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CONTROL OF WEEDS BY SODIUM AND CALCIUM CHLORATES.

FURTHER INFORMATION AND ADVICE.

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AN article by the writer on the use of chlorates in weed control, especially in regard to ragwort, was published in the May issue of the *Journal*. Considerable interest in the subject has been created, and various statements and claims are being made in reference to the discovery and use of these chlorates for weed destruction. The position is that most of the chlorates have been under test for several years as agents for weed-control, and the general results, particularly in France and America, go to show that the most effective work is being done by sodium and calcium chlorates.

The attention of the Fields Division was particularly directed to the use of these chlorates some eighteen months ago by reports of experiments carried out in the United States for the control of bindweed (*convolvulus*) by means of spraying with sodium chlorate. This suggested the possibilities of chlorates for the control of some New Zealand weeds, particularly ragwort and similar plants. We also learned that calcium chlorate was being tested in Australia by the Victorian Railway Department for the control of weeds on the railways. Inquiry was made from the authorities in Melbourne, and their report was so favourable that we decided to give both chlorates a trial. Half a ton of the sodium and a small drum of the calcium was secured, and experiments were started as related in the previous article.‡

Ragwort being a weed that was causing farmers great trouble received most attention, although small experiments with other weeds were carried out, with the result that we found that most soft weeds were destroyed by one application, while the harder weeds, such as Californian thistle, blackberry, &c., were greatly weakened. At the present time there are indications that three sprayings have killed patches of Californian thistle; but we shall require next season's experience before making a definite statement regarding this weed. The same remarks apply to blackberry. Quite a number of experiments are under way this year with various weeds, and so soon as anything definite in regard to any particular weed is available the