

## SHELTER - BELTS.

### REQUIREMENTS FOR THE ORCHARD.

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THERE can be no doubt that in the past the planting of shelter-belts in New Zealand has mainly gone along two lines, one being the factor of quick growth, the other as to what trees could be obtained. Quickness of growth is likely to be always a chief factor. It will be a mischievous one or not according to the view taken of what constitutes quick growth (this being capable of various interpretations) and to the purpose of the belt. Regarding the latter consideration, a tree or collection of trees that would be quite adequate for farm shelter might be quite inadequate for orchard shelter. As to the first consideration, an illustration of my meaning may be given. Pine-trees are, I believe, planted in greater numbers than any other species. It is inevitable that the lower branches die, thus leaving the lower portion of the trunks bare. The pine-trees mostly planted are *P. insignis* (properly *radiata*) and *P. muricata*. The *insignis* loses its lower branches at an earlier period than does the *muricata*. The distance apart the trees are planted has its effect—the closer they are the sooner the lower branches die. The trees are usually planted rather close together, otherwise they would provide no shelter for many years. While the trees are young they make good shelter, but when the lower branches are gone the wind goes through and creates a draught, which in its immediate neighbourhood is worse than uninterrupted wind. If the purpose of the belt was to give close shelter it may have done so for a time, but the eventual condition is worse than no shelter. How, then, can it be called quick growth, when it ended in nothing or worse than nothing? Such a plantation, however, might be quite sufficient on a farm where breaking the force of gales of wind and providing some shade are the primary objects. In such case the term "quick growth" is applicable. Pine-trees will continue to be employed in shelter-belts, and rightly so, but where close shelter is required there should be an outer row of some other tree or shrub.

One of the requirements of the present time is shelter for orchards. Where the acreage is small the width of shelter-belts must not be great—the narrower the better, provided they be effective. The cost of maintenance should also be considered. If trees or hedges that need much trimming be planted they are sure to be more or less neglected, for an orchardist can seldom find time for such work; therefore such trees or hedges should not be planted.

Climate is another factor to be reckoned with. Some trees that do well in the north will not survive in the climate of the south. In the Waikato and about Tauranga the black-wattle (*Acacia decurrens*)