according to soil, planted 12 ft. from the *radiata* and 3 ft. apart in the row. The row of *Cupressus* to be kept trimmed. On land not suitable for *Cupressus*, *Hakea saligna* or barberry may be planted instead. The *Pinus radiata* being of quickest growth soon reaches a fair height, and should be topped at 20 ft. Attention should be given to topping every second year thereafter.

For coastal districts subject to salt-sprays, provided the land is not wet, the following planting is recommended, grown as a tall belt :—

One or two rows of *Pinus pinaster* fronting the sea, 4 ft. apart each way.
One or two rows of *Pinus muricata*, 4 ft. apart each way.
Four rows of *Pinus radiata*, 6 ft. apart each way.
Two rows of *Cupressus macrocarpa*, 6 ft. apart.
One row of *Cupressus Lawsoniana*, *Hakea saligna*, or barberry planted as a hedge, 15 ft. from the macrocarpa. This inner hedge to be kept trimmed.

In districts not affected with salt-sprays another effective break-wind that will provide both shade and shelter is a single row of either macrocarpa or eucalypts, with a hedge of barberry planted on the eastern side in the case of the former and the western side in the case of the latter. With the macrocarpa the barberry should be planted not less than 15 ft. away, and about 9 ft. from the gums. Even then the macrocarpa should be kept well cut back on the side next to the barberry, or it will overshadow it, making it thin and weak in the foliage, and so spoiling its purpose as a draught-arrester. Eucalypts can safely be planted closer to the barberry, owing to their more open and upright growth. A good gum for this type of shelter is *Eucoxylon* (var. *rosea*) Campbell's gum. It is a fairly quick grower, fairly bushy, and does not grow too tall, and stands cutting back.

In wet situations where other trees do not grow satisfactorily, the Lombardy poplar provides quite a good shelter. Four rows should be planted, allowing 4 ft. between the rows and 4 ft. between the plants or cuttings. When the trees have attained a fair height, a good plan to keep the belt furnished at the base is to cut one of the side rows down during early spring. This will cause a dense bottom growth the following summer. During the next year the other outside row may be treated likewise. The resulting growth then provides an impenetrable wind barrier. The Lombardy poplar may also be used successfully in semi-dry areas where the soil is of a fair depth and somewhat loose nature.

The storm which was experienced in this province during February, 1936, revealed many weaknesses in shelter-planting. Trees which were considered resistant to salt-spray were badly blasted, even miles inland. Remarkable instances of this can be seen on both coast-lines to-day. Even in the Bay of Plenty eucalypts and many other varieties of trees were badly blasted. *Pinus radiata* in many localities is very sickly, whilst right alongside can be seen *Pinus muricata* absolutely unaffected.

The cyclonic force of the wind uprooted many shelter-trees, especially tall single- and double-row plantings of timber gums alongside drains. This is particularly noticeable in districts where the permanent water-level is from 4 ft. 6 in. to 6 ft. from the surface. Eucalypts planted for shelter and timber purposes and grown to a height of 50 ft. to 60 ft. in twelve to fifteen years have suffered badly.