

saleable azaleas.

The next release will be called 'Softlights', a fully-double, large, soft peachy-cream-flowered form. This azalea is very healthy in growth and foliage producing copious flowers. Our staff and ourselves are very confident of this selection (no mildew).

If all goes well it takes 5 years to evaluate seedlings, a further 5 years of trials, and 5 years to build up a commercial number of plants for sale, a total of 15 years. It probably takes a further 10 years for the gardening public to become aware of a new introduction. However, with tissue culture, 1 year is adequate to build up commercial numbers and with a good advertising budget 1 year to promote a new cultivar to the public. With this in mind, initial evaluations of plants have become of paramount importance.

Now that we have almost completed the selection and evaluation work from the 1984 hybridizing, parents are now being selected for further breeding. Reds, in particular, are being targeted, even though this colour is not fashionable at present. What of the future? We would like to some day find a frilled red, carnation-like azalea flower with the substance to last a full month. The foliage would be a healthy lush green with bright autumn colours late in the season.

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## Learning To Identify Plants

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I am currently teaching a group of students to identify plants. I begin by teaching the "easy" plants, then move on to plant genera that have less obvious features. The first signs of confusion come when they are shown the two species of native *Fuchsia*. How can *F. excorticata*, a small tree with pale stringy bark be related in any way to the small-leaved ground creeper *F. procumbens*? It is not until these plants flower that the students can see why.

One group of plants that is of particular interest to learn to identify is deciduous trees. When in a deciduous state, one tree looks much the same as another, but even when in this state each genus has very distinctive characteristics. These include differences in bud size and shape, stem colour, branch patterns, leaf arrangement, and bark colour and texture. For example, *Fagus* spp. have long slender pointed buds, *Aesculus* spp. have large sticky buds, the bark of *Platanus* spp. comes off in big flakes, the buds of *Acer* spp. are always in opposite pairs and the buds of *Alnus* spp. sit up on short stalks. To be able to recognise trees in a deciduous state is particularly useful to persons working on an open-ground nursery as winter is the time these trees are being handled the most.

Another group of plants of particular interest is the conifers. Most conifers that are commonly grown fall into one of several main families, within which the genera have common identifying features. For example, all members of the family Pinaceae have needle leaves, but take this one step further and look at the distinctive differences between the genera *Pinus* and *Picea*. *Pinus* species all have their needles arranged in small groups which are joined at the base, and large characteristic cones. *Picea*

species have their needles arranged singly up the stem, a small peg remains on the stem when the needles fall off, and the long slender cones always hang downwards.

Learning to remember botanical names is a difficult task, but when working with plants every day, reading books and catalogues, and visiting nurseries, garden centres, and botanic gardens, it does not take long for these names to become familiar. Also, you soon begin to gain an understanding of the meanings or translations of these names, which makes it easier to relate to them. Most species names are a description of the plant, for example *Magnolia grandiflora*—the *Magnolia* with large flowers or *Pseudopanax ferox*—the fierce *Pseudopanax*. The same species names also begin to appear frequently. Several New Zealand native genera alone have species names, such as *crassifolium*, *arborea*, and *australis*. It seems the more plant names known, the easier it becomes to learn and remember new names. Another way of making the identification of plants easier is to familiarise yourself with botanically descriptive words. These include types of inflorescence, types of fruit, leaf types, leaf shapes, leaf margins, leaf arrangements, etc. Also, is the plant you are looking at a tree, a shrub, a climber, an annual, an herbaceous perennial, or a grass? Knowing these terms allows for keys and references to be followed and easily understood.

Being able to readily identify plants has many advantages:

- 1) It makes working within a nursery easier by being able to quickly access plants by sight rather than having to be constantly looking at labels or asking others for help.
- 2) It makes you more interested, aware, and appreciative of the plants that are around you everyday—in gardens, streets, parks, and native bush areas.
- 3) If you wish to propagate or learn about a plant, knowing what it is allows for fast and easy reference.
- 4) When reading books and catalogues, the plants can be easily visualised.
- 5) When propagating plants commercially, it is essential to have plants correctly identified and named.
- 6) Labelling of plants within a nursery can be significantly reduced if everyone knows the plants they are dealing with.

Since entering the field of horticulture I have particularly enjoyed the challenge of learning new plants and plant names and am constantly searching for unusual or new plants with which I have not yet become familiar. I also find that teaching the subject is very rewarding and I encourage anyone who knows the subject well to teach their employees or fellow workers to learn to identify plants and use botanical names everyday.