

## Vol. XXX.

## FOR WEEK ENDING JUNE 15, 1911.

No. 24

## Spraying to Destroy Wild Mustard

J. E. Howitt, Botanical Department, O. A. C. The time of year is now close at hand when too many of the fields throughout Ontario will be yellow with that curse to progressive agriculture, Wild Mustard or Charlock; such fields are not a credit to the farmers of Ontario and are not tolerated by the up-to-date and successful farmer. It is only the ignorant, the careless, the incompetent, or the hopelessly discouraged man who sits down and says : "Mustard does not hurt the crop; it shows that the land is good and rich." Time and space will not permit of dealing with all the injurious effects of mustard upon the crop. Sufficient it is to say that no man will give the

best price for a farm seeded down with mustard as it is a well-known fact that it takes years of patient labor to clean such a farm.

"Man is constantly looking for some easy way of overcoming his difficulties." It is not to be wondered therefore that for years he has been endeavoring to find some easy and cheap way of destroying mustard. In this he has been partly successful. Various chemical substances have been discovered that will destroy mustard in standing grain without injury to the crop. Iron sulphate or copperas, and copper sulphate or bluestone have both been found to give good results when properly and thoroughly applied at the right ason of the year.

The Department of Botany at the Ontario Agricultural College has been experiment-. ing with both these substances for several years, and the results warrant the statement that either iron sulphate or copper sulphate can te successfully employed to destroy mustard in standing grain without injury to the crop. It mut be borne in mind, however that it is not reasonable to expect to clean a field of mustard by one year's spraying as the mus-

tard seeds are in the soil and some are brought up to the air where they will grow every time the field is plowed. In order, therefore, to completely clean a field by spraying the treatment must be continued for several years.

SPRAYING WITH IRON SULPHATE

During the past three years excellent results have been obtained by the use of iron sulphate to destroy mustard. An account of the preparation, application, cost, etc., of this solution is therefore given here in order that those who are bothered with this pest may obtain information regarding

this comparatively cheap and easy means of destroying it.

HOW THE IRON SULPHATE SOLUTION IS MADE

A 20 per cent. solution of iron sulphate has been found to give the best results. This is made by dissolving 80 lbs. of iron sulphate in 40 gallons of water. The iron sulphate may be placed directly in a barrel of cold water and stirred until completely dissolved. This will take only a few minutes. The solution should be strained through a cheese cloth or fine sieve when it is being put into the spray pump barrel in order to prevent particles of dirt getting into the pump and clogging the nozzles.

An ordinary spray pump such as is used for

## Plenty of Time Yet to Sow Alfalfa George F. Marsh, Grey Co., Ont.

Those Farm and Dairy readers and their neighbors who did not sow alfalfa this spring may be glad to know that there is still lots of time to sow the crop. The Ohio Experiment Station reports that "Alfalfa has been sown upon practically every date between March 14 and September 2 and has failed or has been a partial failure or has been all that could be desired, as the results of different seedings at each of the various dates

Another bulletin from the same station says "Midsummer seeding without a nurse crop upon land which has been thoroughly prepared prob-

ably furnishes the most favorable conditions for securing a stand of alfalfa. This thorough preparation may consist of four to eight weeks of fallow cultivation or of a preparatory crop such as early potatoes, or peas, which is out of the way in good season."

The experiment stations of Pennsylvania, of New York, at Geneva, and Cornell University at Ithaca, as well as the Department of Agriculture at Washington advise August seeding of alfalfa. In Pennsylvania and in New York a favorite method is to sow after early potatoes, or after peas sown for the canning factory in the truck. district, as recommended by the Ohio Station; in the dairy districts peas and oats are sown to be cut green for feed, and alfalfa is put in after this crop is fed out.

Personally I have been in favor of early spring seeding for alfalfa but I have seen a number of excellent fields of the crop gotten by seeding in August. In any case the land should be thoroughly prepared by thorough working. A piece of pasture or hay land, if thoroughly worked, could be put in good condition for seeding about the middle of August.

Whenever you sow alfalfa do not forget to inoculate, either with 200 lbs. of soil from an old successful alfalfa field or by the culture from the Ontario Agricultural College, Guelph.

In broadcasting the seed, especially for the first time alfalfa has been grown on the farm, use from 20 to 25 lbs. to the acre. There is no question but that this is too much seed if we could get the seed all to grow; 20 lbs. of seed to the acre will give about 100 seeds to the square foot while if we have four or five plants it is sufficient. In (Concluded on page 6)



The Mustard in this Field was Destroyed by Spraying with Iron Sulphate



spraying fruit trees can be used to apply the spray mixture. This pump can be placed on a cart or light wagon. It is best to spray the crop in strips, driving slowly along and applying the solution to the mustard plants in the form of a fine spray. If a power potato sprayer is available, it can be rigged up and used for this purpose to advantage. The Aspinwall potato sprayer has a special broadcast attachment for spraying mustard. It consists of a rod 10 feet 9 inches long with 9 nozzles 16 inches apart arranged along it. (Concluded on page 6)