

For the purpose of better emphasizing the result of our work in the orchards, the table gives not only the actual crop, but also a "theoretical crop." This is obtained by calculating the crops which the orchard would have yielded had it followed the general average for the Valley. For example, the crop for the entire Valley in 1916, was 111% of the 1915 crop. The 1915 crop in the experimental orchard was 560 barrels; therefore, the theoretical crop could be 621 barrels, though the actual crop was considerably below that figure, viz., 300 barrels. By comparing the theoretical crop, obtained in this way with the actual crop, we find that up to and including the year 1913 the crop in the orchard is better than the average, but in 1914, it dropped below and continued to do so every year until 1917. This period corresponds with the increasing severity of the infestation of the Green Apple Bug as shown by actual observation. The figures for the three leading varieties show in a very striking manner the steady falling off in yield, and no one who watched the work of the pest in the orchard could doubt that it was the cause of the decline. In 1917, the year the treatment was given, the crop for the entire Valley was 109.26% of the previous crop, while the crop in the orchard was 406.9% of the crop of the previous year. Expressed differently, the actual crop was 1,469 barrels, while the theoretical was 393 barrels.

PERCENTAGE OF DIFFERENT GRADES OF ALL VARIETIES
IN ENTIRE VALLEY AND IN EXPERIMENTAL ORCHARD

TABLE No. 2.

Year	Per Cent. of Different Grades in Entire Valley.			Per cent. of Different Grades in Experimental Orchard.		
	No. 1	No. 2	No. 3	No. 1	No. 2	No. 3
1912	39.5	15.2	45.3	49.6	16.	34.4
1913	32.10	14.4	53.5	33.9	18.4	47.7
1914	50.1	23.3	26.6	59.3	22.4	18.3
1915	34.1	11.1	54.8	22.2	7.6	70.2
1916	40.3	18.9	40.8	49.9	18.8	31.3
1917	34.	20.8	45.2	65.3	12.4	22.3