## Changes in the Root Systems of Trees in Container Production

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In general, the container production of trees often results in root circling. Complex changes in root systems occur under conditions of high temperature and high humidity in Japan. Root circling is caused by the roots having few lateral and fibrous roots. This results in an inhibitory effect on stem enlargement, bud formation, and leaf expansion. From personal observation I believe that the root circling within the container is caused by two apparently contradictory factors, i.e., drainage and water holding capacity of the soil in the container. Therefore, it is very important to increase the number of lateral and fibrous roots by adequate watering of the soil in the container. By following this procedure, it became possible to promote the rapid growth of trees as shown in the pictures.

## **Horticultural Production in New Zealand**

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Geographically, New Zealand is widely spread, from 33° South to 48° South. Specific crop-related activities are concentrated in close proximity to either population concentrations or favourable growing microclimates. Most forestry propagation occurs within the vicinity of established forests. These are throughout the South Island but most especially in the north, south, and west coastal regions and in the North Island on the central plateau.

Vegetable production and supporting propagation activities are centred in South Auckland (Metropolitan Auckland has a population 1 to 1.5 million), south of Palmerston North to service the capital Wellington, and on deep volcanic pumice soils on the west side of the central North Island, particularly around Ohakune. South Island production occurs north and south of Christchurch, and in the region of Nelson and Blenheim in the northern South Island.

Ornamental production is widespread with concentrations in the Auckland, Hamilton, Tauranga, Hawkes Bay, and Taranaki regions of the North Island, and the Christchurch locality in the South Island, these being the areas of greatest population density.