

Lawn Care

REG. U. S. PAT. OFF.

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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

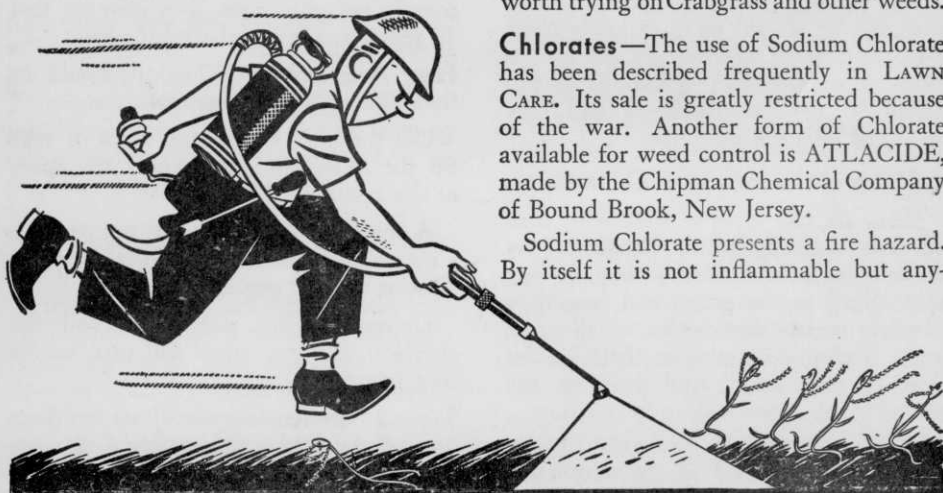
program (*LAWN CARE* No. 70, p. 3) should continue this into August because new plants may still be sprouting.

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 strong 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 any-



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thing 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.

Lawn Sinox is a coal tar derivative manufactured by the Standard Agricultural Chemical Co. of Hoboken, New Jersey. It is applied as a spray and appears to be one of the safest chemicals for use in warm weather. It is still available in garden departments of many stores although the manufacturers advise no more will be made during the war. Favorable results have been reported by many lawn owners.

Zotox is another liquid spray material and is manufactured by the Garden Products Company of St. Louis. This is one of the arsenicals and has been on the market long enough to establish its value in Crabgrass and other weed control. It is reported as still in production and is available through dealers.

This list is by no means complete and local inquiry should serve to locate other good commercial weed killers. Directions for use of commercial preparations are furnished by the manufacturers and they should be followed 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 vegetation, 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.

Fall is the Time

THE doctrine of fall feeding and seeding has long been advocated by *LAWN CARE* beginning with the first summer issue in 1928. The reasons for following nature's example of a late summer seeding are still valid and logical and gaining more converts yearly.

1. Seeds fall on warm ground.
2. Soft rains usually come at close intervals and in sufficient amounts.
3. Warm days and cool nights, ideal for germination and seedling growth.
4. No competition from summer annual weeds.
5. Gradually cooler weather encourages grass roots to grow down into the soil and not expend all their energy in producing topgrowth.

Granted then that fall is a good time to fix up the lawn (old or new) what is the right procedure?

1. Start early. Between August 15 and September 1 depending on the locality. A good guide is to start when the heavy evening dews begin.
2. Cut the grass fairly close (in contrast to the summer program) and rake to clean out clippings and scarify the surface soil.
3. FEED. The grass needs extra sustenance after a hard summer in preparation for a tough winter. Apply Turf Builder at the rate of 10 pounds per 1000 square feet (50 ft. x 20 ft.).
4. SEED. If you use Scotts, three or four pounds for the same area will be enough.
5. Cover the seed lightly if you have good, weedfree soil available.
6. If water is available, keep the lawn moist.
7. Cut regularly at about one inch so the old grass won't smother the young sprouts as they are getting under way.
8. As the new grass gets well started, raise the height of cut to 1½ inches or a little more so cold weather won't catch the short grass unawares.

War Conservation

As *LAWN CARE* goes to press, word comes from the War Production Board asking for a voluntary curtailment in the use of mineral Nitrogen. This was one of the several ingredients of Turf Builder (Scotts special grass food) but no more of it will be used until there is again a plentiful supply. This ruling had been anticipated for some time so we are ready with a new formula for the duration.

In developing Turf Builder from the first ton produced in 1928 to the present time we have had only one thought—to make it the best grass food that could be produced. Now, though we must make a change in the ingredients, the goal is the same—to make it the best that can be made from those materials available in war times.

There seems no reason why there won't be plenty of all other Turf Builder ingredients available for the duration. So plan to continue Turf Builder health treatments each fall and spring—and keep your trees, shrubs and leafy garden vegetables in prime condition with this fine plant food.

Grass Seed is Plentiful

So many things are scarce these days that shortages are apt to be taken for granted. As with almost everything else, rumors were spreading to the effect that there was a shortage of grass seed.

Grass seed is available to meet all expected demands, even though the war effort has stepped up need for it surprisingly. Airfields come to mind first as a user of turf but they do not constitute the major war time need. There are hundreds of army camps and training grounds for men of the navy and marines where grass is being put to use. Around factories and shell loading plants grass is keeping down the dust, a serious hazard. It also prevents erosion and provides pleasant recreation grounds.

The emphasis put on lawn construction for the hundreds of Federal Housing Projects indicates the way government officials feel about the importance of the outside of the home. Home has again become a place to live and home lawns are now more inviting than ever. This past season has witnessed an increase in lawn and garden interest over peacetime. Folks who had been neglecting their lawns begin to realize what a joy they can be. Work with grass has provided fascinating diversion to the war worker, the hard pressed government official and business man—and at little cost with no worry about tires and gas.

Notwithstanding old and new outlets for seed, the supply is ample. Harvesting was carried on with a shortage of man power, yet it was done as thoroughly as ever. Certain foreign sources of seed are no longer available, but even from New Zealand and Australia shipments of seed native to those countries have arrived safely. Some types formerly imported are being successfully grown in the United States adding to diversification of the American farmer. Thus the seed picture is favorable. The home fronts can be maintained in top condition and purchases of seed will in no way impede the war effort.

The Scott Publications

These LAWN CARE bulletins have been published continuously since 1928. Separate issues are available for the asking, covering almost every lawn problem including control of various weeds and pests, improvement of soils, use of lime, proper mowing and watering.

Complete sets of back issues with index are available at a nominal price to cover binding and mailing.

Paper Bound File—25c postage paid including all bulletins.

Loose Leaf Binder—\$1.00 postage paid, all LAWN CARE issues to date and room for several years' future bulletins.

Good Lawns—That amateur gardener's guide to better lawns. Contains a complete outline for building new lawns and improving old ones. Free.

Bent Lawns—Illustrated new edition. Tells about the most beautiful of all lawn grasses—Scotts Creeping Bent.

Care Of Bent Grass—New edition describing the best maintenance practices for Bent Lawns developed from seed or stolons.

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EVERY PACKAGE OF SCOTT'S LAWN SEED BEARS THIS TRADE-MARK AND IS SEALED FOR YOUR PROTECTION