the final stage where the white seed tufts had developed. All the flower heads were planted in moist peat where they had a better opportunity for life than if left

to dry on a lawn. Only where white tufts had appeared before cutting did any Dandelion seeds mature. Even these were shriveled and not normal in appearance. Some plants did develop from these matured seeds but not from any of the others. Based on his experiment, here is Mr. La Rue's conclusion:

"If the white tuft of the Dandelion seeds can be seen at the time of cutting, you may expect a bigger and better Dandelion crop the following year. If, however, they are cut when in full flower, Dandelions may be allowed to dry on the lawn without danger of spreading the weed."

An application of the same idea tried simply on a hunch is reported by a citizen of Winnetka, Illinois. He says:

"For the Dandelion raisers among your readers, it might be interesting to know that we fought a losing battle until we adopted the procedure of picking the blossoms as soon as they came out. I don't believe that more than a dozen have gone to seed within the last three years and Dandelions are now the least of our worries."

Other readers have reported the good results by pulling off Dandelion blossoms with special Dandelion rakes which are available at many garden supply stores.

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As with many weeds Dandelions are most troublesome where soil fertility is low. While it is true that Dandelions will thrive in rich soils, the grass is better able to compete successfully with such weeds if it is receiving adequate food of the right kind. No matter what method is used to control Dandelions it will be more effective if the turf is strengthened by the application of a special grass food.

O. M. SCOTT & SONS CO.



MARYSVILLE, OHIO