Fran Bailey Chairman, Inquiry into primary producer access to gene technology, Standing Committee on Primary Industries and Regional Services, House of Representatives Parliament House Canberra ACT 2600

Submission from the Rural R&D Chairs Committee to the Inquiry into primary producer access to gene technology

Dear Ms Bailey,

Thank you for the opportunity to present this submission on behalf of the Rural Research and Development Corporations (RDCs).

The submission focuses on the background and rationale of the RDCs and the joint activities they undertake to address the issue of producer access to gene technology. A number of RDCs will make separate, but complementary, submissions on the circumstances of their industry on this issue and their own efforts to provide primary producer access to gene technology.

The enclosed joint submission is prepared from the starting position that access of primary producers to gene technology and other leading edge technologies is critical to the future commercial success of Australia's primary industries.

It seeks to spell the role of the Rural R&D Framework in providing mechanisms to overcome the market imperfections and other impediments, which may restrict that access. The R&D Framework does this by establishing partnership arrangements between producers, Government and other stakeholders to provide the essential financial and strategic capability. Central to this is the role each of the Rural Industry R&D Corporations plays, on behalf of its industry.

The submission goes on to outline the structures the RDCs have adopted to ensure that they collaborate effectively on this issue.

The Rural R&D Corporations would welcome the opportunity to meet with your Committee at an appropriate time to these matters in more detail. If I can be of assistance in arranging a panel of RDC representatives for such a meeting, I am available on 6272 3499.

Alan Newton Executive Manager

Submission from the Rural R&D Chairs Committee to the Inquiry into primary producer access to gene technology

Role and rationale of the RDCs

The Australian RDC framework is directed at ensuring that Australia's rural industries have access to those leading edge technologies, which are critical to their international competitiveness. It involves annual expenditures in excess of \$300 million on rural R&D and is one of the most significant and successful government policies for rural Australia.

The framework comprises fifteen organisations. These include twelve corporations, namely; cotton, dairy, fisheries, forest and wood product, grains, grape and wine, horticulture, land and water, pigs, rural industries, sugar and tobacco. There also are similar corporate arrangements for wool and meat and livestock and a council for dried fruits R&D.

Each of these organisations operate as separate bodies under the direction of their corporate boards. Their day to day focus is primarily on the management of a portfolio of strategic research activities on behalf of participating industries, centring on the allocation and administration of funds to research providers.

The author of this submission, the Rural R&D Chairs Committee, represents the RDCs in various ways, in respect to their joint interests.

A background note on the RDC framework is at Attachment A to this submission.

Role of RDCs in relation to gene technology

It is clear from the above statement on the role of RDCs, that the corporations and councils are at the forefront of industry efforts to ensure rural producer access to gene technology.

RDC support is provided in many forms. It includes funding of specific projects concerned with gene technology development and adoption, in supporting initiatives to build understanding and awareness of the nature and importance of gene technologies and their application, and in encouraging the development of the scientific and other capabilities of people to work in this area. The RDCs also collaborate in a number of programs and other joint activities on gene technologies.

Each of the RDCs, as required under their legislation, prepare R&D strategies and priorities, including those for gene technology, in consultation with their industries and research providers and other stakeholders. These are outlined in the R&D plans, Annual Operational plans and Annual Reports. They will also feature in submissions from various RDCs to your inquiry.

Figures are not available on the overall RDC level of funding in support of gene technology R&D. It is not uncommon however, for individual RDCs to allocate around 20% of their budget to this area, which indicates a significant level of support is provided across the RDCs.

Joint arrangements regarding gene technology

As mentioned above, in addition to unilateral actions by RDCs to facilitate gene technology developments, RDCs engage in a number of joint activities. These range from initiatives among a small number of RDCs to sponsor collaborative research programs and other activities, to joint initiatives, which typically involve most if not all, corporations. This latter category is normally coordinated under the under the Rural R&D Chairs Committee arrangements, which includes mechanisms for shared funding of joint projects by the RDCs.

At the centre of these joint arrangements is the bi-annual meetings convened by the Chairman of the Rural R&D Chairs Committee, which comprise the Chairmen and Managing/Executive Directors of all RDC organisations. Joint consideration of gene technology issues and strategies have been major items on the agenda at the last three of these meetings.

The RDCs also maintain two joint working groups on gene technology issues. These are the Gene Technology Working Group, and the Working Group on Intellectual Property in Biotechnology. Both working groups are chaired by Professor John Lovett, the Managing Director of the Grains RDC.

Over recent months the RDCs have cooperated with the Australian Research Council to jointly convene a scenario planning project on genomics and gene technologies. The project, which is facilitated by Curtain University, has comprised a number of workshops to address the key issue of:

How do the ARC and RDCs respond strategically to maintain and increase Australian competitiveness in biological science and its application to the development and prosperity of rural industries?

This issue includes:

 Identification of key emerging science and technologies in genomics and genetics and strategic issues involved.

- Identification of potential synergy in research interests between the ARC and the RDCs
- Consideration of the future investment strategies of the RDCs, ARC and other agencies in this area, including leverage opportunities and obstacles.
- Consideration of the regulatory and communication issues that may impact on the application of genomics and gene technologies

The Office of the Rural R&D Chairs Committee has assisted with the coordination of these workshops.

The RDCs also jointly sponsored and participated in the recent first Australian Consensus Conference on gene technology in the food chain.

Attachment A

The Rural R&D Corporation Framework

The Australian RDC framework involves annual expenditures in excess of \$300 million on rural R&D and is one of the most significant and successful government policies for rural Australia. It is directed at ensuring that Australia's rural industries have access to the leading edge technologies, which are critical to their international competitiveness.

The framework comprises fifteen organisations. These include twelve corporations, namely; cotton, dairy, fisheries, forest and wood product, grains, grape and wine, horticulture, land and water, pigs, rural industries, sugar and tobacco. There also are similar corporate arrangements for wool and meat and livestock and a council for dried fruits R&D.

Each of these organisations has a Board of nine Directors, including ex officio, the RDC Managing Director/Executive Director. The corporations operate under common arrangements prescribed in legislation. These arrangements include standard provisions for the selection and appointment of Directors, strategic management of the corporation in consultation with their industry sector, and for full accountability to stakeholders over performance.

The day to day focus of the RDCs is on the management of a portfolio of strategic research activities on behalf of participating industries, centring on the allocation and administration of funds to research providers.

The framework was developed, primarily, as a way of overcoming the inherent tendency in rural industries, for under-investment in R&D. It is based on measures which are designed to ensure adequate funds are available to facilitate an appropriate access by rural Industries to leading technologies.

The problem of probable under-investment in rural R&D arises from the nature of rural product markets and the predominance of a very large number of small producers each of whom have little market power. As a consequence, individual producers are unlikely to have the incentive to invest in R&D. Producers who do invest are unlikely to be able to fully appropriate the benefits from so doing, while those who do not invest will, nonetheless, probably be able to gain access to the ensuing technologies.

This situation unless addressed, has the potential to result in a significant loss of benefit to individual producers, rural and associated industries and the nation. It has long been accepted that there is a strong case for government intervention to overcome this market failure and to ensure that the appropriate level of investment in rural R&D is conducted.

The RDC framework has proved to be a successful way of addressing this problem. It does this in a number of ways.

First, under the RDC administrative and funding arrangements, rural producers become closely involved in strategic decision making on R&D for their industry. This leads to a greater understanding of the value of research and producers are encouraged to invest in R&D at a level, which can drive the competitiveness of their industries.

Second, the RDC framework provides a way of engaging industry and governments in a partnership to ensure that both public and private investment needs for rural research are met in an integrated manner.

Third, the framework provides a set of arrangements, which directly act to overcome market imperfections. The establishment of RDCs as corporate entities, and the mandating in legislation of certain management and accountability processes, leads them to operate in line with commercial market behaviour.

Additionally, the Minister provides advice to the RDCs of a number of broad priority areas of R&D so that RDC strategies can be framed against a background of Government policies and priority areas of public good research.

The critical importance of rural levies

The levy mechanism is fundamental to the successful operation of the rural RDC model. The system of levies enables rural producers to combine in addressing their collective interest to ensure that there is sufficient investment in R&D to enable them to be internationally competitive. Given that they have an advantage in pursuing their common interests, levies provide a means for the efficient and effective collection of contributions on a fair and equitable basis from industry members.

RDC funds are in most cases, drawn from a combination of industry levies and matching Commonwealth Government contributions. Under the matching arrangements applicable to most RDCs, the Commonwealth provides dollar for dollar matching of corporation expenditures on R&D from levy derived funds, up to the level of 0.5% of the industry gross value of production.

Success of the Framework

The level of expenditures under the present arrangements is a strong indicator of the success of the framework. In addition to a significant increase in overall expenditures and the value of the strategic processes involved, it has been instrumental in eliciting large increases in contributions from industry to rural R&D.

Between 1984/85, (the last period of the previous arrangements) and 1997/98, the respective contributions from industry and Commonwealth increased from \$26.5m to \$148.7m, and \$39.9m to \$147.4m. Over the same time overall program expenditures have increased from \$63m to in excess of \$300m.

The table below sets out, for each of the organisations operating under the framework, the contributions received from industry and the Commonwealth, and their expenditures, for 1997/98.

Organisation	Industry	Commonwealth	Total
	Contribution	Contribution	Expenditure
<u> </u>	\$'000	\$'000	\$'000
Australian Wool Research and Promotion Organisation	12852	13090	26642
Cotton RDC	5485	4519	9307
Dairy RDC	11866	10884	20793
Fisheries RDC	2606	7879	16136
Forest & Wood Products RDC	3167	1266	4812
Grains RDC	53662	33760	74209
Grape & Wine RDC	2374	2565	5246
Horticulture RDC	16366	13900	28783
Land & Water RDC		10778	19098
Meat & Livestock Australia	24535	24535	48922
Pig RDC	3468	3850	9273
Sugar RDC	6257	5822	12781
Tobacco RDC	832	277	1299
Rural Industries RDC	4480	14553	21509
Dried Fruits Research Council	787	567	1318
Total	148737	148245	300138

Rural R&D Income and Expenditures 1997/78*

*Source: Audited figures provided by AFFA.