

These results, coupled with the examinations made from time to time of the stocks of the unaffected stores, demonstrate in a general manner a matter of the first importance in this investigation—namely, that the prevention of extensive damage from collapse to relatively “susceptible” lines in cool stores is possible and practicable for at least six months.

The next examination was made in October—after about eight months’ storage. The bulk of stored apples in New Zealand is unloaded by this time, and there remains a comparatively small proportion consisting of long-storage varieties—among which are Sturmers—that may require to be held a few weeks longer. Table 2 shows that these selected Sturmer lines were all affected to some extent in all the stores after eight months, the intensity of the disease being much greater in one store than in another.

Table 2.—Comparison of the Three Experimental Lines in respect to Damage suffered from Flesh-collapse after Eight Months’ Storage.

Store.	Line.	Number of Apples examined.	Unaffected.	Intensity of Flesh-collapse.				Total damaged.
				Barely damaged.	Slightly damaged.	Badly damaged.	Very badly damaged.	
			Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.
F ..	RX	500	91	9	..	..	..	9
	RB	461	59	41	..	..	..	41
E ..	BX	433	70	29	1	..	..	30
B ..	RX	366	78	20	1	1	..	22
	BX	266	54	40	4	2	..	46
	RB	416	53	35	9	2	1	47
C ..	RX	244	92	8	..	..	..	8
	BX	186	38	54	8	..	..	62
	RB	332	35	65	..	..	..	65
A ..	RX	231	71	26	3	..	..	29
	BX	287	41	29	15	14	1	59
	RB	384	48	33	17	2	..	52
D ..	RX	233	66	15	13	4	2	34
	RB	385	37	32	28	3	..	63

The figures in this table are liable to convey a worse impression of the condition of each line than is justified. The slightest trace of collapse was recorded. The percentage under the heading “Barely damaged” is that of apples which had suffered little or no commercial damage from collapse. Further remarks on the intensity of the disease are made later.

“SUSCEPTIBILITY” OF DIFFERENT LINES OF THE SAME VARIETY.

Table 2, which is based on larger counts than Table 1, indicates that while all experimental lines had some collapse by October, two of them—“BX” and “RB”—suffered at least twice as badly as “RX” in all the stores. A marked difference in the “resistance” to collapse of one line compared with others of the same variety is here indicated,