

commercially from cuttings and, secondly, some do not thrive on their own roots in certain soils. There is another reason — the world-wide spread of *Phytophthora cinnamomi*. Some few rhododendrons seem to be immune to this disease and it may become necessary to use these species as stocks if we are to sell rhododendrons interstate or overseas in the future.

THE SELECTION OF AUSTRALIAN NATIVE PLANTS FOR CULTIVATION

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With the gradual acceptance in the late 1950's and 1960's by the Australian community of the necessity of plant life for the community, it became obvious that for Queensland's sub-tropical and tropical conditions we could no longer rely on obtaining new plant material from the traditional temperate climate sources.

Some plants from colder climates — although we could produce them effectively as nurserymen — did not perform well in the State's gardens. We believed that either we introduce shrubs, trees, palms and ground covers to the public that would grow and thrive in the average person's garden, or continue to produce seasonally those species which flowered in containers but did not always grow well for the average gardener.

As we introduced indigenous species that gave satisfaction to the customer and could be planted from containers at any time of the year, the sales graph has changed. This has been achieved by the selection and introduction of selected forms of Australian flora which have been introduced from climatic conditions similar to ours.

From my experience over the years, I have put forward the following points as guidelines for selection of plant material:

1. **Make a study of ecology as well as the soils, weather conditions, and microclimates in your area.**
2. **A basic knowledge of botany is required to recognise species and families of plants.** Obtain as many botanical publications as possible, especially those dealing with local flora. In Queensland — "The Queensland Flora", by F. M. Bailey, published at the turn of the century, is a good one. "Australian Rain Forest Trees," by W. D. Frances, and "Key to the Eucalyptus", by Blakely, are helpful, as well as all publications from your local Botany Department. Study

these books and learn to recognise flora. Get to know the plants and their requirements in your marketing area.

3. **Travel widely throughout your area.** Undisturbed roadsides in developed areas contain plants of many species. The lonelier the road in fenced areas, the wider the range of plants. Recognise the species wherever grown, paying particular attention to how plants perform in nature under a wide range of these conditions under which any species grows, the more likely it is to turn out to be a good garden subject. Never neglect the native species growing in your local area. They can give satisfaction to your customers.

We have seen the demand grow for indigenous species in the area where we live. With *Eucalyptus*, the demand used to be for *E. ficifolia* and other species from Western Australia but today we are flat out producing the so-called common local gum tree and gradually introducing new species from other places which we have found thrive in our area.

4. **Selection of specific forms from nature for propagation.** We have adopted a policy of seeking out variations in nature of any given species, always looking at habit of growth as well as quality of foliage and flower for marketing purposes. That is selecting the best form of any species for propagation and multiplication.

If the species is growing in nature under a wide range of climatic conditions, as well as in the local marketing area, we have found any form of the species to be adaptable to local conditions. In some cases of seed-produced cultivars, even though it is growing in the marketing area, in our experience it has been best to produce stock from seed collected in areas of completely different weather conditions to obtain the best results. We always try to bring back cutting material for propagation wherever possible. In collecting seed we make sure that form is growing in isolation, without reach of cross pollination, so that we can successfully reproduce the form.

5. **Selection of Forms on the Nursery.** When I started in the industry it was the practice to propagate from stock plants or pruning the same gardens regularly to obtain one's propagation material. Today we reproduce the majority of our cutting-grown plant material from the nursery row. Always take the cuttings from the most vigorous and healthy containers. This has enabled us to propagate most species the year around whereas in the past one was forced into rushed periods of propagation.

The overall standard of plants produced has risen dramatically and good looking plants in containers are the best sales builders for our industry, provided they grow for the customer. Today, if you have a good form of plant, the public quickly becomes aware of its value. Today we are getting sales volume in an ever increasing number of cultivars. This trend will continue and the number of new forms of Australian plants you can discover on your nursery will lead to greater productivity and sales if you are capable of recognising different forms in the propagation and growing period which can be marketed as new forms or cultivars. If the plant grows for your customer easily without too many problems, remember he also wants, in our economy, something different, be it a larger better home, relaxation at the golf course or bowling green, a colour T.V., a boat to relax away from work, and above all a better environment which can be created by our product. Trees will shade his home and keep his house warm in winter and cool in summer. Provided it has some purpose, he will spend money in pruning and shaping. Shrubs will give him privacy and a beautiful flower display so that in an urban community he can live within his own secluded environment.

There is no doubt in my mind that the continuing interest being shown will encourage us to produce many species of Australian flora from cuttings, after selection of the best flowering forms, rather than growing them from seed with variable flowering results. Provided we are active and obtain Plant Patents or Plant Breeder's rights in this country we can reciprocate with other countries in the planned marketing of our product.

6. **The Great Australian Heritage — Flora.** The multiplicity of species in most families of Australian flora never ceases to amaze me and, without doubt, it is a tremendous challenge to the plant hybridizer who could produce spectacular new plants for the world provided he is given the opportunity in the future.