

26°, 1-98. Green aphid has been very prevalent on the peach-trees. The pest does serious damage unless quickly checked; not only does it destroy the foliage and restrict the growth, but the spread of parasitic fungi is greatly facilitated. These aphides are easily destroyed by two or three applications of tobacco concentrate.

Gathering the crop: Midseason varieties of apples and pears will soon demand all the attention of the grower. This section is a very large one in the Nelson orchards, as it includes, comparatively, all the export varieties of apples. It is a section where heavy losses have been incurred during the last four years of war, when the apple-export trade was completely stopped. A great deal of this loss can be avoided in future if the unfortunate experience of recent years is properly considered. Cox Orange and Jonathan apples and William Bon Chretien pears are some of the chief varieties concerned. The commonest mistake has been to pick these varieties too ripe, when they become spongy and decay at the core before they reach the consumer. The right time to pick this class of fruit varies with the class of land and orchard-management, which makes it impossible to lay down any ruling on the subject and necessitates each grower giving the matter careful consideration. The colour of the seeds and the red blush on some apples are some of the factors indicating maturity; another, very much stressed in an excellent bulletin recently issued by the United States Department of Agriculture, is the change in the green ground-colour of immature fruit, which begins to yellow slightly as it approaches maturity. These and suchlike varieties are best picked immediately they mature; this will necessitate at least two separate pickings. The experience of the last season or two has taught us that this class of crop must be handled with despatch, and should it for any reason be necessary to hold it for a while it must be done in cool store. Orchard fruit-stores—more or less insulated—often do splendid work storing some late varieties of apples, but with the higher temperatures of summer they are usually unsuitable for holding midseason fruits.

Budding: In reworking orchard-trees, specially the stone-fruit section, this operation is of great value. It may be carried out most satisfactorily at the present time.

—W. C. Hyde, Orchard Instructor, Nelson.

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Stone-fruits will be in full swing from now on, and growers will be hard at work harvesting and marketing the crop. During this time other orcharding operations are liable to be neglected, much to the detriment of the quality and quantity of the later fruits of the orchard. This is often the case in regard to codlin-moth, and many hundreds of cases are destroyed through leaving the fruit unprotected for too long a period. Get a spray on as soon as possible; about the end of January is a critical time both as regards codlin-moth and leaf-roller caterpillar. Use arsenate-of-lead powder,  $\frac{3}{4}$  lb. to 50 gallons, or paste,  $1\frac{1}{2}$  lb. to 50 gallons.

For all fungus diseases lime-sulphur and atomic sulphur are best from now on, as they act as insecticides as well as fungicides. Reduce the strength of lime-sulphur in this and subsequent sprayings to 1-120 to 1-130. Use atomic sulphur, 10 lb. to 100, on any varieties susceptible to burning, especially if using a combination spray.

Cherry and pear slug will now be troublesome, and trees will soon become defoliated. Do not neglect to spray with arsenate of lead even though the trees have no fruit. Neglect of this on young trees often means disappointment at next pruning-time, when it is found that growths have not developed as anticipated.

Where red mite and woolly aphid are both present make one spray do by combining lime-sulphur and Black-leaf 40. Use plenty of pressure and drive well into knots and crevices.

In the thinning of apples pay special attention to Scarlet Nonpareil where large crops are being borne. These are inclined to run small if not thinned, and trees suffer by becoming stunted if allowed to bear excessive crops.

Strawberries will soon be over and leaf-spot making its appearance. Spray with 4-4-40 bordeaux for this disease.

Where peach-rust has given trouble in previous years use lime-sulphur, 1-130, or atomic sulphur, 10-100. Choose cool weather for stone-fruits, as they are liable to scorch. This spray will also assist in checking brown-rot should it be in evidence.

—J. H. Thorp, Orchard Instructor, Dunedin.