

TABLE No. 8.—Bud-moths and Parasites emerging from 1,000 bud-moth leaf-clusters collected on July 1, 1915, from Wagners in S. B. Chute's orchard.

Plot No.	Sprays Used.	Nozzle Used.	Adults.	Pupae from which no adults emerged.	Parasites.
1, 2, 3 .....	1234	Drive	83	54	14
1, 2, 3 .....	1234	Mist	64	66	9
4, 5, 6 .....	234	Drive	138	104	38
4, 5, 6 .....	234	Mist	140	49	26
7 .....	No spray.	.....	289	120	59

TABLE No. 9.—Bud-moths and Parasites emerging from 1,000 Bud-moth leaf-clusters collected July 5, 1915, in the Hoyt's orchard, from Nonpareil.

Sprays Used.	Poison Used.	Nozzle Used.	Adults.	Pupae from which no adults emerged.	Parasites.
1234 .....	Lead arsenate .....	Calyx .....	24	5	47
1234 .....	Lead arsenate .....	Drive .....	12	.....	27
1234 .....	Arsenate of lime .....	Calyx .....	16	1	8
No spray .....	.....	.....	150	.....	210

These counts were taken on July 1, after the false blossoms had dropped, and when the second spray after the blossoms, or spray No. 4, was being applied. We found that the mist nozzle increased the set by very little as compared with the plots which received no spray, but that the drive nozzle to this date, when we remember that the orchard averaged about 90 per cent bud-moth in the buds throughout, more than doubled the set.

This increased set at this period was very weak, and the apples in clusters which had been infested with bud-moth, averaged only .464 inches in diameter as compared with .536 inches in clusters free from bud-moth. Therefore, no one could reasonably expect all of this increased set to remain.

The season of 1915 gave more burning from lime sulphur than ever before in Nova Scotia. In many cases a 1-008 sp. gr. solution used ten days after the blossoms, not only burned from 20 to 50 per cent of the leaves, according to the thoroughness of the application of it, but it removed a certain proportion of the fruit as well. Examination of Table No. 7, shows the effect of 1-008 sp. gr. lime and sulphur on the superior set of fruit and had been secured in the east end of the plots by use of the drive nozzle, resulting in a smaller crop per tree in almost every case where the drive nozzle was used after the blossoms. Plot No. 3 in Table No. 7, in which a less caustic sulphide than lime and sulphur was used, shows, with but two exceptions, a larger set throughout than the lime sulphur plots, and does not give the same decrease in crop from the use of the drive nozzle that most of the other plots show. These two tables show that the use of the high velocity driving spray before the blossoms, caused many more apples to set, and continuing the same spray after the blossoms with a 1-008 sp. gr. solution of lime sulphur, the increased set was all removed and the crop brought down to less than that in the plots in which the mist nozzles were used. The drive nozzle is recommended, therefore, for the sprays before the blossoms only, if lime sulphur is used.

Table No. 8 shows the number of adults from 1,000 clusters of leaves spun together by the bud-moth in feeding. This table shows plainly the superiority of two sprays before the blossoms, over one spray, and the superiority of one spray over none; but it does not show any marked superiority of the drive over the mist nozzle. This is due to the drive nozzle blowing from the trees clusters of leaves gathered by bud-