Comparative Yields of Rows Sprayed with Lime-Sulphur and Bordeaux Mixture During 1914.

LIME-SULPHUR INJURIOUS TO POTATOES.

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FROM BULLETIN BY
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Conditions prevent desired test. For four years the Station has failed to secure proof that lime-sulphur will or will not prevent potato diseases. In three seasons practically no blight appeared on the test fields, and in the fourth year it appeared so late that many of the lime-sulphur sprayed plants were already dead from the effects of the spray mixture.

To know the effect of lime-sulphur on the diseases Lime-sulphur is very desirable, and the experiments will be continued with that object in view; but we have learned already that this material is not to be recommended for use on potatoes because of its harmful effect on the plants themselves. In 1911, as recorded in Bulletin No. 347, lime-sulphur dwarfed the potato plants and reduced the yield 40 bushels to the acre below that on check rows not sprayed; and in 1912 (Bulletin No. 352) it dwarfed the plants so that they died very early and produced 111 ½ bushels less marketable potatoes to the acre than those on bordeaux-sprayed rows.

In tests reported in the present bulletin no late blight appeared in either 1913 or 1914, but lime-sulphur aggravated the effect of tipburn, dwarfed the plants, shortened the period of growth and reduced the yield each season. In 1913 early frost killed the plants on much of the experimental area when the bordeaux-sprayed rows were still growing luxuriantly though many of the lime-sulphur sprayed plants had been dead from two to three weeks. This frost lessened the contrast between the treatments, but the lime-sulphur rows produced about 25 bushels less to the acre than the check rows, while those sprayed with bordeaux gave almost 20 bushels more than the checks. In 1914, bordeaux spraying increased the yield 104 bushels to the acre and lime-sulphur spraying decreased it 16 bushels. Of six reports from other investigators, only one, based on a single small test, gives as great an increase from the lime-sulphur as from bordeaux mixture, while five show unfavorable results from the use of lime-sulphur similar to those in our tests.

Lime-sulphur is not a good spray mixture for potatoes.

*This is a brief review of Bulletin No. 397 of this Station, on Lime-Sulphur vs. Bordeaux Mixture as a Spray for Potatoes, III, by M. T. Munn.