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**PLANT BREEDER'S RIGHTS:
AN AUSTRALIAN COMMENTARY**



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Outline

The aim of this manual is to provide a practical guide to the *Plant Breeder's Rights Act 1994 (Cth)*. It is a resource of information about the legislation, its administration, and its operation. This commentary is intended to assist plant breeders, scientific researchers, and business managers who want to make a more effective use of the *Plant Breeder's Rights Act 1994 (Cth)* in the management and commercialisation of their intellectual property rights. It is also designed to enhance the understanding of the legislation among lawyers, patent attorneys, qualified persons, and policy-makers. This commentary is divided into six parts.

This commentary covers the following subject matter:

- Chapter One outlines the aims and objectives of the legislation. It discusses the constitutional basis of the *Plant Breeder's Rights Act 1994 (Cth)*. It also situates the legislation in the context of international treaties.
- Chapter Two discusses the steps involved in making an application for plant breeder's rights.
- Chapter Three details the registrable plant varieties.
- Chapter Four outlines the enforcement of plant breeder's rights.
- Chapter Five considers the exploitation of plant breeder's rights.
- Chapter Six situates the *Plant Breeder's Rights Act 1994 (Cth)* in relation to the various regimes of intellectual property and other legislative frameworks.

The commentary provides a discussion of the major cases on plant breeder's rights and plant variety rights, including:

- *Sun World International Inc v Registrar, Plant Breeder's Rights* (1995) 33 IPR 106; (1997) 39 IPR 161; (1998) 42 IPR 321 [1998];

- *Grain Pool Of Western Australia v Commonwealth* (2000) 46 IPR 515;
- *Buchanan Turf Supplies Pty Limited v Premier Turf Supplies Pty Ltd* [2003] FCA 230
- *Cultivaust v Grain Pool Pty Ltd* [2004] FCA 638
- *Asgrow Seed Company v Winterboer et al* (1995) 513 US 179;
- *Sacker Potatoes Ltd v C Meijer BV* (Unreported, October 31, 2001)
- *Monsanto v Percy Schmeiser* (2001) FCT 256
- *Monsanto v Percy Schmeiser* [2002] FCA 309
- *JEM Ag Supply v Pioneer Hi-Bred International Inc* (2001) 534 US 124;
- *Franklin v Giddins* (1978) Qd R 72; and
- illustrative applications under the *Plant Breeder's Rights Act 1994* (Cth).

The commentary is intended to be used by the following audiences:

- plant breeders, scientific researchers and public research institutions,
- business managers, research managers, commercial research institutions,
- peak industry organisations, and particular industries such as the grains industry and agriculture;
- lawyers, patent attorneys, and qualified persons; and
- policy-makers, academics, and the general public.

The commentary will be published as a text and on the following websites: <http://law.anu.edu.au/acipa/> and <http://www.affa.gov.au/pbr>. It will also accompany a seminar series in 2002 on the operation of the *Plant Breeder's Rights Act 1994* (Cth).

1. INTRODUCTION

1.1 Aims and Objectives of Plant Breeder's Rights Act 1994 (Cth)

<http://scaleplus.law.gov.au/html/pasteact/1/618/top.htm>

Plant breeding is a high value added, knowledge intensive activity promoting Australian competitiveness, employment, and economic returns.

The *Plant Breeder's Rights Act 1994 (Cth)* promotes plant innovation by granting the owner of the registered new variety the opportunity to exercise limited commercial rights regarding propagating material. Such rights cover the production, reproduction, conditioning, sale, import, export, and stocking of the material. The legislation is based on Australia's membership of the *International Convention for the Protection of New Varieties of Plants (1991)*. This international agreement establishes a harmonised regime for exclusive intellectual property grants relating to new plant varieties. The UPOV system encourages innovation, multiplication and the exchange of new plant varieties between member countries.

A. Innovation

The granting of intellectual property protection to plant breeders is intended above all to provide an incentive for the development and creation of new varieties, for the overall benefit of society. The past director and registrar of the Plant Varieties Rights office, Dr Mick Lloyd, defended the philosophical basis of the scheme. He drew analogies between the protection of plant breeder's rights, and the protection provided by other regimes of intellectual property, such as copyright law:

A breeder makes an intellectual and financial investment in innovation. The purpose of plant breeders rights is to encourage innovation so that man is assured of new, better quality, sustained food production for the benefit of mankind.

The plant breeder's rights program encourages Australian plant breeders to develop useful new varieties to meet domestic and overseas food and industrial needs. Some form of protection is required as breeding a new variety can potentially take between 10 and 20 years. In this time many costs are incurred, including the cost of skilled breeders, land for cultivation and specialised equipment.

B. Investment

Plant breeders' rights provide an incentive for both government and private investment in the development of new varieties. The introduction of the *Plant Breeder's Rights Act 1994* (Cth) was supported by a number of industry organisations. Dr Hare of the Seed Industry Association of Australia said: "We believe that the Bill is essential to ensure the effective support of Australia's rural industries by ensuring a continuous supply of superior varieties adapted to Australian growing conditions, which can be substantially different to overseas conditions."

C. Protection against Misappropriation

The *Plant Breeder's Rights Act 1994* (Cth) also provides protection of Australian breeders against the misappropriation of their plant varieties. There are penalties in respect of infringement of plant breeder's rights, and additional penalties for intentional and reckless infringement of such entitlement. This legal regime has an important function of deterrence. It reduces the temptation for the covert and illegal introduction of varieties by other plant breeders. Rod Kerley, a General Manager of Plants Management Australia Pty Ltd said that "there are many examples where Australian native flora has been plundered, especially in Europe, and there has been little or no return to Australia". He hoped that the legislation would seek to prevent this appropriation of genetic resources. The rules about essential derivation draw a bright line between breeding and follow-on innovation. They provide protection for breeders against genetic engineers unjustly capitalising upon their work.

D. Public Access to Plant Varieties

The *Plant Breeder's Rights Act 1994* (Cth) also safeguards public access to plant varieties. The exclusive rights granted to plant breeders are subject to a number of exceptions, which are designed to facilitate the use of new plant varieties. The legislation provides an exemption in relation to certain acts done for private, experimental, or breeding purposes. It also offers an allowance for the conditioning and use of farm saved seed. The Secretary of the Department of Agriculture also has the capacity to mandate reasonable public access to plant varieties. This power serves to ensure that there is no anti-competitive conduct in respect of plant varieties. Thus the regime of plant breeder's rights is a much more balanced system than patent law, which offers little in the way of defence in relation to claims of infringement.

E. Branding and Marketing

The *Plant Breeder's Rights Act 1994* (Cth) also promotes the branding and marketing of new plant varieties through the protection of names and their synonyms. In this respect, the regime serves a similar function to that of trade mark law because it serves to communicate to consumers the origin and quality of particular goods, and to dispel any deception and confusion about similar products. The benefits of plant innovation to Australian consumers are significant, delivering a greater choice of new varieties to meet various requirements - for example, nutrition, productivity, taste, look, scent, and conservation characteristics.

F. Export of Plant Varieties

The *Plant Breeder's Rights Act 1994* (Cth) also facilitates the export of harvested material or end products produced from protected species. In particular, it stimulates the export of Australian Native Flora. Ben Swane of the Nursery Industry Association of Australia eulogised the scheme of plant breeder's rights:

It is the greatest form of protection ever introduced for breeders of flowering Australian native flora. Many of these new and exciting native plants have formed the basis of an export industry for flower growers. Without PVR these plants would be lost to Australia. NIAA, the flower growers, fruit producers, individual nurserymen and, most important of all, Australian plant breeders, all support the present system.

Australian breeders have achieved outstanding export successes with over 20 new major export crop varieties registered every year. This has been facilitated by their capacity to obtain protection in other member States of the UPOV agreement.

1.2 History of Plant Breeder's Rights

At least as early as 1892, legislation was proposed to grant patent rights for plant-related inventions.¹ Plant patent legislation was supported by prominent individuals as Thomas Edison who stated that "nothing that Congress could do to help farming would be of greater value and permanence than to give the plant breeder the same status as the mechanical and chemical inventors now have through the law". It was also supported by Luther Burbank, a leading plant breeder of the day... whose widow stated that her late husband 'said repeatedly that until Government made some such provision [for plant patent protection] the incentive to create work with plants was slight and independent research and breeding would be discouraged to the great detriment of horticulture". Such views would have been at the time apposite to the position of Australian wheat breeders such as William Farrer, whose Federation cultivar of wheat was named in 1901.

Impetus for Reform

In Australia, horticultural and ornamental plant industries began lobbying for plant variety rights in Australia in the late 1960's.² The proponents for this legislation included the Industry Committee for Plant Breeders Rights, the Australian Seed Producers Federation, the Industries Assistance Commission, the Australian Agricultural Council, the International Union for the Protection of New Varieties, the Industry Council for Development, and the Grains Research and Development Corporation.

However, proposals for this legislation were resisted by various lobby groups which objected to intellectual property protection for plants and seeds for a variety of reasons. These included arguments that the cost of seed would unfairly rise, and that stocks of valuable seeds would be lost with the introduction of protected varieties.

In 1976, the Industries Assistance Commission recommended that legislation be put in place to ensure that Australia did not miss out in terms of available source materials for horticulture development. In 1979, the then Minister for Primary Industry in the Fraser government, Mr Nixon drafted the first Plant Variety Rights Bill, which was introduced in 1981. Following extensive public scrutiny and

¹ Justice Rich in *Imazio Nursery Inc. v Dania Greenhouses*

² Hindmarsh, Richard. "Consolidating Control: Plant Variety Rights, Genes And Seeds", *Journal of Australian Political Economy*, 1999, Vol. 44, p 58.

comment, the bill was passed by the House of Representatives on 24 April 1982. However, subsequent debate in the Senate saw the bill referred to the Senate Standing Committee on National Resources, whose deliberations were interrupted when parliament was dissolved for the election on 4 February 1983.

Plant Variety Rights Bill 1981 (Cth)

The *Plant Variety Rights Bill 1981 (Cth)* was finally introduced to the Commonwealth Parliament on 7 May 1981. The draft legislation lapsed with the dissolution of Parliament on 4 February 1983. The committee's report was subsequently tabled on 10 May 1984 with two dissenting views. In 1984, the Senate Standing Committee on National Resources in the Federal Parliament considered whether Australia should introduce a system of plant variety rights.³ In 1986, Professor Alec Lazenby of the University of Tasmania reported to the Minister for Primary Industries on Australia's plant breeding needs and all other alternatives to plant variety rights.⁴ He recommended that legislation for a plant variety rights scheme be enacted in Australia and it should be framed such that no crops were excluded from its potential coverage.

Plant Variety Rights Act 1987 (Cth)

Acting on this report, the Federal Government introduced the *Plant Variety Rights Act 1987 (Cth)*. Under this scheme, breeders of new plant varieties can claim the exclusive rights to sell, or licence others to sell, plants or seeds of varieties they have developed. The *Plant Variety Rights Act 1987 (Cth)* requires that plants and reproductive material must be available in sufficient quantity to meet demand, at reasonable prices, and that the holder of the PBR take all reasonable steps to ensure that the reasonable requirements of the public are satisfied. New varieties of plants are eligible for PBR if their genus or species is listed in the regulations under the *Plant Variety Rights Act 1987 (Cth)*.

³ Senate Standing Committee On National Resources. *Plant Variety Rights*. Canberra: Australian Government Publishing Service, 1984.

⁴ Lazenby, Alec. "Australia's Plant Breeding Needs: A Report To The Minister For Primary Industry", Canberra: Australian Government Publishing Service, 1986.

Plant Breeder's Rights Act 1994 (Cth)

There was strong support for the introduction of the *Plant Breeder's Rights Act 1994* (Cth) from rural industries. The legislation contains updated provisions reflecting changes in the 1978 and 1991 versions of the *International Convention for the Protection of New Varieties of Plants* (UPOV) on which the Acts are based. The major differences between the provisions of this Bill and the *Plant Variety Rights Act 1987* are in the scope and strength of the proprietary right it provides to holders of Plant Breeder's Rights 1994 in propagative material of protected plant varieties. Specifically, the major changes relate to Essentially Derived Varieties, Derived Varieties, Farm Saved Seed, alternative dispute resolution, timing of fee payment, prior sale limitation, harvested material/products made from the harvested material. However the core principles, rights and obligations are the same.

1.3 Constitutional Basis

The *Plant Variety Rights Act 1987* (Cth) and the *Plant Breeder's Rights Act 1994* (Cth) are supported by the intellectual property power and the external affairs power of the Constitution.⁵ The validity of this legislation was upheld in a recent constitutional case before the High Court involving the *Grain Pool of Western Australia* and the *Commonwealth*.

***Grain Pool of Western Australia v Commonwealth* (2000) 46 IPR 515**

http://www.austlii.edu.au/au/cases/cth/high_ct/2000/14.html

In *Grain Pool of Western Australia v Commonwealth*, the plaintiff, the Grain Pool of West Australia, challenged the constitutional validity of the *Plant Variety Rights Act 1987* (Cth) and the *Plant Breeders' Rights Act 1994* (Cth). The first defendant, the Commonwealth, in support of the legislation, relied upon s 51 (xviii) and s 51 (xxix) of the *Constitution*. The defendant, Cultivaust, a grain merchant and trader, maintained that it was a licensee from Tasmania, which had the exclusive right to sell and export Franklin barley; and claimed that the plaintiff, by selling within Australia and in exporting Franklin barley, had acted in breach of its rights. The States of Western Australian and Tasmania also intervened.

The plaintiff contends that the operation of s 51 (xviii) with respect to patents of invention is limited by what it identifies as certain traditional principles of patent law. In particular, it submits that there are certain fixed minimum requirements for the 'intellectual effort' required of inventors

⁵ S 10 of the *Plant Breeder's Rights Act 1994* (Cth)

respecting novelty and inventive step, that there is a crucial distinction between product and process claims, and the term 'patent' involves certain limitations as to exclusivity.

Negative Rights

In the case of *Grain Pool of Western Australia v The Commonwealth*, the High Court rejected the submission of the State of Western Australia that the rights conferred by the *Plant Variety Rights Act* and the *Plant Breeder's Rights Act 1994* (Cth) amounted to rights "by way of positive authority to sell and export the protected variety". It noted that this interpretation was based upon a fundamental misunderstanding of intellectual property law: "The legislation, upon its proper construction, holds no such terror".

The High Court observed that the *Patents Act* provides negative rights, which give the rights-holder the power to exclude others from using the invention. It cited the authorities of the *National Phonograph Co of Australia Limited v Menck*, *Steers v Rogers*, and *United States v American Bell Telephone Company*.

The High Court concluded that plant variety rights and plant breeder's rights are negative rights, like those found under patent law, which give the rights-holder the power to exclude others from using the particular plant material. It found that the legislation was consistent with the expositions of principle given in *Steers v Rogers*, and *United States v American Bell Telephone Company*.

Intellectual Property Power

The High Court held that the *Plant Variety Rights Act 1987* (Cth) and the *Plant Breeders' Rights Act 1994* (Cth) were valid under the intellectual property power under the Constitution.

The joint judgment of Gleeson CJ, Gaudron, McHugh, Gummow JJ Hayne and Callinan JJ endorses the dissenting judgment of Higgins J in the Union Label case. It denies that "the boundaries of the power conferred by s 51 (xviii) are not to be ascertained solely by identifying what in 1900 would have been treated as a copyright, patent, design or trade mark. No doubt some submissions by the plaintiff would fail even upon the application of so limited a criterion. However, other submissions, as will appear, fail, because they give insufficient allowance for the dynamism which, even in 1900, was inherent in any understanding of the terms used in s 51 (xviii)". They emphasize that what might answer the description of an invention for the purpose of that section will reflect changes in technology.

The joint judgment relies upon a number of sources of authority. It highlights historical studies into the development of intellectual property. It considers the evolution of common law and statute law. It undertakes a close reading of the *Plant Variety Protection Act 1987* (Cth) and the *Plant Breeder's Rights Act 1994* (Cth). It concludes that plant variety rights do indeed belong within the ambit of "patents of invention".

Justice Kirby held that the *Plant Variety Rights Act 1987* (Cth) and the *Plant Breeders' Rights Act 1994* (Cth) were valid. He reached this conclusion not on the basis of the meaning of s 51 (xviii) of the Constitution according, or even by reference, to the accepted understandings of the terms used in

1900. He reached the conclusion in accordance with what he took to be the meaning of the phrase “patents of inventions”, in its “really essential characteristics” as understood in a constitutional context in Australia today.

The decision of the High Court lays to rest some of the fears that intellectual property legislation would be vulnerable to constitutional challenges. It seems that there will be no constitutional obstacles to the introduction of legislation dealing with subject matter on the outer limits of intellectual property – such as certification trade marks, databases, publicity rights, and the so-called “neighbouring rights”, “performers’ rights”.

External Affairs Power

The complication in this particular case was that the Australian Government had implemented the legislation before it had ratified the UPOV Convention (1991).

The High Court found it unnecessary to consider the application of the power of parliament in s 51 (xxix) of the Constitution with respect to external affairs. Justice Kirby elaborated: “Full argument was heard on the external affairs power. The position so far as that source of constitutional validity of the federal laws is complicated by revision of the applicable international convention and by the fact that Australia had not, at the time the matter was argued before the court, subscribed to the convention as altered in 1991”. He concluded, though, that “it would suffice for the Commonwealth and Cultivaust to support the federal laws by reference to the patents power alone. This would leave the question of the ambit of the external affairs power in respect of the subject matter of an international treaty to be elucidated in a future case where such elucidation was essential”.

Justice McHugh raised concerns about the High Court validating international treaties being captured by special interests. This discussion raises the larger question of the external affairs power and treaty-making in relation to intellectual property.

The Australian Government has since ratified the UPOV Convention (1991). This solves any concerns that the legislation might be vulnerable to attack under the external affairs power.

Freedom of Communication

Justice Kirby also addressed the interaction between intellectual property and freedom of communication. His Honour observes in an oblique footnote: “The protection of intellectual property rights must be afforded in a constitutional setting which upholds other values of public good in a representative democracy. In the United States the relevant head of constitutional power has been viewed as containing in-built limitations many of which are derived from the competing constitutional object of public access to information. In Australia the constitutional setting is different but the existence of competing constitutional objectives, express and implied, is undoubted.”

1.4 International Context

The plant breeding industry is faced with new parameters induced by the globalisation of the World market and the increase in the use of biotechnological techniques. Furthermore, proposed and recent changes in World and EU plant intellectual property rights have made this a critical and decisive period for plant breeders.

In the Second Reading Speech, the Minister for Administrative Services, Mr Walker, discussed the relationship between the *Plant Breeder's Rights Act 1994* (Cth) and other legislative instruments and international conventions:

The plant breeders' rights scheme is complementary to the government's policies geared to promote innovation in Australia's plant industries by encouraging research and development using production levies and tax concessions. In addition, the PBR bill is consistent with Australia's obligations under the UPOV convention and the TRIPS agreement of GATT and with the FAO 'undertaking on plant genetic resources'. According to advice from the Attorney-General's Department, the bill is not in conflict with either the International Convention for the Conservation of Biological Diversity or native title legislation.⁶

An overview of the International Union for the Protection of New Varieties of Plants, and the push for international harmonisation of plant breeder's rights and plant variety rights. A discussion of the relationship between the *International Convention for the Protection of New Varieties of Plants* and other international treaties.

International Convention for the Protection of New Varieties of Plants (UPOV)

<http://www.upov.int/>

In 1957, the French Government held a conference in Paris concerned with the protection of new varieties. This led to the formation of the *International Convention for the Protection of New Varieties of Plants (UPOV Convention)* 1961. The purpose of the International Convention for the Protection of New Varieties of Plants (UPOV) is to ensure that the member states party to the Convention acknowledge the achievements of breeders of new plant varieties by making available to them an exclusive property right, on the basis of a set of uniform and clearly defined principles.

⁶ Wednesday, 24 August 1994, House of Representatives, Hansard, p 158.

In response, the United Kingdom enacted the Plant Variety and Seeds Act 1964 (UK). Similar legislation was passed in the Netherlands, Denmark, Germany, and New Zealand. The United States of America had passed the *Plant Patent Act* 1930 (US). This provided a special form of protection, which was limited to asexually reproduced varieties of plants which did precisely reproduce themselves and called a plant patent. In 1970 the United States followed the lead of seventeen Western European nations and passed the *Plant Variety Protection Act* 1970 (US). This legislation provided protection to developers of novel, sexually reproduced plants.

The UPOV Convention was revised in Geneva in 1972, 1978 and 1991. Both the 1978 and the 1991 Acts set out a minimum scope of protection and offer member States the possibility of taking national circumstances into account in their legislation. Under the 1978 Act, the minimum scope of the plant breeder's right requires that the holder's prior authorisation is necessary for the production for purposes of commercial marketing, the offering for sale and the marketing of propagating material of the protected variety. The 1991 Act contains more detailed provisions defining the acts concerning propagating material in relation to which the holder's authorisation is required. Exceptionally, but only where the holder has had no reasonable opportunity to exercise his right in relation to the propagating material, his authorisation may be required in relation to any of the specified acts done with harvested material of the variety.

There were compelling reasons for the Australian Government to join the international system for the protection of plant variety rights and breeder's rights. The National Interest Analysis highlighted a number of advantages for Australia of the International Convention for the Protection of New Varieties of Plants (UPOV) - including international recognition of Australia's national plant variety protection system, encouragement of investment in plant breeding in Australia, greater community access to varieties, and the facilitation of the transfer of technology and know-how from overseas.

Trade Related Intellectual Property Agreement under the World Trade Organization (TRIPS)

<http://www.wto.org/>

The TRIPs agreement covers all areas of intellectual property. It became part of the World Trade Organisation agreement signed in Marakesh in April 1994. For the most part, it requires members of the WTO to recognise the existing standards of protection within the Berne and Paris Conventions. It also demands substantive protection for rights neighbouring copyright, trade marks, geographical indications, designs, patents, topographies of integrated circuits, and undisclosed information. The agreement provides for detailed procedures in relation to the enforcement of intellectual property rights.

Article 27 (3) (a) of the TRIPS Agreement provides that members may exclude from patentability "plants and animals other than micro-organisms, and essentially biological processes for the production of plants or animals other than non-biological and microbiological processes. However, Members shall provide for the protection of plant varieties either by patents or by an effective sui generis system or by any combination thereof. The provisions of this subparagraph shall be reviewed four years after the date of entry into force of the WTO Agreement."

There are international discussions on the approach taken to the protection of biotechnology intellectual property rights, particularly the patenting of plants and animals and biological processes for their production, and the protection of plant varieties. These discussions may lead to future proposals for changes in the minimum standards for intellectual property rights protection in this field.

World Intellectual Property Organisation

<http://www.wipo.org/>

Furthermore, the initiatives of the World Trade Organization have forced the World Intellectual Property Organization to investigate matters of biotechnology in order to defend its relevance and legitimacy as a forum. WIPO has set up a Working Group on Biotechnology. It hopes to investigate legal standards related to biotechnology, using intellectual property rights in biotechnological inventions, administrative and

procedural issues related to patent applications, the relationship between patents, plant variety rights, and other areas. It also wants to review the role of patents in the process of biotechnology innovation and commercialization.

Rio Convention for the Conservation of Biological Diversity

<http://www.biodiv.org/>

The Rio Convention on Biological Diversity was signed in June 1992. While the Convention was not directly concerned with patent standards or plant breeder's rights, it heralds a new approach to the way biological resources are used.

One of the three objectives of the Convention on Biological Diversity, as set out in its Article 1, is the *"fair and equitable sharing of the benefits arising out of the utilization of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate funding"*. A framework for the implementation of this third objective of the Convention with regard to access to genetic resources is provided in Article 15 of the Convention. In addition, Article 8(j) contains provision to encourage the equitable sharing of the benefits arising from the utilization of knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for conservation and sustainable use of biological diversity.

These provisions are also linked to the provisions on access to, and transfer of technology (Article 16), exchange of information (Article 17), technical and scientific cooperation (Article 18), the handling of biotechnology and distribution of its benefits (Article 19, paragraphs 1 and 2), and financial resources and financial mechanism (Article 20 and Article 21).

FAO's Undertaking On Plant Genetic Resources

www.fao.org

The FAO International Undertaking on Plant Genetic Resources is a non binding agreement that provides for unrestricted access to plant genetic resources. The revised undertaking attempts to maintain relatively unrestricted access to biological material under the control of governments in the public domain while securing reasonable

benefits, particularly for developing countries which provide significant sources of agricultural biological material for development and research in developed countries. The Undertaking stipulates the payment of benefits into an international account by recipients who commercialise research based on material covered by the undertaking. Material in public ex situ collections is expected to be free of charge.

2. APPLICATION FOR PLANT BREEDER'S RIGHTS

2.1 The Role of the PBR Office

<http://www.ipaustralia.gov.au/pbr/index.shtml>

The Plant Breeder's Rights Office (PBRO) is located in IP Australia which administers the registration systems for industrial property. Mr Doug Waterhouse is both Registrar of PBR and Director of the PBRO. A staff of four examiners and two administrative officers support Mr Waterhouse in these functions. PBRO receives approximately 300 applications per year.

Australia's PBR scheme uses breeder testing to establish the distinctness, uniformity and stability of new varieties. The breeder or their agent carries out comparative trials, using UPOV technical guidelines, to establish that each new variety satisfies DUS criteria. To ensure technical rigour, the PBRO requires all applicants to engage the services of an accredited qualified person (QP). The QP, in collaboration with the PBR Office, accepts responsibility for all aspects of the comparative trial, including the choice of comparative varieties, experimental design, collection of data, statistical analysis and preparation of a description of the variety. There are over 200 QPs in Australia and New Zealand, each of whom is accredited to consult on one or a limited range of plant species in which they have expertise.

The QP must apply to the PBRO for accreditation before they can act as PBR consultants and assist applicants. This involves a written application outlining qualifications, experience, and names of referees. The QP must also attend annual training workshops given by the PBRO to retain accreditation. These measures aim to ensure that PBR grants are technically rigorous and legally sustainable in the event of infringement.

A comparative trial in Australia may not always be necessary, providing the variety has been test grown in a UPOV member country using official UPOV guidelines and test procedures, and all the most similar varieties of common knowledge have been included in the trial. If the test indicates the variety is clearly distinct from known Australian varieties, a comparative test may not be warranted. In both of these cases, the PBRO still requires applicants to submit a description in the Plant Varieties Journal.

The PBRO publishes a description and photograph of each variety in the Plant Varieties Journal. Publication allows a breeder's peers to object to the granting of PBR, informs industry and gives the public an opportunity to comment on individual applications. The PBRO investigates all objections and comments it receives.

The Registrar consults widely on all applications. Specifically, he consults the Australian Cultivar Registration Authority for specialist advice on all applications for new varieties of Australian indigenous species. He also utilises the knowledge and experience of the Plant Breeder's Rights Advisory Committee (PBRAC). The Advisory Committee is comprised of representatives of breeders, producers and consumers, and others with appropriate qualifications and experience.

The Plant Breeder's Rights Office will not provide legal advice regarding the *Plant Breeder's Rights Act 1994* (Cth). This should be sought independently. Most major law firms have competence in intellectual property matters.

The Plant Breeder's Rights Office does not play the role of a policeman to investigate complaints. Generally it is the responsibility of those affected to initiate and pursue infringements/complaints keeping the PBR Office advised of developments.

2.2 Synopsis of the application process

The applicant must pay an application fee to the Commonwealth before or at the time of lodging an application for plant breeder's rights.⁷ Initial assessment of an application costs \$300. If the assessment is positive then provisional protection is provided for twelve months though this can be extended provided the variety is proceeding towards registration. Ongoing protection through registration costs a further \$1700 (though bulk discounts are available). Thereafter, an annual registration renewal fee of \$300 is payable.

The applicant must follow a number of steps in applying for Plant Breeder's Rights:

- Obtain from the breeder a signed Authorisation to act as their agent in Australia for the variety in question if your role is as the Australian agent of an overseas breeder;

⁷ S 26 (4) of the *Plant Breeder's Rights Act 1994* (Cth).

- Complete Part 1 of the application form, supplying a photograph of the new variety, paying the application fee, nominating an accredited 'Qualified Person' and, if the variety is an Australian species, despatch as soon as possible a herbarium specimen;
- Engage the services of the nominated accredited 'Qualified Person' to plan and supervise the comparative growing trial;
- Conduct a comparative growing trial to demonstrate Distinctness, Uniformity and Stability (DUS), complete Part 2 of the application form and paying the examination fee;
- Deposit propagating material in a Genetic Resources Centre.
- Examination of the application by the PBR Office, which may include a field examination of the comparative growing trial; and including
- Publication of a description and photograph comparing the new variety with similar varieties in Plant Varieties Journal, followed by a six-month period for objection or comment.
- Upon successful completion of all the requirements, resolution of objections (if any) and payment of certificate fee, the applicant(s) receive a Certificate of Plant Breeder's Rights.

2.3 Part One Information

Part One is the initial application in which you provide general information and claims about your variety. It is used to establish a *prime facie* case that the variety exists, is distinct and meets the requirement of PBR. The Part One application form for plant breeder's rights requires general information about the applicant and the variety.⁸ The application must contain:

- the name and address of the applicant and the applicant's agent;
- if the applicant is the breeder, a statement affirming that the person is the breeder;
- if the applicant is not the breeder, the name and address of the breeder, and the particulars of the assignment of the right to make the application;

⁸ S 26 of the *Plant Breeder's Rights Act 1994* (Cth).

- a brief description and a photograph of a plant of the variety sufficient to establish a prima facie case that the variety is distinct from other varieties of common knowledge;
- the name of the variety, and any proposed synonym for that name;
- the name and location of the site at which the variety was bred;
- the manner by which the variety was bred;
- the particulars of any application for rights of any other kind in the variety in any other country;
- the nomination of a qualified person who is responsible for verification of the particulars of the application; and
- and any other particulars required by the approved form.

It is possible to revisit the Part One form and to demonstrate a new set of characteristics which, similarly, must be substantiated under Part Two. This can only be done through a variation to the original application (see section 31(5) of the Act) and only on payment of the appropriate fee.

Provisional protection is available.⁹ Breeders can obtain provisional protection over the variety from the time the application is accepted to the date of granting of plant breeder's rights. This will give the capacity to take retrospective action on any infringements occurring during the examination period. However, such rights cannot be exercised until the grant.

Common errors made in the Part One application procedure include:

- failure to nominate an appropriate varietal name;
- failure to establish that the applicant is eligible to apply;
- failure to describe the origin and potential distinctiveness characteristics of the variety'
- applications without signature, lack of attention to detail including missing fees or fees made out to the wrong amount, missing nomination of a qualified person that is not accredited for the species.

2.4 Part Two Application

The Part Two application form for plant breeder's rights is a detailed description of the application. It presents the results of the comparative growing trial, including the evidence of distinctness, uniformity, and stability. The detailed description must contain:

- particulars of the characteristics that distinguish the variety from other varieties the existence of which is a matter of common knowledge;
- the particulars of any test carried out, including a test to establish that the variety is distinct, uniform, and stable;
- the particulars of any test in respect of essential derivation; and
- the particulars of any test growing outside Australia.¹⁰

2.5 Acceptance, Examination and Objection

A. Dealing with the application after its acceptance

Third parties may lodge a written objection to the grant of plant breeder's rights with the Secretary after the initial advertisement of acceptance up until six months from the date of publication of the detailed description of that variety.¹¹ Standing is given to any person whose commercial interests would be affected by the grant of plant breeder's rights. The grounds for objection include the failure to comply with the requirements under s 26 (2) to provide Part 1 information, and the failure to comply with any of the factors specified in ss 44 (1)(b)(i) - (viii).

B. Inspection of applications and objections

A person may, at any reasonable time, inspect an application for plant breeder's rights in a plant variety or an objection lodged in respect of that application.¹² A person is entitled to be given a copy of an application for plant breeder's rights in a plant variety, of an objection to such an application, or of a detailed description of the plant variety.¹³

C. Test growing of plant varieties

⁹ S 39 of the *Plant Breeder's Rights Act 1994* (Cth).

¹⁰ S 34 (4) of the *Plant Breeder's Rights Act 1994* (Cth).

¹¹ S 35 of the *Plant Breeder's Rights Act 1994* (Cth).

¹² S 36 (1) of the *Plant Breeder's Rights Act 1994* (Cth).

The Secretary can decide to order a test growing or further test growing of a plant variety to which an application for plant breeder's rights, or an objection to an application, or a request for a revocation of plant breeder's rights.¹⁴ There are rules governing situations in which plant varieties are grown and tested outside Australia.¹⁵

2.6 Grant of PBR

S 44 (1) provides that, if an application in respect a plant variety is accepted and final examination of the detailed description, the Secretary must grant the plant breeder's rights to the applicant, provided they are satisfied:

- (i) There is such a variety; and
- (ii) The variety is a registrable plant variety within the meaning of section 43; and
- (iii) The applicant is entitled to make the application; and
- (iv) The grant of that right is not prohibited by this Act; and
- (v) That right has not been granted to another person; and
- (vi) The name of the variety complies with section 27; and
- (vii) Propagating material of that variety has been deposited for storage in a genetic resource secretary;
- (viii) A satisfactory specimen plant of the variety has been supplied to the herbarium; and
- (ix) All fees payable in respect of the application, examination, and grant have been paid.

2.7 Revocation Of PBR

¹³ S 36 (2) of the *Plant Breeder's Rights Act 1994* (Cth).

¹⁴ S 37 of the *Plant Breeder's Rights Act 1994* (Cth).

¹⁵ S 38 of the *Plant Breeder's Rights Act 1994* (Cth).

The Secretary of the Department of Agriculture must revoke the grant of plant breeder's rights in a number of circumstances,¹⁶ including:

- Where the Secretary becomes satisfied of facts existed that, if known before the grant, would have resulted in the refusal to grant the right;
- Where the grantee has failed to pay a fee in respect of plant breeder's rights within thirty days of notification that the fee is due
- Where the Secretary is satisfied that a person to whom that right has been assigned or transmitted has failed to comply with s 21; and
- Where the Secretary is satisfied that the grantee has failed to comply with a condition under s 49.

The Secretary of the Department of Agriculture must notify the grantee the particulars of the grounds of revocation, and give them thirty days to respond in a written statement. The grantee can appeal an order to revoke plant breeder's rights before the Administrative Appeals Tribunal.

¹⁶ S 50 of the *Plant Breeder's Rights Act 1994* (Cth)

3. REGISTRABLE PLANT VARIETIES

The *Plant Breeder's Rights Act 1994* (Cth) applies to all botanical genera and species, from ornamental roses and native plants to vines, potatoes, and wheat.¹⁷ The plants within the scope of the legislation includes "all fungi and algae but does not include bacteria, bacteroids, mycoplasmas, viruses, viroids and bacteriophages". However, a botanical group of plants may be excluded from the operation of the *Plant Breeder's Rights Act 1994* (Cth) through regulation.¹⁸

S 3 of the *Plant Breeder's Rights Act 1994* (Cth) provides "plant variety" means a plant grouping (including a hybrid):

- (a) that is contained within a single botanical taxon of the lowest known rank; and
- (b) that can be defined by the expression of the characteristics resulting from the genotype of each individual within that plant grouping; and
- (c) that can be distinguished from any other plant grouping by the expression of at least one of those characteristics; and
- (d) that can be considered as a functional unit because of its suitability for being propagated unchanged.

Plant groupings for the purposes of this definition include genetically modified plant groupings.¹⁹

In order to be registrable a variety must satisfy a number of criteria. S 43 (1) provides that "a plant variety in which an application for PBR is made registrable if:

- (a) the variety has a breeder; and
- (b) the variety is distinct; and
- (c) the variety is uniform; and
- (d) the variety is stable; and
- (e) the variety has not been exploited or has been only recently exploited".

There are further requirements that might need to be satisfied in respect of essential derivation.

¹⁷ Article 3 of the UPOV Convention

¹⁸ S 42 of the *Plant Breeder's Rights Act 1994* (Cth)

¹⁹ S 6 of the *Plant Breeder's Rights Act 1994* (Cth)

3.1 Breeding

Breeding includes 'discovery' and 'selective propagation'.²⁰ In normal circumstances, the 'discoverer' is the first to file for PBR protection. 'Selective propagation' is an outcome demonstrated by distinctness, uniformity and stability of the new variety when compared with the population/parents from which the new variety is derived. A plant breeder can include a single breeder, a group of breeders, an employee, or a group of employees.²¹ The Plant Breeder's Rights Office has recently completed an inquiry into plant breeding: <http://www.anbg.gov.au/breeders/index.html>

3.2 Distinctiveness

A plant variety must be distinct in order to be registrable.²² A plant variety is distinct if it is clearly distinguishable from any other variety whose existence is a matter of common knowledge.²³

Common Knowledge

Distinctness is judged in relation to any other variety whose existence is a matter of common knowledge. A variety is to be treated as a variety of common knowledge if an application for plant breeder's rights has been lodged in a UPOV member country, and the application has not been subsequently refused.²⁴

There is no comprehensive definition of 'variety of common knowledge' although discussions in UPOV continue to identify circumstances where common knowledge can be established. For example, the plain English meaning includes those situations where a variety is cultivated and marketed in the public domain. Other examples where a variety is considered a variety of common knowledge include: an application for PBR or the entering on an official register in any country; precise description in a publication; inclusion in a reference collection; and the existence of living material in publicly accessible plant collections. There will some

²⁰ S 5 of the *Plant Breeder's Rights Act 1994* (Cth)

²¹ S 3 of the *Plant Breeder's Rights Act 1994* (Cth)

²² S 43 (1) of the *Plant Breeder's Rights Act 1994* (Cth)

²³ S 43 (2) of the *Plant Breeder's Rights Act 1994* (Cth)

²⁴ S 43 (8) of the *Plant Breeder's Rights Act 1994* (Cth)

seeds and plants that will be common knowledge, even if they cannot be recognised as being protected under plant breeder's rights.

It is the responsibility of the Qualified Person, drawing on their expertise, and on available reference, to compare the new variety with others. Determining whether a new variety is of common knowledge is not limited by geographic boundaries. Given that other countries do not publish material that facilitates such determination there are reasonable limits as to how much can be done regarding global checks and normal risk management principles are applied. For example, if the existence of a similar variety became known after the grant of rights, there is always the possibility that PBR can be annulled. The Australian PBRO is leading UPOV membership by publishing its descriptions on the PBR website.

Stage of Application

The issue of common knowledge is being discussed earlier in the process than before. Previously, it was dealt with at the time of the trial before the examination process. That has been moved up in the process as part of establishing a prima facie case. Required by the Act.

At the time of Part 1 of the application, the Plant Breeder's Rights Office asks the applicant to provide the most similar variety of knowledge, and to make a claim about how their variety is different from it. If they cannot make that claim, the variety is obviously never refused, because it has never been accepted. The criteria of distinctiveness operates early in the process.

Once that claim is made, the Plant Breeder's Rights Office expects the applicant to confirm that claim at the time of the examination. When the examiners attend the trial, they will inspect a comparison between the candidate and the most similar varieties. They will only recognise the criteria of distinctiveness if there are differences between the varieties.

In the description, the applicants are asked how they decided upon some of the varieties of common knowledge. Qualified persons have been encouraged to improve the way that they describe that selection process, and how they chose common varieties, and progressively eliminated those varieties that did not match the description, leaving a small selection of the most similar.

The trial will be less difficult if Qualified persons understand Common Knowledge before they begin the process. It will ensure that the application will help the process of examination, and attract less public comment.

There is the possibility of public comment all through the process – right up to the five months and twenty nine days of public exposure. This allows other people to suggest that a variety be tested against other similar varieties not previously explored.

The Plant Breeder's Office will return to the applicant to ask them why a plant variety was not tested against the other plant varieties. There may be valid reasons – such as it was a breeding variety, and not a variety of common knowledge; or they might say that they eliminated this because it was different.

Testing distinctiveness

The basis of Distinctness is an objective comparison of the variety with the most similar variety(ies) of common knowledge in Australia. Quantitative and qualitative differences between the new and existing varieties must be established and recorded.

Morphological characteristics, especially those least affected by environmental factors are preferred. DNA testing is not used for determining distinctness because, in the view of UPOV, insufficient DNA categorisation work has been undertaken. Nevertheless some courts have been prepared to rule on the basis of DNA test results in regard to infringement actions. Clear repeatable varietal differences must be demonstrated.

Performance attributes can also be included as distinguishing characteristics provided they are clear and consistent.

The Plant Breeder's Rights Office can have regard to the UPOV Technical Guidelines. The UPOV Technical Guidelines (TGs) often contain the names of varieties that usually exhibit a particular state of expression for a specific characteristic. As most TGs have been developed overseas they may not be particularly well adapted for Australian conditions. Accordingly, the PBRO has produced an Australian list of example varieties for major taxa such as wheat, barley and oats.

As an additional test of distinctness, applicants for PBR to Australian species are required to provide a herbarium specimen to the Australian Cultivar Registration Authority (ACRA). ACRA provides the Plant Breeders Rights Office with advice on

whether the variety is considered new. Applicants are asked to forward a fresh, flowering specimen about 40 cm in length and wrapped in damp newspaper, to The Registrar, ACRA, Australian National Botanic Garden, Clunies Ross Street, ACTON ACT 2601. To identify the specimen, applicants should include with the specimen, a completed copy of form HERB1(5/96) , available from the PBR office. Plant Breeder's Rights will only be granted after this procedure has been finalised.

3.3 Uniformity

A plant variety is uniform if, subject to the variation that may be expected from the particular features of its propagation, it is uniform in its relevant characteristics on propagation.²⁵ The uniformity criteria is applied to the distinctive characteristics – not to other characteristics. “Relevant” is relevant to the particular characteristics. This is a different approach, to other countries such as New Zealand, which take a wider view of uniformity, and, looks at a range of characteristics in the eye of the beholder.

Unless the UPOV technical guideline on the species recommends otherwise, the required standard of uniformity for each type of propagation is as set out below.

1. In vegetatively propagated or fully self-pollinated varieties, the number of off-types (plants that do not conform to all the distinctive characteristics of the variety), must not exceed the numbers given in the table.

Number of plants or plant parts measured	Maximum Number of Off-Types
5	0
6-35	1
36-82	2
83-137	3

2. For partially self-pollinated varieties the allowable number of off-types is doubled.

²⁵ S 43 (3) of the *Plant Breeder's Rights Act 1994* (Cth)

In cross-pollinated varieties, a test of uniformity based on a comparison of variances is applied. Measured characteristics are considered uniform if their variance is less than 1.6 times the average of the variances of the varieties used for comparison. Visually assessed characteristics are considered uniform if the number of off-types is the same as or less than the average number found in the comparator varieties.

Environmental considerations

It is widely accepted that a variety's phenotype will be affected by its environment. Accordingly, a variety description may and probably will vary between different locations and years. However if the variety's distinctive characteristics vary substantially when it is regrown in the environment published in its description, legal disputes may arise as to whether access to that apparently different variety is subject to the PBR owner's authorisation. Such disputes may be settled in court.

Some varieties, tested in growing conditions vastly different to those in Australia, do present problems when grown in Australia. 'Grow outs' under local conditions should be conducted for such problem taxa (eg potatoes) and a 'new' description produced and published. Over time this will result in the build up of a database to better identify potential comparators for such taxa. The intention is to place relevant procedures and information on the PBR website.

3.4 Stability

A plant variety is stable if its relevant characteristics remain unchanged after repeated propagation.²⁶ A variety is stable if it remains true to description after repeated propagation or reproduction. Breeders of varieties propagated from seed need to demonstrate stability by including two generations in the comparative trial (If necessary stability can be demonstrated in a separate trial). If the variety is to be vegetatively propagated and is uniform, a demonstration of stability is usually not required. It is the applicant's responsibility to ensure that the variety remains true to the description.

The requirement for stability testing can be relaxed in some cases. However, such latitude will depend on the mode of propagation. Experience shows that uniform, asexually propagated varieties are stable. The same rule of thumb cannot be

²⁶ S 43 (4) of the *Plant Breeder's Rights Act* 1994 (Cth)

applied to heterozygous sexually produced plants. Accordingly the PBRO only considers applications to waive stability testing for sexually propagated varieties on a case by case basis. Where testing for stability is waived, more weight is placed on the assessment of uniformity.

3.5 Exploitation

A plant variety is taken not to have been exploited if, at the date of lodging the application for PBR in the variety, propagating or harvested material of the variety has not been sold to another person by, or with the consent of, the breeder.²⁷

A plant variety is taken to have been only recently exploited if, at the date of lodging the application for PBR in the variety, propagating or harvested material of the variety has not been sold to another person by, or with the consent of, the breeder,²⁸ either:

- (a) in Australia - more than one year before that date; or
- (b) in the territory of another contracting party;
 - (i) in the case of trees or vines - more than 6 years before that date; or
 - (ii) in any other case - more than 4 years before that date.

However, this rule does not apply to a sale by the breeder of a plant variety of propagating or harvested material of the variety to another person if that sale is part of, or related to, another transaction under which the right of the breeder to make application for PBR in that plant variety is sold to another person.²⁹

The equivalent of this section in the old legislation has been subject to administrative review and judicial determination. S 14 of the *Plant Varieties Act* 1987 (Cth) provided that plant variety rights were not granted in respect of varieties previously sold where "(a) the sale took place in Australia before the making of the application; or (b) the sale took place in another country earlier than 6 years before the making of the application"

<p><i>Sun World International Inc v Registrar, Plant Breeder's Rights</i></p>

²⁷ S 43 (5) of the *Plant Breeder's Rights Act* 1994 (Cth)

²⁸ S 43 (6) of the *Plant Breeder's Rights Act* 1994 (Cth)

²⁹ S 43 (7) of the *Plant Breeder's Rights Act* 1994 (Cth)

(1995) 33 IPR 106; (1997) 39 IPR 161; (1998) 42 IPR 321 [1998]

http://www.austlii.edu.au/au/cases/cth/federal_ct/1998/1260.html

Facts: In December 1984, Howard Keck Junior acquired from the Superior Farmer Company a quantity of the Sugraone grapevine on condition that Keck not asexually propagate from the grapevines or sell, transfer or give them or their propagation wood away for the life of US Plant Patent 3106. SFC retained the right to market fruit grown from the vines for five years. The agreement was entitled "Contract for sale of vines". Agreements were also made with three Chilean firms, and an Italian company.

Held: The Administrative Appeals Tribunal affirmed a decision made by the respondent, the Registrar of Plant Variety Rights to refuse the appellant's application for the grant of plant variety rights under the now repealed *Plant Variety Rights Act 1987* (Cth). That application related to a variety of grapevine whose grapes are called "Sugraone". The Registrar decided by reason of s 14 of the Act, the appellant could not be granted plant variety rights under the Act because the grapevines had been sold by the breeder in the United States in 1972, more than six years before the making of the application. In summary, the Tribunal upheld that finding and held that five other agreements were also to be characterised as disqualifying sales.

Sun World applied, by way of appeal, to the Federal Court. French J heard the matter and dismissed the application. His Honour found that five transactions constituted prior disqualifying sales under s 14: *Sun World Inc v Registrar, Plant Variety Rights* (1997) 39 IPR 161.

Sun World appealed to the full court of the Federal Court. Sun World argued that the trial judge should not have interpreted the word "sale" in s 14 so widely as to include dispositions of reproductive material that imposed significant restrictions on the use to which the assignor could put the plant or reproductive material (such as a restriction on further sale of material without the consent of the assignor or for a defined term).

In the full court of the Federal Court, Carr, Burchett and Mansfield JJ dismissed the appeal. Although the primary meaning of the word "sale" in Australian law is a conveyance of an article in return for money, the broad definition of "sell" in s 3 indicated that parliament intended the word "sale" in s 14 to have a wider meaning than its primary sense. So interpreted, the word "sale" in s 14 encompassed the five transactions at issue. The reference in s 14 (b) to disqualifying sale transactions that took place in another country further supported a broad interpretation of the word "sale" in s 14, since such transactions would not necessarily equate to "sales" in the primary sense of the term under Australian law.

In the International system, there is a lack of harmonisation about the application of the criteria to different things, and the year requirements. The trigger for the sale may be different in different countries. The Sun World case makes it very clear that the

formation of a contract may be a trigger. In South Africa, the trigger for commercialisation is the day in which the agreement was made, not the day in which it was completed. Applicants need to be very sure when they are working out the date of first sale.

When a new member takes on the obligations of UPOV, varieties that have already been commercialised are not usually eligible for plant breeder's rights. However, there could be temporary exemptions. Normally if the variety has been commercialised beyond the allowable limits, such varieties should not be eligible for PBR. However, new UPOV members may choose to temporarily waive the time restrictions. This is a very rare exemption. When in doubt enquiries should be directed to the relevant country (see links to UPOV members)

3.6 Essential Derivation

A. Essentially Derived Varieties

A plant variety is taken to be an essentially derived variety of another plant variety if it is predominantly derived from that other plant variety; and retains the essential characteristics that result from the genotype; and it does not exhibit any important (as distinct from cosmetic) features that differentiate it from that other variety.³⁰

The notion of "essentially derived varieties" was introduced in the 1991 UPOV Diplomatic Conference. There was a concern that the rules under the 1978 Convention did not prevent a person finding a mutation within a plant variety or selecting some other minor variant from within a variety, from claiming protection for the mutant or variant with no authorization from or recognition of the contribution to the final result of the original breeder. The lack of recognition of the contribution of the original breeder in such circumstances was generally considered to be unfair. Modern biotechnology has greatly increased the likelihood of such unfairness; it may take 15 years to develop a new variety but a mere three months to modify it by adding a gene in the laboratory. Under the 1978 Act, the addition of a single gene could enable the biotechnologist responsible for the modification to claim protection for the modified variety without recognizing any obligation to the original breeder. The 1991 Diplomatic Conference considered that this situation could be a disincentive to the continued pursuit of classical plant breeding. The concept of essential derivation

³⁰ S 4 of the *Plant Breeder's Rights Act 1994* (Cth)

embodied in Article 14(5) of the 1991 Act is designed to ensure that the Convention continues to provide an adequate incentive for plant breeding.

There are eight conditions to be met under the Australian legislation before consideration can be given to declaring a variety essentially derived³¹:

- (1) A written application seeking declaration of essential derivation, together with the appropriate fee, must have been made by the rightsholder or holder of the plant breeder's rights (PBR) to the variety from which the essentially derived variety (EDV) is alleged to have originated. An application can be lodged at any time after an application for PBR to the alleged EDV has been lodged, but a declaration of essential derivation is contingent on the alleged EDV being granted rights.
- (2) The variety from which the alleged EDV is said to have originated, the initial variety, must have been granted PBR in Australia, and not be in the provisionally protected stage, at the time an application is made for a declaration of essential derivation.
- (3) The applicant or grantee of PBR to the alleged EDV must not be the same person as the grantee or rightsholder to the initial variety.
- (4) The initial variety must not itself have been declared an EDV.
- (5) The variety to be considered an EDV must have been granted PBR.
- (6) The application for PBR to the alleged EDV must have been made on or before 10 November 1994 - the commencement date of the *Plant Breeder's Rights Act 1994 (Cth)*.
- (7) The alleged EDV must have originated from the initial variety.
- (8) The predominant genotype of EDV must have been derived directly from the initial variety and not from a common parent of the initial and essentially derived variety."

There have been no applications to the Plant Breeder's Office in respect of essential derivation. It would seem that the great deal of attention in legislative debate over this subject was unwarranted. The fears have been unfounded. The rules are so clear that people have been obeying the guidelines in respect of essential derivation

³¹ S 40 of the *Plant Breeder's Rights Act 1994 (Cth)*

The *Plant Breeder's Rights Act 1994* (Cth) seeks to strike a balance between the interest of the first breeder and the need for follow-on innovation. It rewards the first breeder for the time, effort, and investment that they have put into developing the variety. The *Plant Breeder's Rights Act 1994* (Cth) is limited by the word “important”. Subsequent innovation which is “importantly different” is acceptable. That is quite a bright line. However, the follow-on innovator has a large amount of freedom with which to operate. The legislation seeks to constrain the rights of the first breeder, so that they do not have a debilitating effect on follow-on innovation.

Netherlands Essential Derivation Case (UPOV Gazette No. 94, December 2002)

http://www.upov.int/en/about/legal_resources/case_laws/pdf/nl_gazette_94_12-2002.pdf

Facts: In a dispute between two holders of plant breeders' rights (PBR), the Civil Court of The Hague in the Netherlands rendered a provisional judgment on the question of essentially derived varieties (EDVs) in October 2002.

Party A, having its residence in the Netherlands, has a PBR, issued on the basis of Regulation 2100/94 of the Council of the European Union (hereafter referred to as a Community Plant Breeders' Right (Community PBR)) for two varieties of the species *Gypsophila*: 'Blancanieves' and 'Summer Snow'.

Party B, having its residence in Israel, has a Community PBR for the variety 'Dangypmini' of the same species.

Party B claims that the varieties 'Blancanieves' and 'Summer Snow' are essentially derived from the variety 'Dangypmini' for which Party B has a Community PBR. It is claimed by Party B that the two DNA tests performed on its behalf demonstrate that 'Blancanieves' is a mutant of 'Dangypmini'. On the basis of that claim, Party B has summoned Party A to stop the distribution of material of 'Blancanieves' and 'Summer Snow'.

Party A denies the claim and has had its own DNA test performed. Party A brought the dispute to the Civil Court of The Hague.

The provisional judgment

Since the DNA tests do not involve the variety 'Summer Snow', the judge argues that Party B has failed to found its suspicion that the said variety is a mutant of 'Dangypmini'. Therefore it is assumed that all actions of Party B with respect to 'Summer Snow' are wrongful.

The relevant question with respect to 'Blancanieves' is whether the harvested material of that variety resembles the original variety as far as the expression of the characteristics resulting from the variety 'Dangypmini' are concerned. That question has been rephrased in the judgment: “In other words – expressed in the terminology of the UPOV treaty – whether 'Blancanieves' has kept the 'essential characteristics' of the genotype of the original variety 'Dangypmini'.”

The Court took into consideration that, apart from differences in the genotypes of the two varieties, the phenotype of 'Blancanieves' differs from that of 'Dangypmini' on several points according to the test results presented. In the provisional judgment, the Court qualifies these characteristics as essential characteristics, resulting from the genetic material of 'Blancanieves' which are not present in 'Dangypmini'.

Party B has not persuaded the Court that these essential differences are related to the act of derivation, meant in Article 13, subsection 6, of EU Regulation 2100/94.

Consequently it is assumed, provisionally, that it is not probable that 'Blancanieves' is a mutant of 'Dangypmini', covered by the scope of the breeder's right granted to the breeder of 'Dangypimi'.

4. ENFORCEMENT OF PLANT BREEDER'S RIGHTS

4.1 The Scope of Plant Breeder's Rights

Plant breeder's rights comprise the rights to exclude others from doing certain specified acts in relation to the propagating material of a variety, ie, production, reproduction, conditioning, sale, import, exports and stocking of the material.³² They extend to essentially derived varieties and certain dependent plants.³³ In certain circumstances, such as where there has been unauthorised propagation and the grantee has not had a reasonable opportunity to exercise their right, harvested material or products made from the harvested material are covered by the same right as propagating material.³⁴

4.2 Duration of Plant Breeder's Rights

The duration of plant breeder's rights is twenty years for all varieties, with the exception of trees and vines where the term is twenty-five years.³⁵ For grants made under the previous *Plant Variety Rights Act 1987* (Cth) all varieties were protected for twenty years. Once PBR or PVR has expired the variety reverts to the public domain is available to everybody. The limited duration of PBR rights ensures a balance between private and public interest.

4.3 Infringement of Plant Breeder's Rights

Parties should be concerned about infringing plant breeder's rights. The PBR grantee may initiate legal action against you seeking damages or an account of profits. The PBRA provides for additional penalties for intentional or reckless infringement of the breeder's right of up to \$55,000 for individuals and \$275,000 for companies if an successful infringement action is brought by the grantee.

To ensure that they are not infringing plant breeder's rights, parties should check with the person from whom you received the propagating material. Check whether the variety is protected by PBR by looking through the *Plant Varieties Journal* (PVJ) or searching on the PBR website (PBR database). When in doubt, contact grantees for additional information.

³² S11 of the *Plant Breeder's Rights Act 1994* (Cth).

³³ S 12 and s 13 of the *Plant Breeder's Rights Act 1994* (Cth).

³⁴ S 14 and s 15 of the *Plant Breeder's Rights Act 1994* (Cth).

³⁵ S 22 of the *Plant Breeder's Rights Act 1994* (Cth).

Infringement of PBR

S 53 provides that the plant breeder's rights in a plant variety is infringed when:

- a person carries out an act in relation to propagating material of a plant variety as defined by s 11 of the *Plant Breeder's Rights Act 1994 (Cth)* 1994 (Cth) or claims to have authorisation from the plant breeder's rights grantee;
- a person uses the name of the variety that is entered in the register in relation to any other plant variety which is not registered;
- a person carries out an act as defined in s 11 of the Act in relation to an essentially derived variety.

Actions for Infringement

The Federal Court has jurisdiction with respect to actions for infringement of plant breeder's rights in a plant variety.³⁶ The court may grant an injunction (subject to such terms, if any, as the court thinks fit) and, at the option of the plaintiff, either damages or an account of profits.

The owner of plant breeder's rights may bring an action in the Federal Court.³⁷ The licensee does not enjoy the right to exclude others from activities that the grantee is empowered to exclude others from doing. Only the grantee has the right to exclude others from doing the activities set out in section 11. A prudent licensee would seek a defence against the possibility of others performing the acts through an appropriate provision in the licensing agreement with the grantee. There is need for clarification as to the grantee's prerogative to initiate or authorise another to initiate infringement action. The committee was strongly opposed to the registrar initiating infringement action.

A person must not intentionally or recklessly infringe the plant breeder's rights in respect of propagating material of a plant variety.³⁸ The penalty is 500 penalty units.

A defendant in an action for infringement of plant breeder's rights in a plant variety may apply, by way of counterclaim, for revocation of that right on the ground that: the variety was not a new plant variety; or facts exist that would have resulted in

³⁶ S 56 of the *Plant Breeder's Rights Act 1994 (Cth)*

³⁷ S 54 (1) of the *Plant Breeder's Rights Act 1994 (Cth)*

the refusal of the grant of that right if they had been known to the Secretary before the grant of that right.³⁹ The court may make an order revoking the plant breeder's rights if it is satisfied of the counter-claim.⁴⁰

Furthermore, a person may apply for a declaration that the performance of an act would not constitute an infringement of plant breeder's rights.⁴¹

***Buchanan Turf Supplies Pty Limited v Premier Turf Supplies Pty Ltd* [2003] FCA 230**

http://www.austlii.edu.au/au/cases/cth/federal_ct/2003/230.html

The Federal Court case of *Buchanan Turf Supplies Pty Limited v Premier Turf Supplies Pty Ltd* [2003] FCA 230 provides an illustration of infringement of plant breeder's rights.

Buchanan Turf Supplies Limited applied for plant breeders rights in respect of a new variety of soft leaf buffalo grass called "Sir Walter". The company was able to demonstrate that this grass was distinct from a breed of soft leaf buffalo grass called "Shademaster". The registrar of plant breeder's rights certified that plant breeders rights had been granted under s 44 (4) of *Plant Breeders Rights Act* 1994 (Cth), to the applicant in 1998.

Since 2000, Premier Turf supplied or offered to supply customers with turf represented to be "Sir Walter" when it was another variety of buffalo grass.

Buchanan Turf argued that conduct of Premier Turf constituted an infringement of plant breeder's rights. The relevant provision was s 53 (1)(c) of the *Plant Breeders Rights Act* 1994 (Cth), which provides that a plant variety is infringed by a person using a name of the variety that is entered into the Register in relation to any other plant variety.

Furthermore, Buchanan Turf alleged that Premier Turf was in contravention of s 52 of the *Trade Practices Act* 1974 (Cth) for misleading and deceptive conduct.

Justice Hely found that the evidence fell short of establishing that Premier Turf had used the name "Sir Walter" in relation to the grass which he proposed to supply. Hence infringement of s 53 (1)(c) of the *Plant Breeders Rights Act* 1994 (Cth) was not established. Nonetheless, Justice Hely found that there was a clear contravention of s 52 of the *Trade Practices Act* 1974 (Cth).

Curiously Justice Hely did not discuss the validity of the plant breeder's rights claim. He merely determined that there had been an infringement of the plant breeder's rights

Offences other than infringement offences

³⁸ S 74 (1) of the *Plant Breeder's Rights Act* 1994 (Cth)

³⁹ S 54 (2) of the *Plant Breeder's Rights Act* 1994 (Cth)

⁴⁰ S 54 (3) of the *Plant Breeder's Rights Act* 1994 (Cth)

⁴¹ S 55 of the *Plant Breeder's Rights Act* 1994 (Cth)

S 75 provides that a person must not intentionally or recklessly:

- Make a false statement in an application or other document given to the Secretary or the Registrar;
- Represent to another person that they are the grantee of plant breeder's rights in that variety;
- Represent to another person that plant breeder's rights extends to cover another plant variety that is not a dependent variety or an essentially derived variety; and
- Represent to another person that a plant of a variety in which plant breeder's rights has not been granted is a plant of a variety in which plant breeder's rights has been granted.

The penalty for making a false statement to the registrar is 6 months imprisonment.

The penalty for making other false representations is 60 penalty units.

4.4 Exceptions and Defences to Infringement

The grantee cannot entirely prevent public access to the new variety. Reasonable public access is guaranteed under the *Plant Breeder's Rights Act 1994* (Cth). There are a number of guarantees of the public interest, including:

- Certain acts done for private, experimental or breeding purposes (s 16)
- The conditioning and use of farm saved seed (s 17)
- Food, food ingredient, fuel (s 18)
- Reasonable public access to plant varieties (s 19)
- Innocent infringement (s 57)

Certain Acts Done For Private, Experimental Or Breeding Purposes Do Not Infringe PBR

In Australia, the regime for plant breeder's rights recognises a defence of experimental use.⁴² S 16 of the *Plant Breeder's Rights Act 1994* (Cth) provides that any act done in relation to a plant variety covered by plant breeder's rights does not infringe plant breeder's rights if done:

- (a) privately and for non-commercial purposes; or
- (b) for experimental purposes; or
- (c) for the purpose of breeding other plant varieties; ...

Certain acts done for private, experimental or breeding purposes do not infringe plant breeder's rights. "Private" would extend to individual and private use for home consumption. It would also cover "non-commercial" uses. "Experimental" would include investigations and experiments associated with reproduction, conditioning, export or stocking of reproductive material. "Breeding" would cover the conditioning of propagating material, the reproduction of propagating material, crossing a variety, and importing a variety for any other purposes.

In Australia, there has been great uncertainty whether researchers can rely under patent law upon a defence for experimental use. Some speculate that such a defence can be inferred from old English case law. In *Frearson v Loe*, Jessel MR stated that "if a man makes things merely by way of bona fide experiment... that is not an invasion of the exclusive rights granted by the patent". However, others doubt that there is any compelling precedent or statutory direction that provides for a defence of experimental use.

The Australian Law Reform Commission has recommended that the Commonwealth should amend the *Patents Act 1990* (Cth) to establish an exemption from patent infringement for acts done to study or experiment on the subject matter of a patented invention; for example, to investigate its properties or improve upon it. The amendment should also make it clear that:

- (a) the exemption is available only if study or experimentation is the sole or dominant purpose of the act;

⁴² S 16 of the *Plant Breeder's Rights Act 1994* (Cth)

- (b) the existence of a commercial purpose or objective does not preclude the application of the exemption; and
- (c) the exemption does not derogate from any study or experimentation that may otherwise be permitted under the *Patents Act*.

The Advisory Council on Intellectual Property has also launched an inquiry into the knowledge of Australian researchers about patent law.

Overseas, there has been much debate about the boundaries of the defence for experimental use. In *Madey v Duke University*, the United States Court of Appeals held that the defence of experimental use was limited to actions performed "for amusement, to satisfy idle curiosity, or for strictly philosophical inquiry". The Supreme Court of the United States refused to hear an appeal against the decision by Duke University. By contrast, in the European Union, the patent defence for experimental use has been broadly defined - including both non-commercial and commercial activities.

Would a R & D Corporation be able to take advantage of the defence of experimental use if it engaged in greater commercialisation? Much depend upon the regime of intellectual property. It is possible to obtain dual protection of agricultural products in Australia under both plant breeder's rights and patent law. It is rather anomalous that the plant breeder's rights regime provides a research exemption, but the patent regime does not. Furthermore, much would depend upon the jurisdiction. In relation to patent law, Australia does not provide a statutory defence of experimental use; the United States only recognises a very narrow one; whereas the European Union recognises a broad exception. However, it would be fair to say that a R & D Corporation could not confidently rely on a defence of experimental use in all jurisdictions if it engaged in greater commercialisation of intellectual property rights.

Farmers' Exemption

The conditioning and use of farm saved seed does not infringe plant breeder's rights.⁴³ If a person engaged in farming activities legitimately obtains propagating material of a plant variety, and subsequently harvests further propagating material from the plants grown, the plant breeder's rights are not infringed by the conditioning and reproduction of that material.

Regulations may be declare a particular taxon outside the scope of the farmer's exemption.⁴⁴ There are special public safeguards in relation to the tabling of regulations on farm-saved seed and the duration of plant breeder's rights. While it will be possible for an industry - not an individual or a company - to seek exemptions from farm-saved seed, no industry has sought such an exemption. It needs to be recognised that no industry in the future will request an exemption from the saved seed provisions unless it is quite sure that there is more profit for the individuals in that industry in buying new seed rather than saving it. If the minister is considering making regulations at the request of an industry, there will be mandatory public notice, a 30-day public consultation period and a requirement for the plant breeder's rights advisory committee to take into account any public submissions before action can be taken.

In 1998, the Committee received a request for the exemption of a taxon from Section 17, the "Farm Saved Seed" provisions. They requested the Registrar to draft an application form for consideration at this meeting. The Committee supported the form which has not been placed on the PBR website. Further requests for exemption will now be assessed in a uniform manner and if supported by industry and the Plant Breeder's Rights advisory committee, will be submitted to the Minister for consideration.

Case Study

Asgrow Seed Company v Winterboer et al (1995) 513 US 179

<http://supct.law.cornell.edu/supct/html/92-2038.ZO.html>

Facts: The respondents Denny and Becky Winterboer engaged in the time-honored practice of so-called brown-bag sales. That is, in addition to growing soybeans to sell as food and livestock feed, the couple sold a percentage of their sizable crop to their neighbors for seed. The problem in the Winterboers' case, however, was that their soybean plants grew from two varieties of seed purchased

⁴³ S 17 (1) of the *Plant Breeder's Rights Act* 1994 (Cth)

from Asgrow Seed. The company claimed proprietary rights over these seeds. The respondents contended that they were entitled to a statutory exemption from liability under s 2543, which provides that a farmer may save seed and use such saved seed in the production of a crop for use on his farm, or for sale for reproductive purposes.

Held: In granting Asgrow summary judgment, the District Court found that exception allowed a farmer to save and resell to other farmers only the amount of seed the seller would need to replant his own fields. The Court of Appeals reversed, holding that s 2543 permits a farmer to sell up to half of every crop he produces, so long as he sells the other half for food or feed.

The majority of the Supreme Court of the United States held that a farmer who meets the requirements set forth in s 2543's proviso may sell for reproductive purposes only such seed as he has saved for the purpose of replanting his own acreage. It found that the respondents were not eligible for the exception because their planting and harvesting were conducted as "a step in marketing". The court noted that marketing ordinarily refers to the act of holding forth property for sale, together with the activities preparatory thereto, but does not require that there be extensive promotional or merchandising activities conducted with the selling.

Justice Stevens filed a dissenting opinion. His Honour argued that Congress intended to preserve the farmer's right to engage in so called 'brown-bag' sales of seed to neighbouring farmers. Justice Stevens argued that "a step in marketing" should be interpreted strictly. His Honour believed that Congress would have used a term such as "sale" if they intended the farmer's privilege exemption to have a narrow operation.

Equitable Remuneration

Section 18 of the *Plant Breeder's Rights Act 1994* (Cth) used to provide that any act that enables the use of the propagating variety as a food, food ingredient or fuel or for any other purpose that does not involve the production or reproduction of the propagating material does not amount to an infringement.⁴⁵

However, the *Plant Breeder's Rights Amendment Act 2002* (Cth) repealed this section, and substituted in its place provisions dealing with equitable remuneration.

"Equitable remuneration" is defined under the legislation as an amount that is agreed to be paid in relation to an act done in relation to propagating material of a plant variety. It includes an agreement between the person proposing to undertake the act and the grantee of plant breeder's rights in the plant variety, or a determination by a court of competent jurisdiction.⁴⁶

If a person either pays equitable remuneration to the grantee in respect of the act or arranges for the payment of such remuneration, then the grantee is not entitled to exercise plant breeder's rights in the plant variety against the person.⁴⁷ However, this defence does not limit the operation of section 17 in relation to the conditioning or reproduction of propagating material.⁴⁸ Furthermore, the grantee is not allowed to exercise plant breeder's rights in respect of later acts except if the later act involves the further production of propagating material, or export of the material.⁴⁹

Case Study

***Cultivaust v Grain Pool Pty Ltd* [2004] FCA 638**

http://www.austlii.edu.au/au/cases/cth/federal_ct/2004/638.html

On Friday, 21 May 2004, Justice Mansfield of the Federal Court delivered judgment in relation to the epic legal action of *Cultivaust v Grain Pool Pty Ltd* [2004] FCA 638 concerning plant breeder's rights in relation to Franklin Barley. His Honour considered the scope of plant breeder's rights, exceptions for farm saved seed and food and fuel, as well as matters of contract law and equity.

Cultivaust was the holder of an exclusive licence, granted by the State of Tasmania, in relation to its barley variety "Franklin" as allowed under the *Plant Breeder's Rights Act 1994* (Cth). Cultivaust and the Tasmanian government contended that the Grain Pool of Western Australia had

⁴⁵ S 18 of the *Plant Breeder's Rights Act 1994* (Cth)

⁴⁶ S 18 (3) of the *Plant Breeder's Rights Amendment Act 2002* (Cth)

⁴⁷ S 18 (1) of the *Plant Breeder's Rights Amendment Act 2002* (Cth)

⁴⁸ S 18 (2) of the *Plant Breeder's Rights Amendment Act 2002* (Cth)

⁴⁹ S 23 (3) of the *Plant Breeder's Rights Amendment Act 2002* (Cth)

infringed plant breeder's rights in Franklin Barley. In the alternative, Cultivaust and the Tasmanian government claimed a breach of contract, estoppel, a breach of fiduciary duties, and unlawful interference.

Initially, the Grain Pool of Western Australia mounted a misconceived and ultimately unsuccessful constitutional challenge against the validity of the *Plant Variety Rights Act 1987* (Cth) and the *Plant Breeder's Rights Act 1994* (Cth) in the High Court. Subsequently, the Grain Pool denied that they had infringed plant breeder's rights in Franklin Barley. They also rejected arguments that they were in breach of any agreement or undertaking to Cultivaust or the Tasmanian Government.

First, in his judgment, Justice Mansfield provides an overview of the cascading rights accorded to the plant breeder under the *Plant Breeder's Rights Act 1994* (Cth). His Honour emphasizes:

"The purpose of the *Plant Breeder's Rights Act 1994* (Cth) is to create monopoly rights in certain plant varieties, to encourage the development of new plant varieties. It does so by controlling the circumstances in which new plant varieties may be produced or reproduced, and by controlling the commercial exploitation of both new plant varieties, the harvest from new plant varieties (s 14) and products obtained from the harvest from new plant varieties (s 15)."

Justice Mansfield observes that the rights of the plant breeder "'cascade' to cover material harvested from the propagating material and products made from harvested material". However, his Honour notes that such extended rights only arise if the breeder did not have a reasonable opportunity to exercise his rights in relation to the propagating material.

Second, Justice Mansfield considers the range of public interest exceptions provided under the *Plant Breeders Rights Act 1994* (Cth). His Honour comments: "The common feature of those provisions is the balancing of the production and commercial use of the propagating material on the one hand with the public interest in having the benefit of access to the propagating material of the particular variety of plants on the other".

Justice Mansfield considers the operation of the farm-saved seed exception under s 17 of the *Plant Breeder's Rights Act 1994* (Cth). His Honour comments: "Section 17(1) authorises from the first generation crop, and from subsequent generations of crop the retention of farm saved seed. It also authorises the use of the farm saved seed in producing a further crop and the harvesting of further propagating material from plants grown from that seed." Justice Mansfield defines the scope of the farm-saved seed exception by reference to s 14 of the legislation dealing with plant breeder's rights in relation to harvest material. He ruled that Tasmania and Cultivaust had a reasonable opportunity to exercise Tasmania's plant breeder's rights in relation to the propagating material leading to each harvest. As a result, Justice Mansfield concludes that Tasmania and Cultivaust cannot claim plant breeder's rights in relation to the harvest and products resulting from the harvest under the *Plant Breeder's Rights Act 1994* (Cth).

Controversially, Justice Mansfield held that s 18 of the old *Plant Breeder's Rights Act 1994* (Cth) was intended to create a "blanket" exemption dealing with propagating material to which plant breeder's rights:

"In my view the words of s 18 should be given their normal meaning, and not be read down as Cultivaust and Tasmania intend... It would not be within the scope of s 18 to grow propagating material from unlawfully obtained seed, intending to sell the harvested propagating material as food. Section 18 only applies where something is done to propagating material which enables its use within the food exemption. It is not the intention underlying the conduct, but the quality of the particular act which might otherwise infringe the PBR."

Justice Mansfield held that the acts of the Grain Pool of Western Australia - namely the storage and sale of Franklin barley, for malting purposes, fell within the food exemption under s 18 of the *Plant Breeder's Rights Act 1994* (Cth). The *Plant Breeder's Rights Amendment Act 2002* (Cth) has since repealed the food and fuel exception in s 18 and set up a new regime dealing with equitable remuneration.

Third, Justice Mansfield rejected a number of arguments made by Cultivaust and Tasmania in relation to contract law, estoppel, fiduciary duty, and unlawful interference. His Honour found that no agreement was entered into between Cultivaust and the Grain Pool of Western Australia in relation to the payment of production levies or end point royalties. Justice Mansfield found that Cultivaust's hopes or expectations for an agreement with the Grain Pool including a production levy on Franklin Barley, were the result of its commercial judgments and strategies, and not an assumption of fact resulting from the conduct of the Grain Pool. His Honour doubted that the Grain Pool had a fiduciary duty not to take advantage of the release of Franklin barley seed in Western Australia "to the economic detriment of Cultivaust". Justice Mansfield found that there was no unlawful interference on the part of Grain Pool. His Honour denied that the Grain Pool had unlawfully attempted to reach an understanding with other statutory grain marketing boards about the level of any production levy or end point royalty to be paid in respect of Franklin barley. The decision highlights the need for business managers to ensure that a written agreement is reached in relation to the exploitation of plant breeder's rights - especially in relation to a production levy or end point royalties.

The Grain Pool of Western Australia - now reconstituted as the CBH Group - is understandably delighted by the decision. CBH Group Chairman Robert Sewell comments:

"Grain Pool has rejected these claims since they were first raised in 1996. Grain Pool has always believed it acted fairly and properly in its dealings with Cultivaust and the Tasmanian government. The Federal Court's decision has now vindicated the position taken by the Grain Pool."

However, the Chairman recognised that that the decision of the Federal Court of Australia in relation to the food and fuel exception was now only of academic interest because it had been repealed by the *Plant Breeder's Rights Amendment Act 2002* (Cth).

On 21 July 2004 Cultivaust lodged an appeal to the Full Bench of the Federal Court against the judgment of Justice Mansfield. There seem to be three possible grounds of appeal. Cultivaust could argue that the judge made an error of law in relation to the interpretation of whether there was a "reasonable opportunity" to exploit the propagating material, the harvest, and products from the harvest. It could appeal that there was an error of law in relation to the controversially broad interpretation of the food and fuel exemption. It could also reiterate its alternative arguments in relation to contract law and equity.

Reasonable Public Access To Plant Varieties Covered By PBR

Section 19 (1) of the *Plant Breeder's Rights Act 1994* (Cth) provides that "the grantee of PBR in a plant variety must take all reasonable steps to ensure reasonable public access to that plant variety." Reasonable public access to a plant variety is taken to be satisfied if propagating material of reasonable quality is available to the public at reasonable prices, or as gifts to the public, in sufficient quantities to meet the demand.⁵⁰

The Secretary of the Department of Agriculture to license an appropriate person (a) to sell propagating material of plants of that variety; or (b) to produce propagating material of plants of that variety for sale; during such period as the Secretary considers appropriate and on such terms and conditions as the Secretary considers would be granted by the grantee in the normal course of business.⁵¹ The purpose of such a license is to ensure reasonable public access to a plant variety. The Secretary of the Department of Agriculture may exercise such a power subject to a number of conditions.⁵² A decision under this section is reviewable by the Administrative Appeals Tribunal.

Section 19 of the *Plant Breeder's Rights Act 1994* (Cth) is multi-faceted. It could ensure the proper disclosure and availability of plant variety rights. It could enable the so-called breeder's exemption under section 16. The provision could serve as a de facto form of compulsory licensing. It could be deployed to prevent anti-

⁵⁰ S 19 (2) of the *Plant Breeder's Rights Act 1994* (Cth)

⁵¹ S 19 (3) of the *Plant Breeder's Rights Act 1994* (Cth)

⁵² S 19 (4)-(11) of the *Plant Breeder's Rights Act 1994* (Cth)

competitive conduct and abuse of market power. The provision is designed to uphold the utilitarian objectives of the *Plant Breeder's Rights Act 1994* (Cth).

As yet, the Secretary has never exercised the options included in s 19. It seems that such a power would be exercised in exceptional circumstances. On occasion the Registrar of the *Plant Breeder's Right Act 1994* (Cth) has written to grantees who have not met the 2 year rule in s 19(4) asking their intention to release propagating material etc. So far all have made material available, albeit after a long spiel about the trials and tribulations of propagating plants/quarantine.

Case Study

***Sacker Potatoes Ltd v C Meijer BV* (Unreported, October 31, 2001)**

This case considered whether compulsory exploitation rights should be granted in protected variety of potato on grounds that refusal to issue licence was unreasonable and right holder was failing to satisfy demand in UK market.

Facts: On October 31, 2001, the Controller of Plant Variety Rights refused the first compulsory licence application lodged under the Plant Varieties Act 1997 (the "Act"). The challenge was to a variety of potato "Lady Rosetta", popularly used in crisp manufacture. Dutch seed breeder, C. Meijer BV ("Meijer") owns the United Kingdom plant breeders' rights in "Lady Rosetta", with MBM Produce Ltd acting as its exclusive agent in the United Kingdom. Sacker Potatoes Ltd ("Sacker") applied (unsuccessfully) for a compulsory exploitation rights in the protected variety, arguing that Meijer's refusal to issue a licence was unreasonable and that the rights' holder was failing to satisfy demand in the United Kingdom market. The applicant's action was supported by Higgins Agriculture Ltd.

Section 17 of the Act sets out the criteria for a compulsory licence application. The Controller may only grant an application on the basis that the rights' holder has unreasonably refused (or put forward unreasonable terms) under section 17 (1) to grant a licence if she is satisfied under section 17 (2) that:

- (a) it is necessary to secure that the variety is: available to the public at reasonable prices; widely distributed; or maintained in quality;
- (b) the applicant is financially and otherwise in a position to exploit the variety in a competent and businesslike manner; and
- (c) the applicant intends to so exploit those rights.

The Controller must also have regard to the fact that the rights' holder is entitled to secure reasonable remuneration from exploiting its intellectual property rights (in practice, to ensure adequate funding for ongoing or new breeding programmes or to finance the development, trialling and marketing of existing or new plant varieties).

Held: After protracted proceedings of over a year, the matter came for final consideration by the Controller, Heather Hamilton of DEFRA's Plant Varieties and Seeds Division. After acknowledging the evidence cited on both sides, the Controller found that insufficient evidence had been adduced by the applicant to demonstrate that the rights' holder had unreasonably refused to grant a licence to the applicant. The Controller had regard to the general conduct of the parties (especially the applicant's previous import of seed without the rights' holder's permission) and concluded that none of the public interest criteria under section 17 (2) had been met.

Innocent Infringement

The Federal Court may refuse to award damages, or make an order for an account of profits, if the person satisfies the court that, at the time of the infringement, the person was not aware of, and had no reasonable grounds for suspecting the existence of that right.⁵³ A combination of labelling of the propagated plants, and the sale of the plants to a substantial extent before the date of infringement, will remove the defence of innocent infringement.⁵⁴

⁵³ S 57 (1) of the *Plant Breeder's Rights Act 1994* (Cth)

⁵⁴ S 57 (2) of the *Plant Breeder's Rights Act 1994* (Cth)

5. EXPLOITATION OF PLANT BREEDER'S RIGHTS

Plant breeder's rights are personal property, and are capable of assignment, or transmission by will or by operation of the law.⁵⁵

Plant breeder's rights allows one to exclude others from doing certain commercial acts. This in principle legal protection must be buttressed with a common law contract which would normally contain details regarding the amount, when and how the royalty is to be paid, etc.

Commercialisation of protected varieties and the level of returns are the responsibility of the grantee. This is usually accomplished through contracts and common law. The owner has the opportunity to commercialise their variety either through a contractual arrangement with the person you choose, or, alternatively to commercialise the variety yourself (provided that there is no other legislation preventing you or the person you contract from undertaking the commercial activities).

There are a number of possible models of commercialisation - assignment, licensing, spin-off companies, research and development corporations, co-operative centres, and technology diffusion.

5.1 Assignment

An assignment of PBR (otherwise than because of the order of court) does not have effect unless it is in writing signed by, or on behalf of the assignor and assignee.⁵⁶

There are sometimes problems in relation to pre-grant assignment. A number of contracts fail to specify the breeder, the assignor, and the variety names. That assignment process is problematic – very bad contracts are not clear about what is being assigned. There has to be a chain of evidence about the ownership of plant breeder's rights.

The Plant Breeder's Rights Office has circulated a model assignment agreement:

⁵⁵ S 20 (1) of the *Plant Breeder's Rights Act* 1994 (Cth)

⁵⁶ S 20 (2) of the *Plant Breeder's Rights Act* 1994 (Cth)

ASSIGNMENT

This assignment is made on the 7th Day of March 1994 AD

Between the "ASSIGNOR"

And the "ASSIGNEE"

Whereas

A The ASSIGNOR is the breeder of a new plant variety called _____
(hereinafter referred to as "CULTIVAR").

B The ASSIGNOR agrees to assign the full and exclusive rights, title and interest in the CULTIVAR, including any Plant Patent, Plant Breeder's Rights, or any other similar form of intellectual property rights and the right to lodge applications for Plant Patent, Plant Breeder's Rights or their equivalent worldwide to the ASSIGNEE and to execute any documents required in pursuance of these rights.

C Now, thereof, in consideration the sum of Two Thousand Dollars of US currency (USD 2000.00), the receipt of which is hereby acknowledged, the ASSIGNOR hereby assigns all rights, titles and interest in the CULTIVAR as described in the paragraph B to the ASSIGNEE .

D The ASSIGNOR hereby undertakes do all acts and supply all documents necessary or desirable for further assuring the title of the ASSIGNEE to the CULTIVAR.

Executed at _____

Signature of ASSIGNOR

Signature of ASSIGNEE

Name _____

Name _____

Witnessed by

Witnessed by

Name of -the witness _____

Name of the witness _____

Post-grant assignments

The registrar must be notified of an assignment of plant breeder's rights.⁵⁷ There is a positive requirement to notify Plant Breeder's Rights Office of a change in post-grant assignment - for instance, as a result in a change of names, merger, a change in ABN, winding-up, liquidation, death. Failure to do so may result in the revocation of plant breeder's rights. In this regard, the *Plant Breeder's Rights Act 1994* (Cth) is different from the Patent Act. IP Australia does not have an obligation for applicants to notify them of changes.

⁵⁷ S 21 of the *Plant Breeder's Rights Act 1994* (Cth)

5.2 Licensing

If a grantee of PBR in a plant variety gives another person a licence in that right, the licence binds every successor in title to the interest of that grantee to the same extent as it was binding on that grantee of the plant breeder's rights.⁵⁸

There are some very important differences in respect of licensing in relation to plant breeder's rights and patent law. Under plant breeder's rights, the licensee does not obtain the Plant Breeder's Rights. Their powers arise from the contract, not from the transfer from the Plant Breeder's Rights. That limits the ability of the licensee to bring infringement actions. By contrast, under patent law, the licensee has a right to bring an action for patent infringement.

As a result, licensees are well-advised to write into contract certain powers – such as a saving clause, like a grantee will support an application for infringement by the licensee.

5.3 Spin-Off Companies

Another option is to set up a company in order to commercialise plant breeder's rights. Florigene is a good example of a company which has been created to exploit intellectual property rights in respect of plants. It seems to rely upon a combination of plant breeder's rights, patent protection, and trade mark protection.

Case Study

Florigene⁵⁹

Florigene was founded in Melbourne in 1985 as Calgene Australia Pty Ltd. The name was changed to 'Florigene' in 1994 after the Company acquired the assets of its primary competitor, Florigene B.V., a company incorporated in Holland. The Company's research centre and corporate headquarters remain in Melbourne while product development and commercial activities are managed through its operations in Holland, in the heart of the flower industry.

Florigene's original mission was to create the world's first blue rose through introduction of the Blue Gene into roses. In 1991, Florigene scientists succeeded in isolating the Blue Gene (from the petunia flower) and an initial patent application to protect the invention was lodged. This was followed with patent applications for the Key Markets. Florigene has since acquired, licensed or developed other technologies and know-how that it deemed necessary to successfully introduce and express this gene in flowers for the purpose of generating novel colours. While the rose was and continues to be an

⁵⁸ S 20 (3) of the *Plant Breeder's Rights Act 1994* (Cth)

important target flower for the technology, the Company was also interested in other commercial flowers that lacked the Blue Gene – carnations, gerberas and chrysanthemums. Moreover, the Company realised that the commercial opportunity was not limited to 'blue', but extended to a range of novel colours in the blue spectrum. These colours can be described as variations of mauve or violet.

In 1995, Florigene scientists succeeded in generating the first carnation to express colour in the blue spectrum. This flower had a light mauve colour and was called Moondust.TM This was an important breakthrough and it was the first genetically modified flower to gain regulatory approval and be commercially sold anywhere in the world. The Directors believe that Florigene remains the only company in the world to gain approval for and sell a genetically modified flower.

Moonshadow,TM Florigene's second novel-coloured carnation, had a much stronger violet colour and was introduced into the Australian market as a pilot product in 1998. In the ten months from July 1998 to April 1999, MoonshadowTM sales amounted to approximately 387,000 stems (flowers) at an average selling price of \$0.28. The Company believes that this average price represents a significant premium over the market average price for carnations. In the 3 months, February-April 1999, the sales were 180,000 stems which, according to Florigene estimates, represented approximately 2% of the sprays segment of the Australian carnation market for an average 3 month period. MoonshadowTM is now being sold in the Key Markets: USA, Europe and Japan.

Like Moondust,TM the long term potential for MoonshadowTM is likely to be limited due to its 'midi' form (small, single flower) which is not popular in the Key Markets. Nevertheless, the Company has learned a great deal from its experiences with MoondustTM and Moonshadow.TM The next generation of carnations with the Colour Modification Technology will be ranges of the more popular and higher value 'standard' form (large single flower) and 'spray' form (small, multi-flower) carnations in novel colours. These standard and spray forms dominate the market for carnations and offer the potential for significant future sales at premium prices.

5.4 Rural Research and Development Corporations

The rural industry based Research and Development corporations play an important role in the funding of rural research and development. The *Primary Industries and Energy Research and Development Act 1989* (Cth) provides some indication of the roles of research and development corporations. The rationale for the funding of the Research and Development Corporations is to address the market failure issues associated with problems of appropriating the benefits of research in industries with many small producers producing homogenous products. One of the important functions of the Research and Development Corporations is "to facilitate the dissemination, adoption, and commercialisation of the results of research and development in relation to the primary industry or class of primary industries in

⁵⁹ <http://www.florigene.com.au>

respect of which the corporation was established".⁶⁰ They have established intellectual property policies and procedures in place to attain this objective.

5.5 Co-Operative Research Centres

Effective licensing and assignment of intellectual property are crucial to the achievement of the CRC Program objective of "capturing the benefits of research".

The Commonwealth Agreement requires that CRCs: *"...shall not assign or license Intellectual Property in any Contract Material having the potential for Commercialisation without...the prior written approval of the Commonwealth. Such approval may only be withheld if the Commonwealth notifies the Researcher of a potential alternative for the exploitation of the Intellectual Property that in its reasonable opinion is superior to the proposed licence or assignment in terms of compliance with clauses 9.2 and 9.4".* (Clause 9.5)

Further, under the Commonwealth Agreement, each CRC is committed to: *"...use its best endeavours to Commercialise or otherwise make available any Intellectual Property in Contract Material to maximise the benefits accruing to Australia, including Australian industry, the Australian environment and the Australian economy generally. The use and exploitation of such Intellectual Property shall be consistent with the Objectives of the CRC Program".* (Clause 9.4)

Centres therefore need to seek approval from the CRC Secretariat for all licensing agreements involving CRC intellectual property. This process requires the Centres to provide "relevant background information" to assist the Secretariat to undertake the necessary consultation prior to Commonwealth approval of the licence agreements. The sort of "relevant background information" required includes information upon the licensing strategy, the value of the intellectual property, the management of the intellectual property, the benefit to the co-operative research centre, and the benefit to Australia.

In granting approval of licensing agreements, the Commonwealth usually requires that the Centre provides an annual report of royalties, licence fees and other commercial revenue under such agreements.

⁶⁰ S 11 (e) of the *Primary Industries and Energy Research and Development Act 1989* (Cth)

Following amendments to the standard Commonwealth Agreement, new Centres established after 1998 are required to: *"...prepare a report in relation to the Commercialisation or other use or exploitation of Intellectual Property in Contract Material..."* (Clause 14B.1) and *"..forward the report to the Commonwealth within 3 months of the end of the relevant Financial Year."* (Clause 14B.2)

When the Centre is wound up they must also: *"prepare a final report in relation to the past and prospective Commercialisation or other use or exploitation of Intellectual Property in all Contract Material; and forward the final report to the Commonwealth within 3 months after the date the Centre is wound up."* (Clause 14B.4)

6. RELATIONSHIP BETWEEN PLANT BREEDER'S RIGHTS AND OTHER LEGISLATION

The *Plant Breeder's Rights Act 1994* (Cth) coexists with other legislation. For example, dispute over the physical ownership of plants is an issue for common law proceedings in the courts. Intellectual property ownership is the basis of the PBR system. Neither would registration be automatically invalidated on the basis of a court decision relating to legal access to or ownership of the source population from which a new variety was derived. Intellectual property rights exist independent of physical property rights.

There is, of course, the possibility of voluntary undertakings linking physical ownership with intellectual property issues (so-called benefit sharing). However these undertakings are quite separate from the granting of *Plant Breeder's Rights Act 1994* (Cth).

Similarly, other Australian legislation could impact on intended use of the registered variety. It is feasible for a new variety to be registered under the *Plant Breeder's Rights Act 1994* (Cth). However, as the *Plant Breeder's Rights Act 1994* (Cth) coexists with other laws of the land, the commercialisation of the variety could be restricted by such legislation. For example, current legislation may prohibit the use of that variety in food, or, the growing of that variety because it is a noxious weed. Such matters are outside the scope of the *Plant Breeder's Rights Act 1994* (Cth) and it is the responsibility of the applicant to take them into consideration and to act appropriately.

Grantees are also subject to national competition policy rules and should avoid activities that may be construed as unconscionable conduct or misuse of market power.

Any concerns in relation to the above jurisdictions should be made to the appropriate jurisdiction, and not to the Plant Breeder's Rights Office.

6.1 Patents

Plant breeders first sought protection under the industrial patent system which grants rights to inventors. However, a number of technical difficulties were encountered in seeking to apply the rules of a system designed to protect technical inventions to plant varieties, which were thought not to precisely reproduce themselves, and whose

appearance can vary depending upon the environment in which they are grown.

Margaret Llewellyn observes:

There were two main reasons why the patent system was seen as inappropriate. First, plant material was not regarded as capable of meeting the requirements of novelty, inventive step and disclosure. Secondly, it was not thought to be in the public interest to permit such an extensive monopoly over plant varieties, given their communal importance. Underlying this was the view that it was desirable to retain, in so far as it was possible, the tradition of free exchange of new plant material between plant breeding institutes. This would ensure the widest possible dissemination and use of the new combinations of genetic information.⁶¹

For these reasons, it was decided to introduce a special form of protection which would be designed to support a specific industry, the plant variety right.

In Australia, it is possible to protect a plant variety under both patent law and plant breeder's rights. Patents tend to protect a process or components of a variety, such as gene technology or gene sequences, whereas plant breeder's rights protect the end product, that is, plant variety as a whole. There are important differences between patents and plant breeder's rights. Patent attorneys should not assume that the rules and principles that govern patent law will necessarily deal with plant breeder's rights. Patent attorneys need to be particularly concerned about quarantine problems in relation to overseas applicants who want to claim plant breeder's rights but who have not decided who will commercialise the material.

Standard Patents

In a pamphlet from November 1998,⁶² IP Australia notes that the range of patentable subject matter for plants includes: new plant varieties; plant components, for example, genes or chromosomes; reproductive material, for example, seeds, whole plants, cuttings, cells or protoplasts; products from plants, for example, fruit, flowers, oils, starches, chemicals or pharmaceuticals; and plant material used in industrial processes, for example, cell lines to produce processes relating to plants, for example, genetic engineering techniques, plant tissue culture, cell and protoplast culture, mutagenesis and breeding and cultivation methods.

⁶¹ Llewellyn, Margaret. "The Legal Protection Of Biotechnological Inventions: An Alternative Approach", *European Intellectual Property Review*, 1997, Vol. 19 (3), p. 115.

⁶² IP Australia. "Australian Patents For Plants", November 1998.

A plant variety is patentable under the *Patents Act* 1990 (Cth) if it meets the standard requirements for patentability. For plants, these requirements are:

- (1) the variety is a manner of new manufacture;
- (2) the variety is novel;
- (3) the variety is a result of an inventive step;
- (4) the variety has utility; and
- (5) the variety has not been subject to secret use.

Furthermore, a patent application in respect of a plant variety must be capable of written description. It must be replicable based on a written description provided in a patent specification. Full description of the plant or plant variety means an inclusion of the full morphological, biochemical and taxonomic characteristics of the organism known to the applicant. It also includes a full description of any scientific testing characteristics (eg isozyme analysis, DNA profiling, etc.) if available. There must be sufficient clear information to enable the specialist to fill in any missing gaps in the description of the invention without conducting lots of experimentation or resorting to invention to discover the conditions necessary for the work.

Interaction with Plant Breeder's Rights

Patent protection is complementary to plant breeder's rights. There have been a number of cases in the United States, Canada and other countries dealing with the interaction between patent law and plant breeder's rights.

Case Study

JEM Ag Supply v Pioneer Hi-Bred International Inc (2001) 534 US 124

<http://supct.law.cornell.edu/supct/html/99-1996.ZO.html>

In the case of *JEM Ag Supply Inc v Pioneer Hi-Bred International Inc (2001) 534 US 124*, the Supreme Court of the United States considered whether utility patents can be granted in respect of plants.

Pioneer Hi-Bred International Inc had obtained 17 utility patents for its inbred and hybrid corn seed products. It sold the patented hybrid seed to merchants and growers under a limited licence, the terms of which only permitted the production of grain and forage from that seed and prohibited re-sale and use of that seed for propagation, seed multiplication or the production or development of a

new hybrid or variety. JEM Ag Supply Inc. - trading as Farm Advantage - bought patented seed from Pioneer under such a licence and resold it. Pioneer brought proceedings against Farm Advantage alleging patent infringement. In reply, Farm Advantage counter-claimed that Pioneer's patents were invalid, because sexually reproducing patents were not patentable subject-matter.

The District Court granted summary judgment to Pioneer, relying on a broad construction of the decision in *Diamond v Chakrabarty* in finding that utility patents covered plant life. It found that in enacting the *Plant Patent Act* and the *Plant Variety Protection Act*, Congress had not expressly or impliedly removed plants from the scope of patent protection. The United States Court of Appeals affirmed this decision. JEM Ag Supply appealed to the Supreme Court of the United States.

Justice Thomas delivered the opinion of the majority of the United States Supreme Court, in which Chief Justice Rehnquist and Justices Scalia, Kennedy, Souter and Ginsburg joined. His Honour stressed that the language in *Diamond v Chakrabarty* was extremely broad: "In choosing such expansive terms as manufacture and composition of matter, modified by the comprehensive any, Congress plainly contemplated that the patent laws should be given wide scope". It noted that the Court explicitly rejected the argument in that case that Congress must expressly authorize protection for new patentable subject matter.

Justice Thomas maintained that the *Plant Patent Act* does not limit the scope of utility patents. His Honour noted: "Whatever Congress may have believed about the state of patent law and the science of plant breeding in 1930, plants have always had the potential to fall within the general subject matter of s 101, which is a dynamic provision designed to encompass new and unforeseen inventions". Furthermore, Justice Thomas held that the *Plant Variety Protection Act* did overlap with utility patents, but the conflicts were not irreconcilable. His Honour observed: "It is much more difficult to obtain a utility patent for a plant than to obtain a plant variety certificate because a utility patentable plant must be new, useful, and non-obvious". Justice Thomas therefore deduced: "Because of the more stringent requirements, utility patent holders receive greater rights of exclusion than the holders of a PVP certificate. Most notably, there are no exceptions for research or saving seed under a utility patent."

Dissenting, Justice Breyer and Justice Stevens held that the two specific plant statutes - namely the *Plant Patent Act* and the *Plant Variety Protection Act* - embodied a legislative intent to deny coverage under the Utility Patent Statute to those plants covered in existing legislation. The two judges were concerned that the expansion of utility patents to include plant subject matter would undermine the exceptions provided for under the *Plant Variety Protection Act*: "Why would anyone want to limit the exemptions - related to seedplanting and research - only to those new plant varieties that are slightly less original? Indeed, the research exemption would seem to be more useful in respect to more original, not less original, innovation. The Court has advanced no sound reason why Congress would want to destroy the exemptions in the *Plant Variety Protection Act* that Congress created. And the Court's reading would destroy those exemptions."

Justice Breyer and Justice Stevens emphasized that the majority wrongly relied upon the canon of implied repeal: "Those who write statutes seek to solve human problems. Fidelity to their

aims requires use to approach an interpretive problem not as if it were a purely logical game, like a Rubik's Cube, but as an effort to divine human intent that underlies the statute. Here that effort calls not for an appeal to canons, but for an analysis of language, structure, history, and purpose. Those factors make clear that the Utility Patent Statute does not apply to plants. Nothing in *Chakrabarty* holds to the contrary."

Case Study

Percy Schmeiser v Monsanto (2004) SCC 34

<http://www.canlii.org/ca/cas/scc/2004/2004scc34.html>

In a judgment with wide implications for gene patents and farmers rights, the Supreme Court of Canada has ruled by a majority of five to four that prairie farmer Percy Schmeiser had infringed the patent of Monsanto relating to genetically modified herbicide-resistant canola.

Chief Justice Beverly McLachlin and a new appointment to the bench, Justice Morris, Fish wrote the leading majority judgment. They held that Monsanto's patent was valid, and that Percy Schmeiser had infringed that patent by using and possessing GM canola. Madam Justice Louise Arbour - the next United Nations Human Rights Commissioner - wrote the dissenting judgment. She maintained that the patent claims could not be extended over whole plants and there was no infringing use.

First, the majority of the Supreme Court of Canada held that Monsanto's patent on herbicide-resistant canola was valid. The judges emphasized: "Under the present Act, an invention in the domain of agriculture is as deserving of protection as an invention in the domain of mechanical science". Dissenting, Justice Arbour found that the patent claims here cannot be interpreted to extend patent protection over whole plants and that there was no infringing use.

Second, the Supreme Court heard argument as to whether Percy Schmeiser infringed the patent of Monsanto by having a patented GM canola crop on his land. The majority rejected the Bruno, Saskatchewan farmer's argument that he was unaware of the presence of GM crops on his land, holding: "Mr Schmeiser was not an innocent bystander; rather, he actively cultivated Roundup Ready canola".

Dissenting, Justice Arbour held that the cultivation of plants containing the patented gene and cell did not constitute an infringement. She was concerned that an innocent bystander could infringe a patent under the approach of the majority. She observed: "The complexities and nuances of innocent bystander protection in the context of agricultural biotechnology should be expressly considered by Parliament because it can only be inadequately accommodated by the law on use".

Third, the majority of the Supreme Court of Canada supported Monsanto's arguments about farmers' rights. The judges emphasized that saving seed could amount to patent infringement: "Saving and planting seed, then harvesting and selling the resultant plants containing the patented cells and

genes appears, on a common sense view, to constitute 'utilization' of the patented material for production and advantage".

Dissenting, Justice Arbour held that it was inappropriate that plants could gain dual protection under plant breeders' rights and patent law. She observed: "Patents should not necessarily be available when other, more tailored intellectual property protection exists".

Although it had found that Monsanto held a valid patent, and that Percy Schmeiser had infringed that patent, the Supreme Court of Canada refused to grant Monsanto an account of profits because the farmer had not benefited from the invention. The court ordered that each party should bear its own costs.

Percy Schmeiser argued that this finding was a "moral and personal victory". He vowed that he would continue to be an activist for farmers' rights: "I will continue to support any efforts to strengthen the rights of a farmer to save and re-use his own seed." However, he is conscious that he will need to pay for outstanding legal costs: "I still have legal bills to pay and I am grateful to all for any past and future contributions."

Monsanto welcomed the decision of the Supreme Court of Canada that the subject matter claimed within its patent for Roundup Ready canola fell within the Patent Act and that Percy Schmeiser and Schmeiser Enterprises Ltd infringed that patent. Carl Casale, the executive vice-president of Monsanto, commented: "We are gratified the Supreme Court of Canada found that Monsanto's patent pertaining to the Roundup Ready gene is valid and enforceable".

Monsanto has stressed that the company has only initiated legal action with the greatest reluctance and as a last resort to protect its patents in situations where it believes there has been a knowing and deliberate violation of its intellectual property. The company has given undertakings that it will not exercise its patent rights where Roundup tolerant crops are present in a farmer's field as a result of inadvertent or unexpected acts - such as trace levels resulting from adventitious presence.

The debate over gene patents will undoubtedly shift from the courts to the political arena. The case of Percy Schmeiser may well become a political issue as the Canadian Prime Minister Paul Martin has called an election for June 2004.

The decision has wider international ramifications. In Australia, the issue of liability for GM crops has become quite contentious. The Gene Technology Regulator has given approval for a number of GM canola crops owned by Bayer and Monsanto to be released. However, a number of State Governments in Australia - such as Victoria, SA, Tasmania and Western Australia - have imposed moratoriums on GM crops in Australia. They have expressed concerns about the impact of GM crops on export markets in the European, Asia and the Middle East - especially in relation to grain, dairy and honey. It remains to be seen whether there will be a resolution to this impasse between the Federal Government and the State Governments.

It should be stressed that the decision of the Supreme Court of Canada is not limited to biotechnology. It raises a range of issues not just with the future of GM crops, but also other patented plant technologies. The decision highlights the need for growers to take care that they only use patented plants, with the express permission of the owners. The use and possession of a patented

invention could amount to infringement of the patentee's rights. The decision also emphasizes that there is no defence under patent law in respect of farm-saved seed. It reinforces the importance of farmers carefully scrutinising their contracts, then acting on the clauses as required.

Innovation Patents

The innovation patent has replaced the petty patent as a lower tier patent to supplement the standard patent system. Essentially, this scheme offers protection for a maximum term of eight years in respect of inventions that display an innovative step. Substantive examination will only occur if directed by the Commissioner of Patents or requested by the patent owner or a third party or if there is an infringement suit.

The innovation patent can be used to protect inventions that are incremental, or small advances to devices, substances, methods or processes, that display an *innovative step*. An innovative step has two parts. First, there must be a difference between the invention and what is currently known about that technology. Second, this difference must make a substantial contribution to the working of the invention. The invention must also satisfy the other criteria for a valid standard patent, such as being *new, useful, and a manner of manufacture*.

An innovation patent cannot be applied for in respect of plants, animals, and other biological processes.⁶³ However, an innovation patent can be applied for if the invention is a microbiological process or a product of such a process.⁶⁴ The purpose of these provisions seems to be to save a space in the legislative regime for *Plant Breeder's Rights Act 1994 (Cth)*.

6.2 Variety Names

Under the *Plant Breeder's Rights Act 1994 (Cth)*, both name and synonym of a plant variety are protected. A synonym is an additional name which the applicant may also use to commercialise the variety in Australia. However, acceptable variety name and synonym must comply with section 27 of the Act and the *International Code of Nomenclature for Cultivated Plants 1995 (ICNCP 1995)*. For the purpose of this article a reference to a name is also a reference to a synonym.

⁶³ S 18 (3) of the *Patents Amendment (Innovation Patents) Act 2000 (Cth)*

⁶⁴ S 18 (4) of the *Patents Amendment (Innovation Patents) Act 2000 (Cth)*

Section 27 of the *Plant Breeders Rights Act* provides that a variety name must not:

- (i) be likely to deceive or cause confusion, including confusion with the name of another variety; or
- (ii) be contrary to law; or
- (iii) contain scandalous or offensive material;
- (iv) be or include a trade mark that is registered, or whose registration is being sought, under the Trade Marks Act, in respect of live plants, plant cells and plant tissues or consist of or include;
- (v) the name of the person living at the time of the application unless the person has given written consent; or
- (vi) the name of a person died within ten years unless the legal person or representative of the person has given written consent; or
- (vii) the name of corporation or other organisation lists the corporation or organisation has given written consent

Trade Mark

A trade mark cannot be, or be part of, the variety name under the *Plant Breeder's Rights Act 1994* (Cth).

A trade mark is a sign used, or intended to be used, to distinguish goods or services dealt with or provided in the course of trade by a person, from goods and services dealt with or provided by others.

However, it is possible to use a trade mark in conjunction with a variety name, with the variety name having equal prominence. For example, it might be decided to market a range of varieties under the trade mark 'Elle'. So that one might have 'Elle' *Celebration*, 'Elle' *Anniversary* or 'Elle' *Applause*.

If a commercial name is registered as a trade mark it cannot be used as a variety name. If a plant is marketed under a trade mark without PBR protection a purchaser may produce from the plant freely and sell the product.

The Committee was concerned whether a trade mark could be included in a variety's name. Currently a variety name must not be or include a trade mark. The Committee acknowledged the problem and agreed that a variety name could include a trade mark so long as the applicant owned that trade mark or was authorised to use it.

6.3 Confidential Information

Confidential information and trade secrets can be protected under common law.

In order to bring an action for breach of confidence, a number of requirements must be met. The information must be able to be precisely identified. The information must have a quality of confidence about it. The information must be received by a person in circumstances importing an obligation of confidence. Furthermore, there must be actual or threatened misuse of that information.

Confidential information and trade secrets may be of relevance to plant varieties, as the Queensland Supreme Court case of *Franklin v Giddins* highlights:

Case Study:

Budwood

The Queensland Supreme Court case of *Franklin v Giddins* (1978) Qd R 72 deals with the application of confidential information and trade secrets law to plant breeding.

Facts: The plaintiffs conducted an orchard where they grew "Franklin Early White" nectarines which were highly successful from a commercial point of view. The plaintiffs were the sole suppliers to their markets of this type of fruit; the male plaintiff having commenced breeding the trees which bore the fruit as early as 1946. The Franklin Early Whites were unique in that as a matter of practical genetics it was impossible to repeat the cross-breeding programme followed by the male plaintiff in producing the nectarines, except by grafting the plaintiffs' budwood cuttings to the root stock.

The defendants conducted an orchard in the plaintiff's locality. They knew that the plaintiffs' budwood was not for sale and realised that the plaintiffs wished to retain their commercial advantage. The male defendant stole budwood cuttings from the plaintiffs' orchard and by carrying out the necessary grafting process commenced to grow Franklin Early White nectarines, in competition with the plaintiffs. The female defendant subsequently learnt that the nectarine trees being grown in their orchard were the produce of the budwood stolen by the male defendant.

Held: Justice Dunn held that the male defendant had stolen a trade secret, which was the property of the plaintiffs. His Honour noted that, although the information had been confidentially imparted by the plaintiffs to the male defendant while a contract was in existence between them, the male defendant had acted unconscionably and in contravention of the plaintiffs' rights. In the circumstances, the plaintiffs were entitled to equitable relief against him independently of any contractual relationship.

Justice Dunn found that it would be unconscionable for the female defendant to derive any benefit from the trees, and that she also infringed the plaintiff's rights, and was subject to the equitable

jurisdiction of the court. His Honour ordered that the defendants deliver up to the plaintiffs for destruction the productive budwood.

6.4 Gene Technology Act

The *Gene Technology Act 2000* (Cth) aims to "protect the health and safety of people, and to protect the environment, by identifying risks posed by or as a result of gene technology, and by managing those risks through regulating certain dealings with GMOs." The Act does six key things. First, it establishes a statutory officer, the Gene Technology Regulator (the Regulator) to administer the legislation and make decisions under the legislation. Second, it establishes a scientific committee, an ethics committee and a community committee from which the Regulator and the Ministerial Council on gene technology may request advice. Third, it prohibits persons from dealing with GMOs (e.g. research, manufacture, production, commercial release and import) unless the dealing is: exempt; a Notifiable Low Risk Dealing (NLRD); on the Register of GMOs; or licensed by the Regulator. Fourth, it establishes a scheme to assess the risks to human health and the environment associated with various dealings with GMOs, including opportunities for extensive public input. Fifth, it provides for monitoring and enforcement of the legislation. And, sixth, creates a centralised, publicly available database of all GMOs and GM products approved in Australia.

6.5 Environment Protection and Biodiversity Conservation Act 1999

Flowing from the Rio Convention on Biological Diversity, the Voumard report made recommendations about an access and benefit sharing scheme for use in Commonwealth areas and as a possible model for other jurisdictions, where needed.⁶⁵ The scheme provides that a person seeking access to Commonwealth areas would apply to Environment Australia for a permit.

A model benefit sharing contract is being developed by Environment Australia:

- to promote parties' understanding of the issues;
- to facilitate negotiations and agreement between them; and

- to promote certainty for industry by ensuring that agreements are based on prior informed consent, mutually agreed terms and adequate benefit-sharing arrangements, which will in turn provide an agreed set of standards against which industry's performance can be judged.

The model contract will also help to reduce transaction costs and times. The Department of Agriculture Fisheries and Forestry has raised concerns about the access and benefit sharing regime recommended by the Voumard report. However, the Government is yet to resolve what course of action it will take.

⁶⁵ Voumard, John. *Access To Genetic Resources in Commonwealth Areas: Commonwealth Public Inquiry*. Canberra: Environment Australia, 2000.