

respectively. All the fruit was practically of the same size—namely, $2\frac{3}{4}$ in. diameter—and was cool-stored within twenty-four hours of picking. The less-mature apples were picked and stored on 30th March, the mature apples on 11th April, and the overmature on 29th April. The overmature apples had thus been exposed to cool-storage conditions a month less than the less-mature fruit at the dates when they were examined. Despite this, it will be seen that they suffered most from flesh-collapse. The experiment was conducted in triplicate, three separate cool rooms being used (unfortunately, the overmature fruit was omitted in the third room). Moreover, in each cool room the experiment was duplicated. In recording the results fifty apples from each line were cut and examined for the presence of flesh-collapse only. Three such examinations were made at intervals of one month—firstly, on 29th August, when the fruit had been cool-stored for four to five months; secondly, on 4th October, after five or six months' storage; and, thirdly, on 3rd November, after six to seven months' storage.

One consistent feature of the experiment was the fact that the overmature fruit invariably showed a greater percentage of flesh-collapse than the mature or the less-mature fruit. In most cases there was twice as much of the disease found in the overmature fruit, the extent of the injury ranging from 38 up to 92 per cent. This is the most noteworthy feature of these experiments, indicating as it does that even under cool-storage conditions that favour the development of the disease much loss—probably 50 per cent. in some cases—can be averted by the selection of less-mature fruit for storage. Now, the reduction in the amount of flesh-collapse by picking the fruit in a greener state may be of immediate value in arresting the serious losses that some growers have sustained for two or three years past, but I fully recognize that alteration of the stage of maturity to suit the cool-storage conditions is not a desirable move if it is going to reduce the ultimate attractiveness and market value of the fruit. The selection of greener fruit is to be regarded as a temporary precautionary measure. There is no doubt whatever that cool storage will shortly be modified so as to enable the more attractive lines to be stored satisfactorily.

The stage of maturity, therefore, has a very direct bearing upon the percentage of flesh-collapse developed in cool storage, but better cool-storage conditions will enable the more mature lines to be stored satisfactorily. In the meantime the judgment of the condition required for storage presents no little difficulty to the grower. One who has suffered badly from flesh-collapse must select less-mature fruit, but not so green as to give rise to premature shrivelling.

Packing.

So far as packing for the cool store is concerned, there are several points that may be availed of as temporary precautionary measures. Anything that facilitates the escape of gases from the case into the chamber is of assistance. This will be better appreciated when the cool-storage conditions are considered. Close packing and the use of paper or wood-wool may be considered an advantage, or may even be essential in certain circumstances, but for the prevention of flesh-