

Lawn Care

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CHEMICAL WARFARE ON CRABGRASS

THE CASE against Crabgrass was presented in the previous issue of *LAWN CARE*, Number 70. There it was pointed out that as desirable grasses take a summer rest, Crabgrass is apt to slip in, inconspicuously at first but with such vim and vigor that it is soon a real problem.

Even in early August a severe infestation of Crabgrass may go unrecognized. Every lawn should be carefully examined now for its presence. If found and attacked at once there is still time to keep it from producing seed to propagate its kind another year. If not removed or chemically controlled now the two ugly stages of Crabgrass will soon be in evidence. The first when the heads mature to purplish or reddish brown color and the second when frost kills the plants leaving unsightly patches of brown.

An early start is the best control for Crabgrass. But those who hand pick the seedling plants in the two leaf stage or follow the prescribed raking and mowing program (*LAWN CARE* No. 70, p. 3) should continue this into August because new plants may still be sprouting.

If there has been no control and the infestation is serious, drastic treatment with the rake and mower is necessary to prevent wholesale seeding. A special Crabgrass rake or a stronger iron rake with flat teeth may be employed to lift up the prostrate stems and runners so a closely set mower will cut them off. The clippings should be caught and destroyed. Repeat the treatment in an opposite direction in order to remove all the seeding stems. Follow up each week with the same treatment as long as seeding continues.

The use of certain chemicals may offer an easier method of control. Even these will not work magic and the results with any weed killing chemicals will be modified by the various factors described on page 4 of *LAWN CARE* No. 70. However, there are sufficient reports of success to make one of the following chemicals worth trying on Crabgrass and other weeds.

Chlorates—The use of Sodium Chlorate has been described frequently in *LAWN CARE*. Its sale is greatly restricted because of the war. Another form of Chlorate available for weed control is *ATLACIDE*, made by the Chipman Chemical Company of Bound Brook, New Jersey.

Sodium Chlorate presents a fire hazard. By itself it is not inflammable but anything burnable that becomes saturated with a Sodium Chlorate solution will easily ignite from friction when dry. Thus it is better to wear rubber boots when working with it and to keep it off clothing (See *LAWN CARE* No. 2).

Arsenicals—Various compounds of arsenic are toxic to weeds. These include Sodium Arsenite and Arsenic Acid. They are generally available through drug stores or chemical supply houses. It is not necessary to use chemically pure grades. All arsenic compounds are poisonous (including Lead Arsenate) so they should be handled carefully.

Using Arsenicals and Chlorates

There are two types of treatment: first, selective control by which the weeds may be destroyed or weakened without permanent injury to the grass, and second, a complete surface destruction of all vege-

tation, a clean-up treatment that rids the lawn of both weeds and grass so the ground can be scratched up for seeding.

Selective control of Crabgrass is not possible unless started in the very early summer while the plants are small and vulnerable. August is usually too late to inaugurate selective chemical treatment.

In late summer Crabgrass growth is so heavy that a stronger chemical treatment is required even though it will also scorch the good grasses and possibly destroy their roots, too. However, this need not be of great concern because by mid-August a heavy stand of Crabgrass will have pretty well smothered all good grasses anyway and the plants are easily replaced in fall seeding. Where turf is so badly infested with Crabgrass and other weeds that there is little else, a renovation program such as the following may be carried out.

Timing—First treatment between August 15 and September 1, second treatment about ten days after the first.

Wet Spray Materials—Mix 4 oz. Sodium Arsenite with 16 oz. Sodium Chlorate or 24 oz. Atlacide and then stir into sufficient water to spray on 1000 square feet of lawn. The amount of water needed will depend upon the kind of sprayer to be used and will vary between one and two gallons to the 1000 square feet. It is advisable to experiment with the sprayer first. Measure off a section of 1000 square feet (40 ft. x 25 ft.). Then put clear water in the sprayer to see how much is needed to go over the area.

Mix the chemical with double this amount of water so the area can be gone over in two directions, thus insuring that all vegetation is coated with the spray.

First Application—The soil should be thoroughly moist before treatment.

Cut the lawn closely and catch or rake up the clippings. Then apply the spray or dry mixture.

A chemical solution can be put on with a sprinkling can but at least twice as much solution will be needed.

Unless a heavy rain washes off the chemical, the vegetation will turn brown in a few days.

Second Application—In about ten days, rake off the dead matted material. Loosen the soil with rake or hoe, apply Turf Builder at 10 pounds per 1000 square feet, then seed. Later the same day repeat the previous application of chemical in that way insuring destruction of the weeds. The chemicals will not harm the seed but would injure young grass if delayed until after germination.

DRY METHOD—Instead of spraying, these chemicals can be applied by mixing them with a dry carrier such as screened soil or sand and then broadcasting by hand or through a fertilizer spreader such as the Scott Spreader. With the dry method it is necessary to use twice as much chemical because less sticks to the foliage than in spraying. The bulk needed will be 3 or 4 gallons per 1000 square feet. Two separate treatments should be made the same as by spraying.

Control Seeding

Chemical treatments do not always turn out perfectly and sometimes it is difficult to find the reason why. A heavy rain may wash the chemical off the leaves before the plants absorb it. The mixture may not have been strong enough or coverage not complete. But generally a careful series of treatments will have the two-fold effect of stopping the seeding of Crabgrass and destroying other weeds.

The fact that Crabgrass is a summer annual plant bears repeating. Cultural or chemical control is needed to prevent seeding. It is not necessary to kill the roots since they will naturally die in the fall. Prevention of seeding this year is the way to check Crabgrass next year. This is accomplished by raking and mowing, by applying chemicals or by burning off with flame torches as described on page 4 of *LAWN CARE* No. 70.

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