II. INCREASE IN QUANTITY OF APPLES DUE TO CONTINUED SPRAYING.

The Yield from One Sprayed and One Unsprayed Orchard during the Years 1911, 1912, 1913 and 1914.

The preceding artiele shows very well what many people realize, namely, the increase in the quality of fruit due to spraying; but very few realize the enormous inerease in *quantity* due to spraying. We have demonstrated in our insect eontrol work that the set of fruit may be increased by 80 per cent, due to the control of three of our most eommon inseets, the budmoths, the fruit worms and the eodling moth. The Plant Pathologists and the season of 1913 have demonstrated the enormous increase in set which may eome from eontrolling apple seab, or blackspot, before the blossoms open, by preventing it from infecting the stems of the blossoms and ruining the set. We are just beginning to realize the effect of spraying in causing the leaves to remain healthy during the latter part of the summer and fall, and to remain on the trees mueh later in the season than those of unsprayed trees, so causing, no doubt, stronger and more healthy fruit buds to be formed and a stronger and more vigorous bloom and set of fruit the following spring.

In selecting orchards to demonstrate this point, we went to the Round Hill Fruit Company and chose one orchard which has been well sprayed since 1909 and one which had never been sprayed until 1915. These orchards were selected on knowledge of their past record in spraying, and no other figures were examined, although there may be many orchards which demonstrate the point even better.

The year 1911 was the year of the big crop; it is also remembered as the year when there was absolutely no blackspot on the apples in Nova Seotia. In that year practically every apple tree in the Annapolis Valley had a full crop of clean fruit. The value of spraying was at its minimum in that year. It could not have increased the quantity nor quality by eontrolling fungous diseases since none were present; and insect injury, while present, passed almost unnoticed on account of the enormous quantity of apples. We are approximately correct in estimating that both sprayed and unsprayed orchards had a full 100 per cent. crop in 1911.

The following tables show the number of barrels packed out from the sprayed and the unsprayed orchard, as well as the percentage of the 1911 crop, obtained in 1912, 1913, 1914.

NONPAREILS.

Year.	Unsprayed Orchard.		Sprayed Orchard.	
	Actual Crop.	Percentage of 1911 Crop.	Actual Crop.	Percentage of 1911 Crop.
1911	197·25	100	162·75	100
1912	64·5	32·5	69·5	42·7
1913	41	20·7	309	189·8
1914	76·75	38·8	167·5	102·9