CONTROL OF WEEDS IN LAWNS WITH CALCIUM CYANAMIDE

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In the southeastern states the summer lawn grasses are usually dormant in the winter and the lawns are frequently infested with plants that grow during the winter and produce seed in the spring. Such weed plants are unsightly, shade the grass, reduce its vigor, and when they die leave areas bare of vegetation. A treatment that would control weeds and at the same time stimulate the lawn grasses would be desirable.

Calcium cyanamide is a common source of commercial nitrogen which has herbicidal properties. Experiments with the use of cyanamide as an herbicide on lawns were begun at the Alabama Agricultural Experiment Station in 1932. These experiments were devised to determine the effect the treatment would have on weeds and on the lawn grass, and to determine the rate and time at which the cyanamide should be applied. Preliminary results were reported in 1933. Further studies are reported in this paper.

Established lawns of Bermuda grass (Cynodon dactylon (L.) Pers.) were used in the experiments. The cyanamide was broadcast by hand, usually in the middle of the day when there was no dew on the plants. It was found that the cyanamide was more effective if applied when the plants were wet, but the applications were made when the plants were dry in order to make the test under the most unfavorable conditions. The percentage of weeds killed was determined about two weeks after the applications had been made. When the Bermuda grass had begun active growth, notes were taken on its condition.

DATE OF APPLICATION

On the dates shown in Table 1, plats were treated with granular cyanamide at a rate of 1,500 or 2,000 pounds per acre. It was found that the weeds could be killed usually without injury to the Bermuda grass.