products, without any increase in production, could be worth up to \$4.5 million in increased export earnings when it comes into full force in 1999.

Remanufactured Wood Products

Probably New Zealand's fastest growing area of forestry exports is in remanufactured wood products. These products include a diversity of goods including wooden furniture and furniture components, mouldings, beadings, and prefabricated housing. Exports of these products have increased from \$64 million in 1990 to \$107 million in 1993. With a number of new remanufacturing plants recently commissioned or on the drawing board strong export growth is anticipated to continue into the future. These value-added products are particularly susceptible to tariff escalation, a common phenomenon under which a country's tariff rates become progressively higher as a product is processed to a higher degree. However, in a number of key target markets, notably the United States and the European Union, the GATT Settlement has markedly improved access for remanufactures. For example, the US tariff on wooden furniture which is applied at 2.5 - 6.6 per cent will be eliminated. A similar result was achieved with Japan where the present base tariff on wooden furniture is 4.8 per cent and in the European Union countries where presently the base tariff is 5.6 per cent.

Softwood Components

Softwood components such as mouldings, imported under code 4409.10, achieved similarly good results. In the United States and the European Union these tariffs have been eliminated (with the exception of finessed dowel rods in the US), while in Japan the tariffs in this class, currently applied at 4.8 – 8 per cent, reduce to 3.6 – 5 per cent.

The overall result on forestry sector tariffs, a sector where most of New Zealand's major markets apply moderate to low tariffs in any event, is sound if not spectacular. There now remain few tariffs that are insurmountable barriers for a determined exporter. The Japanese sawn timber tariff, which stands out firmly as the major source of trade distortion, will remain a focus for future unilateral negotiation. In the future decreased tariff escalation should provide additional incentive to substitute away from log exporting and into higher-valued processed products.

Comprehensive Analysis

The Ministry of Forestry is in the process of preparing a comprehensive analysis of the GATT Settlement for forestry.



Dr Wilfred J.B. Crane

Readers will be interested that CSIRO has named a circuit road around the oval in front of Forestry House as Wilf Crane Crescent. Wilf was well known in NZ forestry and scientific circles and in November 1991, shortly before his death, had hosted members of a NZFRI cooperative when they visited Canberra. He showed them over an impressive outdoor tree physiology experiment in which water and nutrients were strictly controlled to a stand of radiata pine.

The ceremony took place as scheduled and the main speaker was Hugh Wareing, a forester and scientist well known to New Zealanders who recounted a number of amusing anecdotes about Wilf - an eccentric but well respected character. The road named in honour of Wilf is in front of the old Australian Forestry School where many old-time NZ foresters like myself received our training, before the advent of the Canterbury School of Forestry.

Ryde James

The highest **GF** rating

Sir,

I have recently been asked by a number of people involved in forestry as to what has been the highest GF rating allocated to any radiata pine seedlot so far.

Readers may like to know that, to date, the highest rating ever allocated to a seedlot involving more than two parents has been GF28. A few two-parent control-pollinated crosses (specific crosses) have been rated GF29* and GF30*. An asterisk indicates that less than normal confidence should be placed on that particular rating, because of the limited availability of the progeny performance data. It is unlikely that any increase in the top rating will occur over the next 12 months.

The availability of planting stock of the most genetically improved material is very limited. Regardless of the GF rating of the material being purchased, buyers should obtain a copy of the appropriate seed certificate from the seller and make sure that the packing note or invoice for the seed or plants being purchased contains the seedlot number and GF rating.

T.G. Vincent Manager **NZFRI Seed Certification Service**

Update on macrocarpa (continued)

old trees from open stands have also been selected. Many of the trees selected to date appear to have more than just macrocarpa in their parentage.

Once clones have been multiplied up, they are then tested for two or three years in the field to ensure they are vigorous and of very superior form before stool beds are established for commercial production of planting stock. The first few thousand rooted cuttings were sold in 1992, and it is hoped to have at least 100,000 available by 1996. So far there has been a strong demand for these plants, with stocks sold out a year in advance of production, despite a price of \$2.50 each. With increased production, costs will drop below \$2 and could even drop to \$1 if production is on a big enough scale.

Although the long-term performance of these macrocarpa clones has yet to be proved, early indications are that on prime sites they are faster growing than Leylands and have lighter branching.

Conclusions

The intrinsic wood properties of macrocarpa make it a very desirable species to grow a range of end uses, and the species enjoys a high reputation, despite the poor

quality of most logs currently available. It is relatively easy to grow but is not suitable for easy-care management. In young stands already established it is possible to produce high-quality logs with intensive pruning. In a few years time it is hoped to have high-quality seed available commercially, and this should greatly enhance growers' ability to produce high-quality logs. In the meantime, rooted cuttings of superior clones offer another avenue of quickly upgrading the quality of planting stock.

NZ training for Indian forestry officials

Seventeen scientists and officials from the Indian Council for Forestry Research and Education are in New Zealand for threemonth training fellowships. Hosted by the New Zealand Forest Research Institute, the high-ranking visitors from all over India are undertaking United Nations Development Project Training Fellowships through FAO prior to returning to India to take key roles in major afforestation projects.