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GOOSEBERRY MILDEW HELD IN CHECK.

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GOOSEBERRY MILDEW HELD IN CHECK.

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**A tried
remedy.**

Recent successes confirm past promises. In Bulletin 133 of this Station it was announced that the results of one season of scientific testing added to ten years' practical experience with the fungicide indicated the superiority of potassium sulphide over all other remedies for mildew, the worst disease of the gooseberry. Since the publication of that bulletin, two years more of accurate comparison of remedies in a commercial plantation and one year's work along slightly different lines in another locality, have proved the sulphide the best remedy known to the Station for this disease.

**Recent
tests.**

The work in the last location consisted of comparative tests of the sulphide and some newly recommended remedies (soda-Bordeaux mixture, ammoniacal solution of copper carbonate, etc.) and tests of winter spraying. Mildew was but sparingly present in this plantation, so that results were inconclusive. No gain was derived from the winter treatment.

In the other plantation the work was a continuation of that outlined in Bulletin 133. The bushes under test were divided into 6 plats. Upon 2 plats spraying was begun early; upon 2 others, medium early; and upon the other 2, late. Potassium sulphide in two strengths, lysol and formalin in three strengths, and ordinary Bordeaux mixture, 1-to-11 formula, were used upon part of each plat.

* This is a brief review of Bulletin No. 161 of this Station on Treatment of Gooseberry Mildew, by C. P. Close. Anyone specially interested in the detailed account of the investigations, will be furnished, on application, with a copy of the complete bulletin. The names of those who so request will be placed upon the Station mailing list to receive future bulletins, popular or complete as desired. Bulletins are issued at irregular intervals, as investigations are completed, not monthly.

Results. Mildew was present each season and was very abundant in 1898, so the fungicides were given a fair and thorough test. Almost without exception, potassium sulphide in the stronger solution used, 1 oz. to 2 gals. water, protected the fruit best. Considering all treatments with each solution, whether applied early or late, this stronger sulphide solution reduced the percentage of mildewed fruit to 18.3 per ct.; a weaker solution, 1 oz. to 3 gals., to 33.4 per ct.; lysol, 1 oz. to 1 gal., to 35.1 per ct.; formalin, 1 oz. to 1 gal., to 46.2 per ct.; Bordeaux mixture to 59.9 per ct.; while the check bushes showed 63.5 per ct. of spotted fruit.



FIG. 1.—STAGES AT WHICH SPRAYING SHOULD BE GIVEN FOR MILDEW.

Time to spray. Treatment begun early, just as the buds were breaking (as shown at the left of the figure), and continued at intervals of ten days or two weeks until 7 applications were made, gave best results. Bushes thus treated showed 7.5 per ct. less disease than those sprayed but 6 times, beginning when the buds were opened (middle stem in figure); and about 11 per ct. less than those sprayed only 5 times beginning still later (stem at right).

Recommendation. Use potassium sulphide; begin when buds are opening; spray thoroughly; spray repeatedly. Such treatment, using 1 oz. of sulphide to 2 gals. of water and spraying seven times, will cost but three-tenths of a cent per bush for materials.