

The following season turned out to be one of heavy crop, close on 20 bushels per tree being produced. The majority of the fruit was now being carried on the lateral wood. Despite the heavy crop new lateral growth was satisfactory.

Since then, with the exception of one year when a late frost lowered the crop, cropping has been consistent, and this season sees the fourth consistent crop of over 20 bushels per tree.

Each winter the pruning has been on the same basis, that of cutting away the old and exhausted wood, and leaving the new lateral growth to take its place in the sequence of fruiting. The provision of lateral growth has provided the tree with increased leafage, and the benefit is to be seen in the healthy rejuvenated appearance of the trees.

The manuring has been gradually increased, sulphate of potash being added in 1934 and since. Carbonate of lime, 12 cwt. to the acre, was applied in June, 1935. Last year's manuring consisted of 15 lb. per tree applied in August of a mixture containing fish manure, bonedust, and sulphate of potash at a ratio of 2-10-3, and in October with 4 lb. per tree of meat-meal.

As a result of this season's satisfactory crop, together with further satisfactory new lateral growth and good fruit-bud development, it is considered that these trees have now been established in consistent cropping.

Other biennial cropping varieties in the same orchard appear to have responded in a like manner, and have reverted to annual average cropping.

In orchard practice it must be recognized that increased quantities of manure at times must be applied if heavy crops, together with sufficient new growth, are to be maintained. Increased manuring, however, will not correct biennial cropping or maintain consistent crops unless it is associated with the correct pruning practice. Briefly put, this consists, in the case of all apple-trees, of the removal each winter of the older and more exhausted fruiting-wood, and the spacing and leaving unshortened of all one-year-old lateral growth.

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At a large meeting of farmers at Rakaia in May a discussion took place regarding the growing of blue lupins for sheep-feed. There was great diversity of opinion, but the majority state that lupins were not good sheep-feed and that stock had to be starved before they would eat the lupins.—*Fields Superintendent, Christchurch.*

*Certified White Clover in Canterbury.*—In the Rangiora district the common method of establishing mother-seed white-clover areas is to broadcast 3 lb. to 4 lb. of seed on an autumn-sown wheat crop. The white clover is sown in the spring after the wheat has been rolled, and light harrows are used to cover the seed. Although this is natural white-clover country, some of the stands have been almost complete failures this year. Heavy wheat crops have sometimes resulted in poor clover establishment. Rather than incur the expenses of preparing the land for spring sowing along with rye-grass, most farmers prefer to risk sowing the high-priced clover-seed with wheat. In one or two cases certified Hawke's Bay rye-grass has been sown with the clover and certified seed of both plants harvested off the same area. Probably the reason for the popularity of sowing with wheat is the excellent manner in which red clover has at times been established. Red clover, however, is more suitable for this practice than white clover, as its upright habit enables it to withstand the shading better, and the deeper rooting-system of red clover enables it to withstand better a dry period, after the wheat has been removed and has left the land depleted of moisture.—*Instructor in Agriculture, Christchurch.*