Report Lawn Sinox Effective in WEED CONTROL

By PAUL BURDETT

During the past three years course supt.s. in the Chicago district have made rather extensive and promising use of Lawn Sinox in control of clover, crabgrass, knotweed, chickweed, craggrass, dandelion, plantain and buckhorn. In no case were players aware that a weed control project was being undertaken as there was no discoloration of fairway or greens grasses, bent or other varieties.

Lawn Sinox is one of the di-nitro-o- cresalates, a material that has been used extensively in the west and northwest for control of weeds in small grains and flax. Its use on lawns for the control of weeds at the same strength as used in the grain fields caused great discoloration to the turf, even killed out the bent in greens where it was originally used.

Credit for discovery of the effectiveness of the material when applied in a mild solution at frequent intervals must be given to Fred Millies, gkpr., Hillside (III.) GC. Millies, plagued with the seemingly impossible task of keeping out clover, applied Lawn Sinox in September to his greens at the rate of 1 pint to about 250 gallons of water, just as he had applied his control material for dollar spot. He noticed a curling of the clover leaves and a thinning of the clover and within two weeks, repeated the application, and again about the middle of October. The clover went into the winter in a weakened condition and failed to re-establish itself the following spring.

During the next two years Lawn Sinox was used on several other courses and careful observation enabled the working out of the method of use and rates of application now suggested. During this time, observation was made on the effectiveness of Lawn Sinox as a control material for brownpatch and dollar spot. At that time mercury was not available and many courses used Lawn Sinox for this job. While not completely effective at the strength used for the control of weeds, Lawn Sinox had some merit at this job. When used at strengths needed to be effective as a fungus control Lawn Sinox sometimes caused some discoloration.

The method of using Lawn Sinox is simple. On bent greens 2 ounces of Lawn Sinox in 50 gallons of water is applied to 1000 square feet of surface. A power sprayer, McClain Hydromixer, or sprinkling can, can be used, and if a power sprayer is used, the pressure must be reduced so that the solution goes on as a coarse mist and the hose must be held up so the spray is not driven into the grass but rather falls gently on the foliage. Treatment must be continued until control is established which usually takes about 8 applications at weekly intervals. During very hot weather use 1½ ounces per 50 gallons of water over 1000 square feet. For fairways and blue grass lawns the rate of application is 4 ounces to 40 gallons of water over 1000 square feet. This can be applied with any convenient equipment, power sprayer, sprinkling can, McClain Hydromixer. Treatment must be repeated at weekly intervals until control is established.

Andrew Heim of the Medinah (III.) CC devised an ingenious method for the application of Lawn Sinox to fairways. He rigged a valve and inlet under a fairway sprinkler, attached the hose of his power sprayer, turned on the sprinkler and valve from the sprayer and the force of the fairway sprinkler diluted the strong solution from the sprayer and carried the weaker solution over the fairway. Two men with the power sprayer and the fairway watering system covered 18 fairways in two days. Control was splendid. The same method was used on sprinklers on the greens and resulted in a greatly reduced cost of applying Lawn Sinox to greens.

Other applications of Lawn Sinox to lawns and fairways have proved the effectiveness of the material. The material cost per fairway is estimated at $14.00 per acre and for 18 greens at $45.00.

Knotweed had presented a serious problem at the Oak Park (Ill.) CC. After some years of experimental work on small plots with mild solutions of Lawn Sinox, Edward B. Dearie, Jr., Gkpr., treated several fairways for control of this pest. Dearie had treated knotweed in the experimental plots and decided that the second week after germination was the best time to spray knotweed, so in April 1945, the work was done. Dearie used 2 quarts of Lawn Sinox in 100 gallons of water and applied the solution at the rate of about 150 gallons per acre. A second application was made a week later. Kill was complete and thorough; the permanent grasses in the fairway were not discolored and in May, the spots were seeded.

Crabgrass has been controlled on both greens and fairways with the recommended rates of application. After 5 treatments, the crabgrass plants seem to be heaved out of the ground and the plants can be pulled up without difficulty, in two more applications, the plants fade and disappear.

Leonard DeBruyn, Gkpr., Ridge CC, rid his greens of an extremely troublesome pest late in the summer of 1945 while treating his greens for clover control. DeBruyn has had to fight a small spreading red stemmed weed (identified as
spotted spurge in the Chicago area) which appeared about August 1st. The first three applications of Lawn Sinox removed this weed and "Brownie" had no further trouble. The few plants of crabgrass that appeared on Brownie's greens also dried up during treatment.

In every case where a number of applications of Lawn Sinox have been made there has been a marked increase in the growth rate of turf. Bent grasses have grown over the spots as the weeds were dying, blue grass has been stimulated as though fertilized.

**New Royer Powered by Gasoline Engine**

The lifting of wartime restrictions has again made Royer Compost Mixers available for golf courses, where one of the most popular models has been the Royer "Junior," hitherto furnished only as an electric motor driven machine. While this model is portable, it can be used only within practical range of an electrical outlet. There has been an expressed demand for a compost mixer of this size which could be used anywhere on the course.

The manufacturer, Royer Foundry & Machine Co., Kingston, Pa., has according-ly developed the Royer "Junior G," shown in the illustration, which is driven by a $1\frac{1}{2}$ h. p. gasoline engine. This portable self-contained machine handles material as fast as one man can shovel it into the hopper. No matter what compost materials are used, this Royer thoroughly shreds, mixes and aerates them, reducing the mixture to pea size. The machine automatically eliminates sticks, stones and trash, and discharges onto pile or truck the kind of top dressing which readily yields its nutrients to the grass roots.