

b.—LOCAL CONDITIONS.

If the orchard is to contain but few varieties it is the more necessary that these few should be the *very best* for the purpose intended; and it must be remembered that we are now dealing with the *export trade*. It is not enough that a certain variety is *good*; we must enquire, is it the *best*, or one of the three or four best, for the export trade and for this particular farm? The grower ought to plant those only which are best suited to the soil, location and general conditions of the proposed orchard. The advice of experienced local orchardists should be obtained, and Ontario and Quebec growers should not fail to consult the lists given for the various districts in Mr. Macoun's pamphlet * 'Apple Culture,' pp. 33-37.

Having obtained a reliable list of 'standards' from which to select, the grower must now consider the established fact that large lots of uniform merchandise command higher prices than small or mixed lots; it will therefore be to his advantage to plant as many trees of each variety selected, as his ground will allow without crowding. Even if he desires with a small orchard to 'cover the season,' three or four varieties should be sufficient. A very successful Annapolis grower recommends for this purpose only three, for Nova Scotia:—

Gravenstein.
Baldwin.
Nonpareil.

Buying New Stock.

In purchasing trees, the grower should deal only with the most reliable firms, or with agents whom he knows personally, and whom he can hold responsible should the trees not prove true to name. He should moreover, resist all inducements to plant new and untried varieties, for which the agent claims exceptional virtues. As before stated, the average grower cannot afford to experiment, but should await the verdict of the Government stations.

Top-grafting.

If the varieties already planted are unprofitable, from any cause, the grower should replace the undesirable trees, or alter them by top-grafting to standard sorts as described in 'Apple Culture', p. 20.

2.—Care of the Orchard.

If the apple trees are to yield their owner a good return, he must invest something more than their original cost; he must make some annual outlay in feeding, training and protecting them. In other words, he must cultivate, prune and spray.

A.—CULTIVATION AND COVER CROPS.

Orchards require cultivation. This is so nearly a universal rule, that the exceptions need not be discussed here.

The main object of cultivation is the conservation of moisture; by keeping on the surface a dust mulch of about three inches in depth, evaporation is checked, and thus moisture is retained for use of the trees. Moreover, it has been shown that frequent stirring to this depth, secures for the trees the greatest quantity of available plant food, by allowing free circulation of air through the soil. Deep plowing destroys many of the fine rootlets which grow near the surface, besides reducing the amount of plant food available.

* Bulletin No. 37, Central Experimental Farm, Ottawa, which will be sent free to all applying for it.