ERADICATING QUACK GRASS WITH SODIUM CHLORATE

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Throughout the area eastward from the Dakotas and Nebraska quack grass is not only considered as the worst of field weeds but the nuisance is steadily enlarging its range. Once established, the land is of little value except for pasture since no reliable method of eradication over large infested areas exists.

Quack grass usually starts in the form of one or more small patches after being introduced by means of impure seed. The average farmer pays little attention to the newcomer, which to all appearances is an ordinary harmless grass, until new patches arise in all parts of the field as a result of root pieces distributed by cultivating implements. To date, the only reliable method of destroying such patches before they spread into a solid infestation is covering with tin roofing, tar paper, or any other material that completely excludes the light for a period of three months. It will be seen at once that this method has serious disadvantages aside from the expense involved, and it is impractical where livestock has access to the infested area.

The need for a quicker and cheaper method has long been felt. The writer has tried a number of chemical weed killers with indifferent results until sodium chlorate was used during the season of 1926 against a solid area of the grass 2 rods in length and about 4 feet wide, growing along a fence row at West Lafayette, Indiana. Sodium chlorate has been found to be effective against Canada thistle by Aslander3 and against field bindweed by Latshaw and Zahnley4, but no data were available regarding its value against quack grass and other weeds.

The material was dissolved in water at the rate of 1 pound per gallon, and applied with a sprinkling can during late June when the heads were reaching maturity. The treated plants soon turned light brown and within a week the tops were apparently dead. A number of the roots were dug up and they were found to be brown

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2Associate Botanist.