

*E. intermedia* looks more promising as a rootstock. There is less suckering from the base and better uniformity in the grafts than with *E. gummifera*; it is also a suitable rootstock for the central Queensland area.

*E. calophylla* 'Rosea' also looks good but trials with this rootstock have only been going for 12 months.

In summary, we are in our second year of trialing *E. intermedia* and *E. gummifera* and problems with suckering and genetic variability have been encountered. *E. calophylla* has only been under trial for one year but early results look promising. All will take time but no definite success can be claimed until a significant number of grafts have reached at least 8 years of age.

## **THE NEW ZEALAND EXPERIENCE IN EXPORT OF NURSERY STOCK**

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Horticulture in New Zealand is broadly spread across both the North and South Islands, which offers a diverse range of climate from subtropical in the Bay of Islands to a cold climate in Southland. The native flora is extensive as is the range of plant material being grown.

The New Zealand nursery industry is very fortunate to have a strong research base which is both Government and University funded. This gives support to the private nurseryman and to the industry as a whole.

Regardless of climate, soil, and the range of flora available the market demand in New Zealand is limited due to the small broadly spread population. Because of this, several New Zealand nurseries have sought markets overseas.

Traditionally New Zealand is a trading country recognized for its primary industry, and over the past 20 years considerable emphasis has been placed on horticulture. A great deal of this has been the result of the rapid growth of the kiwifruit industry and the international acceptance of this product as a valued fruit.

With the export of the fruit came the demand for kiwifruit plants. It was from this plant that the industry diversified and moved into the export of ornamentals, opening markets in the United Kingdom, U.S.A., and Japan.

During the oil shock of the early 1970's the cost of heating for overwintering in the northern hemisphere became high. This allowed the New Zealand nursery industry to take advantage of the hemisphere difference to air freight stock, from an early winter, into the United Kingdom spring, landing it there as an advanced line ready for potting on.

A rapid growth of this practice resulted, and today large quantities are sent by sea and air to Europe. Credit must be given to companies such as Duncan and Davies who did the footwork for many years prior to large consignments being successful.

The question can be asked "Why export"? The determination of New Zealand growers to find new plants for production has resulted in considerable interest overseas, and together with the limited home market, has resulted in the development of the export industry.

Because New Zealand is an island isolated from any large land mass, and has a high standard of nursery stock, quarantine officials worldwide allow growers to enter markets which would otherwise be prohibited.

Research and stock improvement plays an important part in nursery stock production. This has resulted in the elimination of virus diseases from such plants as daphne and nandina, and enabled growers to offer a product superior to that currently on the market.

Following a disease problem in the United Kingdom the New Zealand exporters and the New Zealand Ministry of Agriculture implemented new quality assurance procedures as a joint effort. Strict growing standards were set and all exporters are required to abide by the recommendation laid down. These producers are reviewed each year to ensure that they conform to changing quarantine standards around the world.

Most production is carried out in soilless media, and liner material is produced in 5 and 10 cm containers. Traditionally air freight has been the main method of shipment but with new facilities and improved environmental control, container shipping by sea has proved successful. This has allowed larger volumes to be moved, and the opportunity to ship fully grown specimens.

Much has been written about the future of horticulture in New Zealand and only time and results will prove if the statistics are correct. There is no doubt, however, that we have a wide range of stock to offer, that will be accepted if the quality and hygiene is consistent, and the New Zealand growers continue to accept the challenge of export markets.