Satisfactory Control Of Wild Morning-glory By Use Of 2,4-D Requires Application

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An extract from the College of Agriculture, Agricultural Extension Service, University of California, Experiment Station, Davis.

Wild morning-glory is highly susceptible to 2,4-D. The foliage and most of the vertical roots are killed by proper application. Data obtained from early spring and late summer treatments show that even low rates of 2,4-D, applied at the proper time, will control this weed for a number of years. Thus spraying in the early summer when soil moisture to allow new plants to develop normally, a second spray the following spring, should be big enough to spray before disking, in the spring. Morning-glory may be treated in this way in 1945. The grain and other crops planted within a few weeks after the first spraying, and some new plants may come up from lateral roots which did not rot. The sprayed area closely and spray as soon as regrowth is large enough. Soil conditions may result from use of 2,4-D. How long the effects will remain depends upon numerous chemical, physical and biological factors. Morning-glory or any other perennial has a longer life than the annual weedy grasses. The water in the stratum is used at the same time, the escape area for the underground flow is reduced at the source. As the time passes, the escape will no longer function properly, the extra water stored in the soil at the ripening and summer time objective. A more satisfactory way to prevent the loss of water from the soil is by paying attention to the way in which different crops react to 2,4-D.

Selectivity

Because of the high susceptibility of morning-glory to 2,4-D, the selective control of this weed is often obtainable. In strawberry plantings it has been impossible to control morning-glory without injury to the crop. If the strawberry plants are blooming at the time of spraying, the new growth of the first berries will usually be lost because the spray drifts into the blossoms. Little is known about the way in which different varieties of strawberry react to 2,4-D.

Precautions

In general, broad-leaved plants are relatively susceptible to 2,4-D, but there are exceptions. For example, tomato plants show no reaction to a per acre application of 2,4-D. The effect of per acre application of 2,4-D on crops is much more pronounced than with the application of 1% pound of 2,4-D acid per acre. Therefore, if 2,4-D is applied, it is advisable to use only low concentrations. The action of 2,4-D is slow, some time required to kill the tops and roots of the treated plants. However, since no plants are completely resistant to 2,4-D, sprayings are often necessary between crops to kill the tops and roots of the weeds, especially perennials. Two sprayings are often necessary before the area is sprayed again. Otherwise, field treatments are not effective. As a result, morning-glory and yields have been increased. Wild morning-glory is highly susceptible to 2,4-D. The selection of 2,4-D is slow, some time required to kill the tops and roots of the treated plants. However, since no plants are completely resistant to 2,4-D, sprayings are often necessary between crops to kill the tops and roots of the weeds, especially perennials. Two sprayings are often necessary before the area is sprayed again. Otherwise, field treatments are not effective.