

## Container Culture for Oak-Tree Production from Seed

**Masakatsu Morita**

Lecom Green Co.Ltd., Yanowari 6-2, Kan-no-shinden-chou, Toyohasi-shi, Aichi 441

In Japan, the container production of green plants started around 1965. At that time, the cultivation techniques were not fully understood and for many nurseries it was a case of trial and error when it came to problems with soil condition, plant height, container size, production facilities, etc. Also, no one knew exactly whether or not the market would increase. In 1974, I began the container production of green plants, especially oak trees. I shall now trace my efforts in oak-tree container production.

### SEED PROPAGATION OF OAK TREES

Seeds are collected in the nearby forest. Natural hybridisation is frequent in oaks, so, we must remember which trees produce seeds plentifully and, what is more important, true to type. Variation of plant habit is frequently observed from plant to plant.

The seeds, once collected, are stored as soon as possible under moist conditions for the winter. In January, the seeds are sown in seed boxes. After the new seedlings emerge (about April), they are planted in vinyl pots (10.5 cm in diameter). The soil is a mixture of clay (35%), peat moss (35%), perlite (10%), vermiculite (10%), and Kanuma-do (a local Japanese volcanic soil, 10%). After 15 to 20 days, when the new roots are reaching the bottom, fertilizer is applied. Three months later, an additional application of fertilizer is made. By autumn, the biggest plants are saleable. If 1-m-high plants are required, they are replanted into 15-cm pots and grown on until the next spring. Elite plants of high quality have close nodes, a main stem with several side branches, and healthy leaves free from disease and pest infection. When taller plants are required, they are replanted and grown on for one more year until 1.5 m in height. To produce large plants, adequate spacing in the nursery bed is most important. Irrigation is done by hand, not by automatic control, with a careful watch kept on the condition of the plants.

The overriding principle in the production of high quality plants is the maintenance of good management practices, carried out at the correct times with proper care and attention.

In these days, the demand for oak trees is gradually increasing for landscaping in city areas. So, container-grown oak trees which establish readily when planted, are much sought after.