Submission to

STANDING COMMITTEE ON PRIMARY INDUSTRIES AND REGIONAL SERVICES

on

INQUIRY INTO PRIMARY PRODUCER ACCESS TO GENE TECHNOLOGY

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TABLE OF CONTENTS

1. SUMMARY OF RECOMMENDATIONS 3

2. INTRODUCTION 5

2.1 THE ROLE OF THE GRAINS COUNCIL OF AUSTRALIA 5
2.2 BACKGROUND 5

3. BENEFITS AND BENEFICIARIES OF GRAINS RESEARCH AND DEVELOPMENT 6

4. THE CASE FOR GOVERNMENT FUNDING OF RURAL RESEARCH AND DEVELOPMENT INCLUDING BIOTECHNOLOGICAL RESEARCH 7

5. TERMS OF REFERENCE 8

5.1 THE FUTURE VALUE AND IMPORTANCE OF GENETICALLY MODIFIED VARIETIES 9
5.2 THE ABILITY FOR PRODUCERS TO COMPETE USING TRADITIONALLY AVAILABLE VARIETIES 10
5.3 THE COMMERCIALISATION AND MARKETING OF AGRICULTURAL AND LIVESTOCK PRODUCTION VARIETIES 10
5.4 THE COST TO PRODUCERS OF NEW VARIETIES 11
5.5 OTHER IMPEDIMENTS TO THE UTILISATION OF NEW VARIETIES BY SMALL PRODUCERS 11
5.6 ASSISTANCE TO SMALL PRODUCERS TO DEVELOP NEW VARIETIES AND THE PROTECTION OF THE RIGHTS OF INDEPENDENT BREEDERS, IN RELATION TO GENETICALLY MODIFIED ORGANISMS 13
5.7 THE APPROPRIATENESS OF CURRENT VARIETY PROTECTION RIGHTS, ADMINISTRATIVE ARRANGEMENTS AND LEGISLATION, IN RELATION TO GENETICALLY MODIFIED ORGANISMS 13
5.8 OPPORTUNITIES TO EDUCATE THE COMMUNITY OF THE BENEFITS OF GENE TECHNOLOGY 17

1. Summary of Recommendations

The GCA's Recommendations to the Inquiry are outlined as follows:

Recommendation 1

The GCA recommends that the Commonwealth Government raise its matching contributions beyond the present maximum of 0.5 per cent of Gross Value of Production.

Recommendation 2

GCA recommends that the Commonwealth facilitate the introduction of collection of funding contributors to research in gene technology from down stream processors and marketers which would be subject to Commonwealth matching funding in a similar way to that operating for agricultural R&D.

Recommendation 3

Australian growers must be able to access gene technologies that are available to their international competitors as they, and the Australian community generally, would otherwise risk falling behind in terms of competitiveness.

Recommendation 4

That the Commonwealth ensure that appropriate incentives to encourage investment in gene technology Research and Development by private investors are maintained.

Recommendation 5

That domestic investment in the development of gene technology products be encouraged in order to ensure that Australian producers' access to new varieties is not inhibited by cost factors.

Recommendation 6

That the Commonwealth ensure that high levels of concentration in the gene technology sector do not act to restrict Australia's access to international gene technology or to hinder the development of Australian intellectual property.

Recommendation 7

That ANZFSC and ANZFA should carefully reconsider the decision to develop further standards to cover the labelling of genetically modified foods.

Recommendation 8

That AQIS ensures that it remains fully aware of the potential benefits to the grains industry of having easy access to gene technology in its development of new regulatory arrangements for the import of genetically modified organisms.

Recommendation 9

That the proposed Office of Gene Technology should establish a formal consultative mechanism with all State and Territory Agriculture Ministers, as well as the Commonwealth Minister for Agriculture, Fisheries and Forestry, in order to ensure that the interests of Australia's agricultural industries are taken account of by the Office in its regulation of gene technology.

Recommendation 10

That all regulatory bodies in the area of gene technology maintain open channels of communication in order to ensure that regulatory consistency is maximised and duplication of regulation is minimised.

Recommendation 11

That the development and implementation of any new regulatory arrangements be conducted with the goal of ensuring that effective access to biotechnology intellectual property for Australian grain growers is maintained.

Recommendation 12

That Australian regulatory bodies in the area of gene technology ensure that they keep pace with international developments in the sector.

Recommendation 13

That the proposed Office of Gene Technology be established as quickly as possible with a mandate to educate the community about the safety of products developed through the use of gene technology and the potential benefits that could accrue to the community from the use of the technology.

2. Introduction

2.1 The Role of the Grains Council of Australia

The Grains Council of Australia (GCA) is the peak body of the Australian grains industry, representing more than 45,000 growers.

The fundamental objective of the GCA is to maximise Australian grain growers' returns by seeking to initiate or influence policy decisions on matters which affect their profitability and international competitiveness.

The GCA's member and associate member bodies are:

- Western Australian Farmers Federation
- South Australian Farmers Federation
- Victorian Farmers Federation
- New South Wales Farmers Association
- Queensland Graingrowers Association
- Tasmanian Farmers and Graziers Association (Associate Member)

The GCA is a member of the National Farmers' Federation which represents over 170,000 farmers through 25 affiliated member groups.

The GCA welcomes this opportunity to present a formal submission to the Standing Committee on Primary Industries and Regional Services Inquiry into Primary Producer access to Gene Technology.

2.2 Background

The grains industry makes a major contribution to the economic well being of the nation in general, and to regional economies in particular. The Gross Value of Production (GVP) for the grains industry for 1998/99 is estimated at $6.7 billion. The average GVP over the last four years of the grains industry has been $7 billion or one-quarter of the total Australian farm GVP. Grain exports for 1998/99 are expected to be $4.8 billion, over 70 per cent of total grains GVP. Over the last four years exports have averaged $5.2 billion, or again, one-quarter of total farm exports. As an export oriented industry, its contribution depends on its international competitiveness, through price and quality, and improvements in production efficiency.

The industry has had to contend with a complex global economic, social and political environment, changing in a way and a rate unprecedented in recent history.

To complement the industry's strategic approach to improve its competitiveness an effective, efficient and market oriented research and development sector is necessary.

The Grains Research and Development Corporation (GRDC) was established through the Primary Industries and Energy Research and Development (PIERD) Act 1989.

The GRDC is the national organisation through which grower-contributed funds, together with "matching" funds from the Commonwealth, are administered and allocated to grains research and development.

The GRDC is legislatively required to be accountable to grain growers through the industry representative organisation, the GCA.

State Departments of Agriculture, the CSIRO and tertiary institutions throughout the country, financed both Federal and State Governments, are also important providers of research.

Whilst the GRDC is not the only organisation funding grains research and development, this submission will concentrate on the GRDC as the GCA is the formally gazetted industry representative organisation. Through this relationship and the strong consultative arrangements that have been formed between the two bodies the research and development component of the grains industry is integrated with the industry and targeted at its needs.

The "objects" of the GRDC specified in the PIERD Act (1989) are, through the funding and administration of research and development, to:

- Increase the economic, social and environmental benefits to the grains industry and to the community in general by improving the production, processing, storage, transport and marketing of grains.
- Achieve the sustainable use and management of natural resources
- Make more effective use of the resources and skills of the community and, in particular, the scientific community
- Improve accountability for research and development expenditure.

3. Benefits and Beneficiaries of Grains Research and Development

Numerous studies, both outside Australia and within Australia, have indicated that agricultural research and development produces a high return to industry and society. In all cases the returns to R&D have been estimated to be high, much higher than returns on alternative investments, suggesting that investment in agricultural R&D has been worthwhile for Australian society and that continued investment, even at a higher level, is warranted.

In 1991 the GRDC commissioned an independent study of the benefits from research which had been supported by the GRDC and its predecessor councils. The benefit/cost analyses showed that over the implementation life of the projects evaluated benefits are expected to exceed costs by $1010m in present value terms. This was equivalent to an annual average benefit, or more than twice the then annual budget of the GRDC. The individual rates of return (IRR) ranged from 34 percent to 561 percent with an overall benefit/cost ratio of 19:1.

The direct benefits to growers of the research funded have usually been in the form of productivity improvements or cost reduction. Society too benefits directly from grains research through the development of conservation and sustainable production systems. For example, there is now an increasing awareness of the need to conserve soil moisture, and energy with a view to improving agronomic and economic efficiency. Similarly, the adoption of integrated pest management has benefits for the wider community as it uses a total systems approach that evaluates and integrates biological, chemical, and natural control factors into a unified program (eg combining natural predators, cultural control, plant resistance and selective pesticides), where economic damage is avoided, the effectiveness of control strategies are optimised and better sustained and adverse effects on environmental quality are minimised.

Other benefits accrue through regional multiplier effects and improved export earnings.

Indirectly, other sectors benefit through the application of research findings to those, often unrelated, sectors.

Expenditure on research and innovation can also lead to economic growth. The endogenous growth theories focus on the linkage between new knowledge, acquired through research for example, and economic growth. Knowledge has public good characteristics which can provide positive externalities for other areas of the economy. These knowledge externalities are the basis of the new growth theories. The Bureau of Industry Economics[1] sees the new growth theories as "important because they focus on the factor that is generally acknowledged to be the key to long-term economic growth: increased productivity from knowledge….
They provide possible justification for government intervention to assist growth through encouragement of certain externality generating activities and they highlight possible reasons why market forces alone might not result in the highest possible long-term growth".

The new growth theories also help to differentiate government expenditure on research and development compared with other areas of expenditure on the basis that expenditure on research through the acquisition of knowledge will lead to economic growth.

The benefits of investment in biotechnology in the grains industry is expected to similarly provide enormous benefits and for those benefits to be widely distributed, directly and indirectly throughout Australian society.

4. The Case for Government Funding of Rural Research and Development including biotechnological research

There are a number of justifications for government involvement in research and development. They relate to: the under-investment in R&D which would occur without government intervention; the large external benefits to the community beyond those received by growers and, the achievements of national interest policy objectives.

Under investment in rural research occurs because of the existence of market failure. This occurs principally when investors do not capture the full benefits. Knowledge can be regarded as a public good and users of this knowledge have an incentive to free ride. Aggregate knowledge does not decrease as any individual uses it. The private sector has inadequate incentive to fund R&D that has benefits to others in society. This is the approbriability issue.

There are two other elements of market failure: firstly, because of the critical minimum size of most research projects funding by an individual would be beyond their power and in the absence of divisibility projects of this nature would go unfunded, and: secondly, the uncertain and high risk nature of R&D, both in terms of outcomes and their benefits means that individual growers would rarely undertake research.

As a consequence, the absence of government intervention, research of benefit to individuals within society and the nation as a whole would not be funded. Under investment is likely to be greatest where the industry is characterised by many small firms. The grains industry, with 45,000 growers is such an industry for which Government support for R&D is essential.

For investment in biotechnologies the market failure that arises through the critical minimum size and the indivisibility of investment projects are, if anything, more acute because of the size of the investment required.

Positive externalities arise from the implementation of research results and are thus welfare enhancing. It is a benefit which accrues to a member of society for which they do not pay.

[1] Bureau of Industry Economics. Recent Developments in the Theory of Economic Growth: Policy Implications. Occasional Paper No 11. 1992.

Without government involvement, because of the existence of positive externalities, research expenditure would be sub-optimal. Positive externalities may be direct, for example when grains research findings/applications benefit human health and welfare or indirect, where research in grains will help in solving other seemingly unrelated problems. Much of the research GRDC funds in improving on-farm productivity such as farming practices through integrated pest management and reduced tillage has clear positive externalities. Rural research in aggregate has been, and will probably continue to be, an investment activity with a high social rate of return.

The GCA have long contended that in view of the wider community benefits , which do not diminish at a certain arbitrary level that the Commonwealth Government should raise it matching contribution beyond the present maximum of 0.5 per cent gross value production.

Indeed to avoid underinvestment in the area of gene technology and in the process maintain Australia's grains industry's international competitiveness the GCA urges that the Government raises it matching beyond the present arbitrary level of 0.5 per cent of Gross Value Production.

Recommendation 1

The GCA recommends that the Commonwealth Government raise its matching contributions beyond the present maximum of 0.5 per cent of Gross Value of Production.

In any case the Commonwealth Government should encourage funding of research into gene technology through the RDC's beyond the present arrangements.

Beneficiaries of research into gene technology include marketers and down stream processors. All of which have a wider group of beneficiaries. The existence of the 'free rider' could thus lead to under investment in research in gene technology.

Recommendation 2

GCA recommends that the Commonwealth facilitate the introduction of collection of funding contributors to research in gene technology from down stream processors and marketers which would be subject to Commonwealth matching funding in a similar way to that operating for agricultural R&D.

This could be on the basis of a general levy or specific amounts to undertake specific projects which involve a wide range of beneficiaries.

5. Terms of Reference

The GCA's comments on the individual items outlined in the Terms of Reference for the review follow.

5.1 The future value and importance of genetically modified varieties

As indicated above, the Australian grains industry is export oriented. Whilst it exports the majority of its grain production it is not the major player on the World stage. For wheat, for

example, Australia accounts for around one-sixth of World trade – behind the United States (one third), Canada (one fifth) and the European Union.

Australia has maintained its competitiveness and increased the efficiency of its grain industry in the 1990s. A major factor in this achievement has been the Australian industry's uptake of new technology. The new technology has created better opportunities for new and enhanced characteristics, both quality traits and crop production traits, to be introduced into grain cultivars.

Conventional plant breeding is a slow and costly process. However, the introduction of biotechnology has allowed the normal time periods to be accelerated. The GRDC has estimated that the production of a new grain cultivar may take up to thirteen years using conventional breeding methods. In contrast, the use of gene technology to produce a new cultivar is estimated to take around three years.

It is important to stress that gene technology is not an alternative to conventional plant breeding. Rather, it is an additional method that allows breeders to speed up the process of producing new cultivars and to effect more precise changes to quality and crop production traits.

The GCA strongly believes that the Australian grains industry needs to maintain international competitiveness and a global focus in the area of genetically modified foods. It has been widely acknowledged that there are very substantial benefits to the Australian grains industry stemming from the use of this technology. Benefits can arise from such things as increased production efficiencies, quality improvements and decreased environmental impacts.

Quality improvements can include improvements in protein quality, oil quality and reduced anti-nutritional factors. Improved crop production traits, such as herbicide resistance, insect resistance, disease resistance and stress tolerance, can also be achieved. The GRDC has identified particular benefits that are expected to accrue to the oilseeds industry, such as reduced agrochemical usage, the development of new markets for new products, the production of healthier fats and oils, and renewable sources of industrial oils. Positive developments are also occurring with regard to a number of pulse crops, including lupins, chickpeas and peas.

It is also the case that many of the benefits that flow to producers from the use of genetically modified organisms, those outlined in relation to quality improvements for example, are also associated with wider positive implications. Many of the benefits stemming from the use of genetically modified organisms also flow on to consumers, to the environment and to the Australian community generally. For example, the use of genetic technology in the grains industry has the potential to increase yields, thereby reducing costs to Australian growers and helping to more efficiently feed a growing population, and, at the same time, to reduce the application of chemicals to grain crops, thereby reducing the incidence of chemicals in the environment.

The biotechnology revolution is picking up pace all over the World. The Australian grains industry has World class players in our growers, researchers and marketers and this gives the industry the potential to be a significant player in the area of genetically modified foods in coming years. However, the GCA is concerned that the industry must be given every opportunity to take advantage of the new technology in order to maintain its level of international competitiveness.

5.2 The ability for producers to compete using traditionally available varieties

The Australian grains industry is in the position of being a small producer on a Worldwide basis (accounting for less than 3% of World production in an average year) but a large

exporter (accounting for around 15% of international trade in an average year). Around 80% of Australia's total grain production is presently exported.

International grain markets are becoming increasingly dominated by very large buyers and processors, both State owned and private companies. These entities wield very considerable market power in international markets and have the ability to demand particular quality characteristics. The use of new technologies has allowed Australian grain growers to produce products that meet these demands. The need for new technologies, including genetic technology, will only increase in future. This means that the ability of producers to compete internationally using only traditionally available varieties can be expected to decline significantly over time.

It is also important to note that Australian growers, and the Australian community generally, will be in danger of falling behind their international competitors if those competitors have access to technologies that are denied to Australian growers.

Recommendation 3

Australian growers must be able to access gene technologies that are available to their international competitors as they, and the Australian community generally, would otherwise risk falling behind in terms of competitiveness.

5.3 The commercialisation and marketing of agricultural and livestock production varieties

The GCA is concerned to ensure that the benefits of gene technology accrue to grain growers and to the Australian community generally. It is important that newly developed plants are made available to growers and the industry without unnecessary delays. Development of new crops through genetic technology normally involves significant private investment. It is thus also important that such investment is not hindered – incentives for appropriate investment must be continued by ensuring that the investing entities have the opportunity to achieve reasonable returns on their investments. Thus, the GCA considers that an appropriate balance needs to be reached between ensuring that the benefits of gene technology are shared by growers and the community and ensuring that the appropriate incentives for development of new products by private investors are maintained.

An additional issue that effects commercialisation and marketing is the issue of plant breeders' rights. Traditionally, plant breeders' rights have been exercised by the collection of royalties on seed. However, there has been a move towards end point royalties in the grains industry in recent times. A number of industry stakeholders have previously expressed a fear that so called "closed loop" marketing schemes may come to dominate in the future, which could have the possibility of creating adverse effects on marketing choices and on existing marketing infrastructures. In order to avoid this, it is likely that there will be a need to develop a system of end point royalties which enables the owners of rights to obtain a return without having to enter into the marketing of the commodity.

Recommendation 4

That the Commonwealth ensure that appropriate incentives to encourage investment in gene technology Research and Development by private investors are maintained.

5.4 The cost to producers of new varieties

Evidence indicates that grower access to cultivars that have been developed using gene technology is generally more expensive than access to other cultivars. This represents the cost of the intellectual property utilised in the development of these products, usually by private investors. However, the premium that growers generally pay for access to the products of gene technology represents the price of access to the benefits of that technology. Benefits such as higher yields, greater pest resistance, greater resistance to herbicides and improved crop quality mean that the extra cost of access to gene technology developed products can nonetheless be cost effective for Australian grain growers. Access to the technology must be cost effective if growers are to switch to new varieties.

The bottom line is that Australian grain growers must have access to genetically improved products or technology at reasonable prices if they are to remain globally competitive. In this context, continued significant investment in research and development activities in Australia is essential. Investment of this nature is likely to involve considerable benefits for the Australian grains industry, as well as leading to positive externalities. This includes the introduction of new cultivars that can in turn lead to the uptake of better production methods and improved farming systems. Gene technology has the potential to decrease the cost of farm inputs and increase growers' productivity and profit margins. Domestic investment in the development of gene technology products will act to keep the cost to producers of access to new varieties down and thereby contribute significantly to the international competitiveness position of Australian grain products.

Recommendation 5

That domestic investment in the development of gene technology products be encouraged in order to ensure that Australian producers' access to new varieties is not inhibited by cost factors.

5.5 Other impediments to the utilisation of new varieties by small producers

There are a number of additional impediments, apart from purely cost factors, that have the potential to effect the utilisation of new varieties by small producers. In particular, the growing tendency for the gene technology development sector to be dominated by large multinational companies has caused concern in this regard. This tendency is likely to be exacerbated by trends toward further rationalisation in the sector, with a number of international mergers and acquisitions having taken place in recent times. Trends towards rationalisation have the effect of concentrating the ownership of gene technology intellectual property resources in fewer hands and this has the potential to restrict access to these resources for Australian grain growers or to allow for monopoly rents to be extracted.

An additional element is that the rationalisation trend also appears to be leading to a greater level of vertical integration in the sector, which could further hinder access by meaning that a particular piece of gene technology intellectual property can be researched, developed and marketed all by a single entity. The GCA has significant concerns that there is a trend developing towards the use of closed marketing loops by major biotechnology companies. Widespread use of such closed marketing loops could have the potential to greatly hinder the access to gene technology of smaller players, such as individual growers. All of these factors have the potential to have major undesirable consequences for Australian grain growers' access to gene technology.

The operations of the large multinationals, which have generally previously controlled businesses based in the agricultural chemicals sector, have become increasingly focussed on the gene technology sector in recent years. Strategic mergers and acquisitions have

placed these companies into very strong positions of market power by virtue of their control of intellectual property in the gene technology sector. There are now believed to be seven large international corporations that control most of the World's gene technology intellectual property with regard to grain products. These seven companies have developed linkages with a large number of other organisations in many countries. At the same time, small companies that have developed new gene technologies of value are steadily being acquired by the seven major players so that those players can add to their technological bases.

The situation in Australia appears to largely mirror the World situation. The major multinational corporations have Australian subsidiaries that now control much of the gene technology intellectual property in Australia. These subsidiaries are increasingly looking to enter into joint ventures with smaller Australian companies. The joint ventures do not necessarily involve ownership but are based around commercial agreements designed to allow for access to the gene technology intellectual property of the Australian companies.

The development of gene technology intellectual property for marketing purposes is often an expensive process requiring the application of significant resources. Australian companies need a vehicle in order to engage in that development and the large multinationals are able to provide that vehicle. In many cases, there is little alternative for Australian companies but to enter into these sort of arrangements in order to be able to effectively develop and market their gene technology intellectual property. The danger is that there is a significant possibility that Australian growers could then be denied access to the benefits of the development vehicle provided by the arrangement involving the multinational.

The GCA considers that the high level of concentration in the gene technology sector is where the potential problems may arise. The GCA is aware that there are some companies that have already expressed reservations about dealing with the multinationals due to concerns about access to intellectual property and control of that intellectual property. Any difficulties that arise in relation to dealings and arrangements between Australian companies and multinationals could have the potential to both restrict Australia's access to internationally developed gene technologies and also to hinder the marketing of Australian developed intellectual property.

The GCA believes that the issue of access to gene technology intellectual property, and the resources needed to effectively develop that intellectual property, is one of the most significant issues that will face the Australian grains industry in the immediate future. It is likely that, despite the difficulties, Australian companies will have no choice but to enter into joint ventures with the large multinational players if gene technology products are to be developed effectively in Australia. The alternative is that the Australian grains industry would increasingly lose competitiveness with its international rivals.

Recommendation 6

That the Commonwealth ensure that high levels of concentration in the gene technology sector do not act to restrict Australia's access to international gene technology or to hinder the development of Australian intellectual property.

5.6 Assistance to small producers to develop new varieties and the protection of the rights of independent breeders, in relation to genetically modified organisms

The major assistance to small producers to develop new varieties based on genetic technology in the Australian grains industry has come via the GRDC. The GRDC is a research and development body that is funded jointly by the Commonwealth Government and by the grains industry – the industry funding coming by way of levies on producers. The

GRDC operates on the basis of investing in research and development projects that are designed to benefit growers in the future. As noted earlier, the GCA is the formally gazetted industry representative organisation in relation to the GRDC and strong consultative arrangements have been formed between the two bodies to ensure that the research and development component of the grains industry is integrated with the industry as a whole and targeted at its needs.

The levy on grain growers means that growers have agreed to fund their own industry research. The Government matching of industry contributions to the GRDC recognises the high risk and uncertain nature of research, the free rider problem of some producers benefiting from research conducted and paid for by others, and the large positive externalities considered to be inherent in research and development expenditure. These facts about research and development expenditure are likely to be particularly important in the grains industry, which is characterised on the production side by many small individual growers. This means that the absence of government support for research and development would be likely to result in substantial under-investment as far as the grains industry is concerned.

5.7 The appropriateness of current variety protection rights, administrative arrangements and legislation, in relation to genetically modified organisms

At present there are a number of different Commonwealth and State bodies that are involved in the regulation and administration of genetically modified organisms. Some comments on the operations of the major bodies follow:

The Genetic Manipulation Advisory Committee (GMAC) is the body presently designated with responsibilities for overseeing the development and use of novel genetic manipulation techniques in Australia. Its role is to assess whether potential hazards are passed to the community and recommend appropriate safety measures for researchers working with GMOs. It also conducts public consultation on proposals for the release of GMOs into the Australian environment.

The Australian New Zealand Food Authority (ANZFA) is the body responsible for developing uniform food standards across all Australian States and Territories and New Zealand. ANZFA is presently in the process of developing a new labelling standard for foods produced using genetic technology. The GCA is concerned at the decision to develop such standards. In this context, the GCA has recently written to all Australian Ministers for Health and Agriculture outlining the concerns that it has with the implementation of that decision.

The GCA understands that the ANZFA is presently in the process of considering proposals for extending the labelling requirements for foods produced using gene technology. The GCA also understands that ANZFA has been instructed to develop options in line with the Health Ministers' decision of earlier in the year. The GCA is aware that these options are to be considered by the Ministers at the mid-year meeting of the Australian and New Zealand Food Standards Council (ANZFSC).

The GCA is extremely concerned that the recent decision by the Australian and New Zealand Health Ministers to significantly strengthen the labelling requirements for genetically modified foods, and ANZFA's attempts to develop proposals to facilitate the implementation of that decision, may have adverse implications for the future of the Australian grains industry. In particular, the GCA is concerned that the decision, and the new labelling proposals being considered by ANZFA, have the potential to significantly restrict the benefits that the biotechnology revolution can bring to the industry.

The GCA has impressed on ANZFA the particular importance to the Australian grains industry of being able to effectively participate in the biotechnology revolution if the industry is to remain internationally competitive in the future. In this context, the GCA has strongly put forward its view that the Australian and New Zealand Health Ministers and ANZFA should carefully reconsider the decision to develop further standards to cover the labelling of genetically modified foods in advance of the ANZFSC mid-year meeting.

The GCA has also stressed on ANZFA that it believes that ANZFA needs to ensure that it is fully aware of the potential implications for the future of the Australian grains industry of any options that are developed for the implementation of new labelling standards for food that has been derived from genetic technology.

Recommendation 7

That ANZFSC and ANZFA should carefully reconsider the decision to develop further standards to cover the labelling of genetically modified foods.

AQIS has jurisdiction over imported plants that are not already widespread in Australia and meet the definition of quarantine pest. The current quarantine proclamation prohibits the import of genetically manipulated plants pending their assessment.

The GCA understands that AQIS is in the process of developing new regulatory arrangements for the import of genetically modified organisms. AQIS released a discussion paper in relation to this issue earlier this year. In the discussion paper, AQIS has expressed a concern that genetically manipulated plants may have an increased potential to become weeds if survival characteristics are enhanced. It has also been noted that it is possible that enhanced survival characteristics could be transferred to relatives that are already present in Australia. The discussion paper notes that the AQIS view is that the likelihood of these things occurring must be assessed on a case by case basis.

At the same time, the discussion paper has acknowledged that there can be significant benefits to Australian agriculture stemming from genetic manipulation and plant breeding. As a consequence of this, the discussion paper states that AQIS has made a commitment to minimise any disruptions to trade that are likely to be caused by the introduction of new regulatory arrangements.

The GCA responded to the discussion paper by impressing on AQIS the particular importance to the Australian grains industry of having easy access to protected genes and molecular technology if the industry is to remain internationally competitive. The GCA's submission to AQIS on this issue focussed on the following points:

- The GCA stressed that AQIS needs to ensure that it is fully aware of the potential benefits for the grains industry of GMOs and biotechnology;
- The GCA impressed on AQIS the importance to the grains industry of having easy access to protected genes and molecular technology;
- The GCA impressed on AQIS the view that duplication of regulation must be kept to a minimum;
- The GCA encouraged AQIS to remain aware of international developments; &
- The GCA encouraged AQIS to seek grains industry input into future consultations.

The period for public consultation on AQIS's proposals for the regulation of imports of GMOs has now closed. The GCA believes that AQIS is now in the process of further developing

these proposals in light of the comments received. The expectation is that AQIS will finalise their proposals within the next couple of months.

Recommendation 8

That AQIS ensures that it remains fully aware of the potential benefits to the grains industry of having easy access to gene technology in its development of new regulatory arrangements for the import of genetically modified organisms.

The Commonwealth Government announced in its 1999 Budget an intention to establish a new Office of Gene Technology. This Office will be contained within the portfolio of the Federal Minister for Health and Aged Care. The Office will have the responsibility for regulating all aspects of the development, production and use of genetically modified organisms and their products, where no other existing regulatory body has responsibility.

The Budget proposals provide for the Office of Gene Technology to be established within the Commonwealth Department of Health and Aged Care. The GCA believes that there is some merit in locating the Office within the Department of Health as this is likely to have the advantage that it should act to reassure consumer groups that the interests of consumers, particularly with regard to issues like food safety, will be adequately protected under the new regulatory regime.

However, the GCA is concerned that the proposed structure for the Office, located within the Department of Health, may not allow for an effective mechanism for the interests of industries like the grains industry to be taken into account. As noted earlier in this submission, the grains industry will need effective access to gene technology and new plant varieties in the future if it is to maintain international competitiveness. The GCA considers that there is a danger that the Office of Gene Technology may not be in a position to give appropriate attention to these sorts of issues.

The GCA is aware that it is proposed that the Office of Gene Technology will establish a formal consultative mechanism for all State and Territory Health Ministers in order to ensure that all health issues are effectively taken into account by the Office in its regulation of the use of biotechnology. The GCA is of the opinion that the Office should be encouraged to also establish a similar formal consultative mechanism with all State and Territory Agriculture Ministers, as well as the Commonwealth Minister for Agriculture, Fisheries and Forestry, in order to ensure that the interests of Australia's agricultural industries are not overlooked by the Office in its regulation of gene technology.

Recommendation 9

That the proposed Office of Gene Technology should establish a formal consultative mechanism with all State and Territory Agriculture Ministers, as well as the Commonwealth Minister for Agriculture, Fisheries and Forestry, in order to ensure that the interests of Australia's agricultural industries are taken account of by the Office in its regulation of gene technology.

The GCA would like to make the point that it views consistency across regulatory bodies as being extremely important when it comes to the regulation of gene technology. The GCA would also like to note the importance of avoiding duplication of regulatory mechanisms by ensuring that any regulatory proposals are consistent with the proposed national regulatory framework for gene technology regulation in Australia. In this context, the GCA notes that AQIS and GMAC have established channels of communication and intend to do the same with the proposed Office of Gene Technology.

The GCA has encouraged all regulatory bodies to further develop these channels of communication in the interests of regulatory consistency. The GCA believes that duplication of regulation must be kept to a minimum in order to ensure that the Australian grains industry has adequate access to overseas intellectual property so as to maintain international competitiveness.

Recommendation 10

That all regulatory bodies in the area of gene technology maintain open channels of communication in order to ensure that regulatory consistency is maximised and duplication of regulation is minimised.

The need for proper access to genetic resources for Australian grain growers was a key outcome of the GCA's 1998 "Progressing Crop Improvement for a New Millennium" Conference. The Conference concluded with a commitment from industry stakeholders to push strongly for regulation of plant breeding technology to be handled in a realistic and objective manner. Much importance was placed on the need for effective access to overseas intellectual property if the Australian grains industry is to maintain international competitiveness in the future. The GCA wishes to impress on Government the view that the development and implementation of the proposed new regulatory arrangements must be conducted with this ultimate goal in mind.

Any new regulatory system that is developed must be internationally competitive. In particular, it must allow for a reasonable degree of flexibility. The plant breeding sector, and the biotechnology area specifically, is changing and developing rapidly. Scientific advances are likely to progress at a much faster rate than advances in laws and regulations and the GCA considers that the Australian Government must take account of this in its development of new regulatory arrangements.

Recommendation 11

That the development and implementation of any new regulatory arrangements be conducted with the goal of ensuring that effective access to biotechnology intellectual property for Australian grain growers is maintained.

Australia has made widespread use of germplasm developed through international research agencies. There are also a series of Plant Genetic Resource Centres located around Australia. The operation of these centres is influenced by the Biodiversity Collection Convention which came into force in 1993. It recognised, for the first time, national sovereignty over genetic resources and provided that access to a country's genetic resources must be on mutually agreed terms and subject to informed consent.

The GCA's view is that it is important that Australian regulatory bodies also keep pace with the FAO's proposal to develop a "Global System for the Conservation and Utilisation of Plant Genetic Resources for food and agriculture." The need for the Australian grains industry to be cognisant of international developments in this area was a key outcome of the New Millennium Conference. In particular, the Global System includes the development of an International Code of Conduct for Plant Germplasm Collecting and Transfer and a Code of Conduct for biotechnology. The GCA believes that regulatory bodies must ensure that they remain aware of, and are able to respond to, developments in this area.

Another important recommendation that came out of the New Millennium Conference was that the GRDC should maintain access to genetic resources from, and enhance formal links with, the international CGIAR system. This was in order to allow the GRDC to facilitate the development of internationally competitive plant breeding programs in Australia, with the

maximum possible access to available genes and molecular technologies. In order to ensure that this can be achieved, the GCA considers that it will be important that the GRDC, and other industry stakeholders, have ongoing input into the development and implementation of new regulatory arrangements.

Recommendation 12

That Australian regulatory bodies in the area of gene technology ensure that they keep pace with international developments in the sector.

5.8 Opportunities to educate the community of the benefits of gene technology

The GCA believes that the public must be made aware that most products developed through the use of genetic technology are fundamentally similar to those that could be created, although far more slowly, through traditional plant breeding techniques.

The GCA also believes that the proposed Office of Gene Technology should be established as quickly as possible in order to ensure that an effective regulatory framework for the use of genetic technology in Australia is in place. The Office should also be given a mandate to publicise to the community the safety of products developed through the use of gene technology and the potential benefits that could accrue to the community from the use of the technology. The GCA considers that the introduction of an effective and reliable system for regulating the use of genetic technology will substantially reduce concerns that have been expressed by consumers about the use of the technology**.**

The issue of genetically modified organisms has received a substantial amount of media coverage in recent times. The references to genetically modified foods as “Monster Mash” and “Frankenstein Foods” are excessive and add an unnecessary degree of hysteria to the genetic technology debate.

The GCA is aware that there is a need to treat sensitively public concerns regarding the safety of the food consumed in Australia. However, the GCA also strongly believes that we should not allow often inaccurate or misleading information regarding biotechnology to go unanswered or undebated. People should be made to justify their statements regarding the hazards of biotechnology as much as they should be made to justify their statements regarding its benefits.

The GCA considers that the deliberations of the recent Consensus Conference on genetically modified organisms have made it clear that consumer acceptance of genetically modified foods is critically dependent on proper and sensible regulation of the technology. To avoid excessive regulation, the food industry, including the grains industry, must demonstrate that it can behave responsibly in managing both the environmental and marketing issues associated with biotechnology.

Recommendation 13

That the proposed Office of Gene Technology be established as quickly as possible with a mandate to educate the community about the safety of products developed through the use of gene technology and the potential benefits that could accrue to the community from the use of the technology.