

GF Plus Scheme

The New Zealand Radiata Pine Breeding Co-operative (NZRPBC) has recently introduced the GF Plus Scheme. The new GF Plus scheme provides additional information on specific tree growing and wood property traits, to enable more informed comparisons of the genetic characteristics of different control-pollinated seedlots. The new trait ratings are intended primarily to assist tree growers to make better informed decisions on which seedlot to use. Forest growers can select particular seedlots for specific sites and end uses considered strategic in their area.

For the past 10 years radiata pine seed has been rated under the GF system. Recent tree breeding efforts have focused increasingly on developing and testing material for a number of specific tree characteristics. While GF ratings indicate performance in terms of growth and form, no information is provided for other important wood property traits. The new GF Plus scheme provides performance ratings for growth, straightness, branching habit, dothistroma resistance, wood density and spiral grain. This is a significant improvement on the old GF system.

Seed producers apply to the Forest Research seed certification service to have their seedlots rated. Participants of the scheme obtain a certificate for each seedlot purchased from their seed or plant producer. These certificates provide estimates of relative performance of a given seedlot for each of the six traits. Trait ratings on the certificate are estimates of the genetic worth of each seedlot for the specified trait. Certificates also name the seed producer, show the seedlot number, the orchard in which it was produced and the pollination method and state the number of parents and crosses involved if this more than four. An estimate of ratings for an average unimproved seedlot is shown on each certificate.

A fee of \$32.00 (+ GST) per 1000 GF Plus plants bought, is paid by the tree stock purchaser. The seed purchaser (usually nurseries) collects the fee on behalf of the NZRPBC. Funds raised will be used by the NZRPBC to assist with further research and development of radiata pine breeding.

The Seed Certification Service is still continuing to provide seed certificates with GF, DR and LI ratings for control-pollinated seedlots outside the GF Plus scheme, but information is limited to the GF rating and seedlot origin only.

A one-day workshop introducing the GF Plus scheme was held in Rotorua in March – further workshops will be held in other locations during the year. Any queries regarding the scheme should be directed to the Scheme Administrator, P.O. Box 1131, Blenheim.

MAF Policy

Concerns about the ability of the Ministry of Agriculture and Forestry to deliver policy advice have been raised in a report by Parliament's Primary Production Committee. In its 1998 Financial Review of MAF, the committee notes the ongoing benefits of the merger of the Ministries of Agriculture and Forestry were estimated by external consultants to the government at \$4.63 million.

However, ministry people had limited input and this had resulted in Crown revenue being "inadvertently reduced" following the merger.

"Two essential functions were omitted from the initial

budget development and some functions that were curtailed were assumed to be funded from Revenue Crown. In reality, they were either wholly or in part cost recovered functions funded from Revenue Other.

"The errors in the budgets totalled \$2.094 million for the current year and affect the baselines on which the ministry operates on an ongoing basis. The budget shortfalls increase to \$2.194 million in 1999/2000 and \$2.294 million in the following to years.

"This has resulted in some functions, such as policy advice, being significantly under-resourced."

As result, policy advice and finance staff, in particular, were working very long hours to deliver outputs. There was a freeze on recruitment of policy analysts and ten out of 60 head office policy advice positions were vacant, forcing the ministry to approach other government agencies to have staff seconded to assist with policy advice.

"A major issue facing the ministry is finding the time to develop policy advice staff, most of whom only have two to three years experience. The staff need to be away from the operations for this to happen."

The committee noted that the ministry intended to undertake a capability review on policy advice within the next year and it would monitor this situation.

Global Links in Gene Deal

Fletcher Challenge Forests is joining with International Paper Co., Monsanto Co., and Westvaco Corp. in a forestry biotechnology venture to produce and market tree seedlings that will improve forest health and productivity for forestry markets worldwide. The four companies will contribute a total of US\$60 million over five years to the joint venture.

The partners intend to contract the Auckland-based Genesis Research and Development Corp., a biotechnology research company, to provide genomics research. The joint venture also will acquire forestry intellectual property from Genesis.

The participating companies envision the joint venture as a worldwide magnet for future developments in forestry biotechnology and believe that as international demand for wood fiber increases, significant business opportunities will result from additional breakthroughs in forestry science. Each company possesses significant biotechnology capabilities and will share its individual strengths as an equal partner in the joint venture.

The joint venture also plans to actively seek technological advances from independent laboratories, universities, and other companies to position itself for marketing new advances in forestry biotechnology to the world's tree growers in the shortest possible time.

The joint venture will focus on tree species that represent a majority of the seedlings now planted by the forest industry around the world and will initially direct its efforts toward various eucalyptus and poplar species, Radiata pine, loblolly pine, and sweetgum.

The improvements are expected to enable forest landowners to meet the growing demand for paper and wood products while strengthening their ability to manage forestlands in a sustainable and eco-efficient manner for the benefit of future generations. Increasing the productivity of tree plantations safely and sustainably will help meet the world's wood and fiber needs without increasing pressure on native forests, the four companies believe.