



THE UNIVERSITY
OF QUEENSLAND
AUSTRALIA



Collecting Australian native plant
materials from Intermediaries:
Guidelines on key legal issues

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June 2020

Acknowledgements

This research was conducted by the ARC Laureate Fellowship *Harnessing Intellectual Property to Build Food Security* (FL150100104) and the *ARC Industrial Transformation Training Centre for Uniquely Australian Foods* (IC180100045) and funded by the Australian Government.



Australian Government

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1. Introduction

Australian native plants offer numerous cultural, social, economic, environmental, and scientific benefits. As a result, over the years, people have collected, circulated and used these plants for many different reasons that range from use in kitchen gardens, botanical classification and scientific research, through to food production, breeding and product development. Increasingly, and because of their cultural, social, economic, environmental, and scientific significance, the collection, circulation, and use of native plant materials have become the subject of national and international regulation.

Native plant materials can be obtained either directly from the wild (*in situ*), or indirectly from intermediaries who have collected the plant material from the wild (*ex situ*). These *Guidelines* highlight the legal issues that potentially arise when Australian native plant materials are obtained from intermediaries, who may include personnel at research institutions (e.g. scientists; plant breeders; administrators), staff at botanic gardens, herbaria, and seed banks (e.g. curators; botanists; taxonomists), businesses (e.g. nurseries; food and seed trading companies), private organisations (e.g. seed cooperatives; seed savers' networks), or individuals (e.g. relatives; friends; colleagues). The legal issues that potentially arise when native plant materials are collected from the wild are dealt with in *Collecting Australian native plant materials from the Wild: Guidelines on key legal issues*.

For the purpose of these *Guidelines*:

- 'native plant material' is taken to mean plant material that is indigenous to Australia.
- a native plant is understood to have been collected from the wild (*in situ*) when it is obtained directly from the ecosystem or natural habitat where it grows (such as National Parks, State Forests, Crown land, roadsides, private land, and Indigenous land).
- native plant material is understood to have been collected from an intermediary (*ex situ*) when the plant is obtained from outside of its ecosystem or natural habitat, for example, from individuals or institutions such as gene and seed banks, herbaria, botanic gardens, museums, plant nurseries, food and seed trading companies, or from neighbours, colleagues, friends, or relatives.

In Australia, the collection of native plant materials from intermediaries triggers a number of different legal obligations. These *Guidelines* focus on the legal obligations that are associated with different types of contracts (such as a benefit sharing agreement and material transfer agreement) and intellectual property (such as patent and plant breeder's rights). The *Guidelines* do not cover other legal obligations, such as those that arise from laws governing biosecurity, biosafety, or food regulatory standards.

The target audience of these *Guidelines* are the users and providers of Australian native plant materials including:

- individuals, enterprises, networks, and cooperatives that utilise Australian native foods and botanicals;
- public institutions such as government authorities, gene banks, herbaria, botanic gardens, plant nurseries, and museums;
- universities;
- industries that utilise plant materials for research and development; and
- Indigenous peoples and organisations.



Image 1: A range of Australian native plant foods

2. Potential legal issues

There are a number of legal issues that potentially arise when native plant materials are obtained from intermediaries in Australia. The legal issues will depend on whether:

- use of the plant material is subject to any contractual obligations;
- the plant material is protected by intellectual property; and
- the plant material or a derived product will be exported to another country.

2.1 Where use of plant material is subject to contractual obligations

In some situations, an intermediary may be under a legal obligation to ensure that parties that they transfer plant materials to adhere to the same terms that were agreed to when the plant was initially collected. This will be the case where the plant material was initially obtained under a benefit sharing agreement (or similar contract), or via the Standard Material Transfer Agreement (SMTA) of the *International Treaty on Plant Genetic Resources for Food and Agriculture* ('Plant Treaty'). In these cases, the intermediary will be under a legal obligation that dictates how they use the plant material, including when they transfer the material to other parties.

In other cases, the intermediary may not be under any specific legal obligations when they transfer the plant material to other parties. Where this is the case, the intermediary is free to do whatever they want with the material. For instance, they could simply transfer the material with no obligations or impose their own requirements for use.

(i) Agreement based on mutually agreed terms of benefit sharing

In some situations, intermediaries may be under an obligation to ensure that parties who they transfer plant material to adhere to the same terms that were agreed on to when the plant was first collected. In these cases, the intermediary is required to ensure that parties who they transfer the plant material to share benefits with the original provider of that material and that they maintain the same condition for any other subsequent user of the material. This will be the case when the initial collection is governed by the laws that regulate biodiscovery or bioprospecting in Australia.¹

Depending on the parties, the mutually agreed terms of benefit sharing might be monetary, non-monetary, or both. Examples of monetary benefit sharing include:

- access fees/fee per sample collected or acquired;
- up-front payments;
- special fees to be paid to a trust/benefit sharing fund;

¹ A detailed analysis of biodiscovery laws in Australia is provided in *Collecting Australian native plant materials from the Wild: Guidelines on key legal issues*.

- salaries;
- research funding;
- joint ventures; and
- joint ownership of relevant intellectual property rights.

Examples of non-monetary benefits include:

- sharing of research and development results;
- collaboration, cooperation, and contribution in scientific research and development programmes, and in education and training;
- participation in product development;
- transfer of technology;
- access to scientific information, including biological inventories and taxonomic studies;
- research directed towards health, food, and livelihood security; and
- social recognition.

(ii) Standard Material Transfer Agreement

In some situations, native plant material obtained from an intermediary may be governed by the SMTA of the Plant Treaty. The SMTA is a standardised, non-negotiable agreement whose terms and conditions cannot be changed. The SMTA was developed and adopted to facilitate the collection and use of the plant materials that fall within the scope of the Plant Treaty.

There are two potential ways that a plant falls within the scope of the Plant Treaty. These are when the plant:

- is one of the 64 species of plants listed in Annex I of the Plant Treaty (*see* Appendix 1 of these *Guidelines*), or
- is included in the Multilateral System of the Plant Treaty (either because the plant is listed in Annex 1 of the Plant Treaty, or because it has been placed into the Multilateral System by the relevant government authorities of members of the Treaty, or by gene banks, individuals, private institutions, or other actors).

There are a number of key terms of the SMTA that are worth noting, including that:

- access to plant materials is only allowed for research, breeding, and training for food and agriculture and not for chemical, pharmaceutical, and/or other non-food uses;
- no one is allowed to obtain intellectual property rights over the materials in the form in which the user receives them; and

- users of the plant materials will share any benefits that they obtain through use of the materials by contributing to the International Benefit-Sharing Fund that the Plant Treaty Secretariat administers, or by including any new material that is derived from the initial plant material in the Multilateral System.

(iii) Independent contracts/material transfer agreements

While the collection of plant material in Australia is often governed by biodiscovery laws that require use of a bilaterally negotiated benefit sharing agreement or by the SMTA of the Plant Treaty, there are many situations where collection may occur outside of these frameworks. For example, if a macadamia specimen was collected from a farmer in New South Wales, that collection would not be subject to a biodiscovery-based benefit sharing agreement or to the SMTA of the Plant Treaty for two main reasons. The first is that New South Wales does not have biodiscovery laws that require an access and benefit sharing agreement between the provider and the collector of the plant material. Second, the SMTA of the Plant Treaty would not apply to this collection because macadamia does not fall within the scope of the Treaty.

In these situations, native plant material obtained from an intermediary will be governed by the contractual terms that were agreed to when the plant material was first collected from the original provider. The nature and scope of these terms will vary, given that one of the fundamental principles of contract law is that parties are free to contract on whatever terms and conditions they see fit.

Depending on the interests of the parties, an independent contract or material transfer agreement (other than the SMTA) governing the collection and use of native plant materials could be negotiated for various purposes. For example, an independent contract or a material transfer agreement that sets the terms for the collection and use of the plant material could be negotiated for commercial, potential commercial, and/or non-commercial purposes. Likewise, an independent contract or a material transfer agreement governing the collection and use of the plant material may include terms for monetary, non-monetary, or both kinds of benefit sharing.

Additionally, an independent contract or a material transfer agreement may be negotiated to include other contractual obligations such as:

- who could claim ‘new’ intellectual property that is created out of the use of the collected plant material;
- how the collected plant material may be distributed or circulated, including through the publication of the results of research involving the plant material; and
- the obligations of the parties to comply with relevant laws, including in the event that the agreement is breached.



Image 2: A macadamia specimen (*Macadamia tetraphylla* L.A.S. Johnson) held in an *ex situ* collection at the Queensland Herbarium.
© The State of Queensland – Queensland Herbarium

2.2 Where the plant material is covered by intellectual property

Obtaining Australian native plant materials from an intermediary may trigger legal issues if the plant material is protected by Australian intellectual property laws. This is typically the case where the plant material is protected by a patent or plant breeders' rights in Australia.

Anyone who obtains plant material that is protected by intellectual property from intermediaries must be careful that they do not violate the rights of the intellectual property owner. In this situation, to use the protected plant material, it may be necessary to obtain a licence from the intellectual property owner.

In other situations, it may not be necessary to obtain a licence to use the protected plant material. For example, interested parties may be able to use intellectual property protected plant materials for experimentation and breeding, or to save propagating material on-farm for re-planting, but not for commercial purposes. Notably, anyone is able to use intellectual property protected plant materials for any purpose after the period of intellectual property protection (typically 20 years) expires, at which time the materials enter into the public domain.

(i) Patents

In Australia, plants and related subject matter can be protected under the *Patent Act 1990*. The Act covers a range of plant-related subject matter that may be patentable, including new plant varieties; plant components such as genes and chromosomes; reproductive material (e.g. seeds and cuttings); products from plants including fruit, flowers, oils, chemicals or pharmaceuticals; genetic engineering techniques; and breeding and cultivation methods. While patent protection is not available under the *Patent Act 1990* for naturally occurring genes, protection is available for many types of genetic innovations (including synthetic genetic materials).

The rights granted by a patent are not automatic. To obtain a patent for an invention, an application must be lodged with IP Australia. This application must demonstrate that the invention is new, involves an 'inventive step' (meaning that it is not an obvious, incremental improvement on an existing invention), and that it is useful for industrial purposes.

A patent is only infringed if it is valid and the infringement involves all of the essential features of the invention as claimed. For example, if a patent claims 5 essential features (which gives it its novelty and inventiveness), another product or process that includes 4 of those 5 features will not infringe the patent. In Australia, experiments on patented inventions do not constitute patent infringement. This exemption applies when the predominant purpose motivating the use of the patented invention is to gain new knowledge, or to test a principle or supposition about the invention. However, where the main purpose is to commercialise a patented invention or to manufacture it for sale or use for commercial purposes, the exemption does not apply. An additional exemption under Australian patent law is that the use of an invention by a government, a

government authority or a person authorised in writing by the government will not constitute infringement.

The exclusive ownership rights associated with a patent are temporary, with a maximum duration of 20 years. After the patent has expired, any person can use the invention and can benefit from the disclosures that were made in the patent application.

(ii) Plant breeder's rights

In Australia, it is possible to protect plant varieties under both patent law and plant breeder's rights law. The Australian *Plant Breeder's Rights Act 1994* grants a set of exclusive commercial rights to the breeders of the plant varieties that are new, distinct, uniform, and stable.

Australian law specifies that plant breeder's rights can be granted for a maximum of 25 years for trees and vines and 20 years for any other plant variety. After a plant variety is protected, the plant breeder's rights scheme enables the relevant right holders to prevent others from acts including producing, reproducing, offering for sale, selling, importing, and exporting the seed and other propagating material of the protected variety.

The Australian *Plant Breeder's Rights Act 1994* recognises exemptions to the exclusive commercial rights of the breeder, including for acts done for experimental purposes or for the purpose of breeding other plant varieties. One of these exemptions allows farmers to save and re-plant the propagating material (e.g. seeds) of protected plant varieties, provided that they do not sell these seeds or exchange them with other people.

As is the case with patents, the exclusive rights associated with plant breeder's rights are temporary. After the plant breeder's rights have expired, any person can exploit the plant variety, for example, by producing, reproducing, and selling the seed and other propagating material of the plant variety.

2.3 Where the plant material (or a derivative product) will be exported to a Nagoya-compliant country

The Nagoya Protocol came into force in 2014 as a supplementary international agreement to implement the access and benefit sharing provisions of the *Convention on Biological Diversity* (CBD). As of 2020, 124 countries, including the European Union, had ratified the Nagoya Protocol.

Although Australia signed the Nagoya Protocol in January 2012, it had not yet ratified the Protocol. Nevertheless, the Protocol is still important for people who collect and utilise Australian native plant materials. If Australian native plant materials, derivatives thereof, or products that contain either of these are exported to a country that has adopted the Nagoya Protocol, the exporters may be required to demonstrate that they acquired the items in accordance with the Protocol. This is because countries that have ratified the Protocol are obligated to ensure that all relevant imported plant materials (including those obtained from countries that are not members of the Nagoya Protocol) were collected, used, and/or developed in compliance with the Protocol. Specifically, Nagoya Protocol

member countries are required to ensure that imported plant materials are accompanied by relevant documentary evidence including:

- access permits from the relevant authorities;
- prior informed consent from the authorities and providers of the materials; and
- benefit sharing agreements between users and providers of the materials.

This evidence, which is needed in order to obtain an ‘internationally recognised certificate of compliance’, must be provided to relevant authorities and the ‘Access and Benefit Sharing Clearing-House of the Nagoya Protocol’.

An Australian individual or entity that wants to export native plant materials or products to one of the Nagoya-compliant countries would need to be able to demonstrate that:

- prior informed consent was obtained from the relevant authorities or the providers of the materials when they were collected;
- benefit sharing agreements were concluded between providers and users of the materials; and
- all measures were undertaken to involve and to address the interests of Indigenous peoples in cases of the access and use of Indigenous knowledge and/or native plant materials obtained from Indigenous land.

When the relevant information is not confidential, an internationally recognised certificate of compliance must contain the following minimum details:

- Issuing authority;
- Date of issuance;
- Name of the provider;
- Unique identifier of the certificate;
- Name(s) of the person or entity to whom prior informed consent was granted;
- Subject-matter or specific plant materials covered by the certificate;
- Confirmation that mutually agreed terms were established;
- Confirmation that prior informed consent was obtained; and
- Specification of whether the use will be commercial and/or non-commercial.

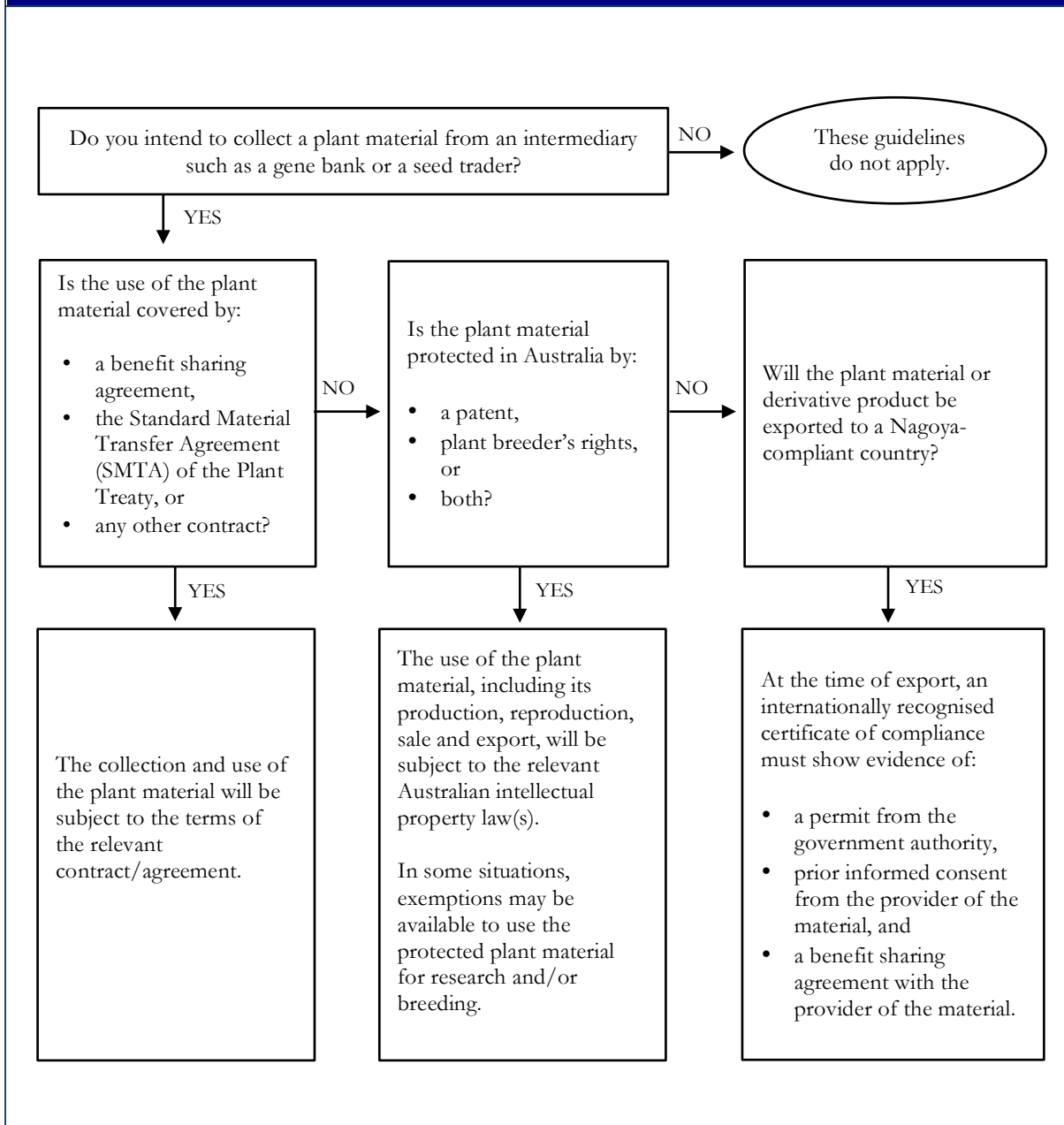
Despite the requirement to be Nagoya-compliant, in some cases certain obstacles could limit the ability of parties to obtain an internationally recognised certificate of compliance or to demonstrate that prior informed consent was obtained and that a benefit sharing agreement was concluded with the original provider of the plant material. This could occur when intermediaries provide access to historical plant materials, that is, materials

that were collected before the Nagoya Protocol came into force in 2014. The reason for this is that the provenance or source of the plant material may not be known.



Image 3: Indigenous owned Gulkula Nursery in Nhulunbuy, East Arnhem Land, Northern Territory

Decision Tree: Collecting plant materials from intermediaries



Appendix 1: Materials under Annex I of the Plant Treaty

Crop	Genus	Observations
Breadfruit	Artocarpus	Breadfruit only.
Asparagus	Asparagus	
Oat	Avena	
Beet	Beta	
Brassica complex	Brassica et al.	Genera included are: Brassica, Armoracia, Barbarea, Camelina, Crambe, Diplotaxis, Eruca, Isatis, Lepidium, Raphanobrassica, Raphanus, Rorippa, and Sinapis. This comprises oilseed and vegetable crops such as cabbage, rapeseed, mustard, cress, rocket, radish, and turnip. The species <i>Lepidium meyenii</i> (maca) is excluded.
Pigeon Pea	Cajanus	
Chickpea	Cicer	
Citrus	Citrus	Genera Poncirus and Fortunella are included as root stock.
Coconut	Cocos	
Major aroids	Colocasia, Xanthosoma	Major aroids include taro, cocoyam, dasheen and tannia.
Carrot	Daucus	
Yams	Dioscorea	
Finger Millet	Eleusine	
Strawberry	Fragaria	
Sunflower	Helianthus	
Barley	Hordeum	
Sweet Potato	Ipomoea	
Grass pea	Lathyrus	
Lentil	Lens	
Apple	Malus	
Cassava	Manihot	Manihot esculenta only.
Banana / Plantain	Musa	Except <i>Musa textilis</i> .
Rice	Oryza	
Pearl Millet	Pennisetum	
Beans	Phaseolus	Except <i>Phaseolus polyanthus</i> .
Pea	Pisum	
Rye	Secale	
Potato	Solanum	Section tuberosa included, except <i>Solanum phureja</i> .
Eggplant	Solanum	Section melongena included.
Sorghum	Sorghum	
Triticale	Triticosecale	
Wheat	Triticum et al.	Including <i>Agropyron</i> , <i>Elymus</i> , and <i>Secale</i> .
Faba Bean/Vetch	Vicia	
Cowpea et al.	Vigna	
Maize	Zea	Excluding <i>Zea perennis</i> , <i>Zea diploperennis</i> , and <i>Zea luxurians</i> .

Forages

Genera	Species
LEGUME FORAGES	
Astragalus	chinensis, cicer, arenarius
Canavalia	ensiformis
Coronilla	varia
Hedysarum	coronarium
Lathyrus	cicera, ciliolatus, hirsutus, ochrus, odoratus, sativus
Lespedeza	cuneata, striata, stipulacea
Lotus	corniculatus, subbiflorus, uliginosus
Lupinus	albus, angustifolius, luteus
Medicago	arborea, falcata, sativa, scutellata, rigidula, truncatula
Melilotus	albus, officinalis
Onobrychis	viciifolia
Ornithopus	sativus
Prosopis	affinis, alba, chilensis, nigra, pallida
Pueraria	phaseoloides
Trifolium	alexandrinum, alpestre, ambiguum, angustifolium, arvense, agrocicerum, hybridum, incarnatum, pratense, repens, resupinatum, rueppellianum, semipilosum, subterraneum, vesiculosum
GRASS FORAGES	
Andropogon	gayanus
Agropyron	cristatum, desertorum
Agrostis	stolonifera, tenuis
Alopecurus	pratensis
Arrhenatherum	elatius
Dactylis	Glomerate
Festuca	arundinacea, gigantea, heterophylla, ovina, pratensis, rubra
Lolium	hybridum, multiflorum, perenne, rigidum, temulentum
Phalaris	aquatica, arundinacea
Phleum	pratense
Poa	alpina, annua, pratensis
Tripsacum	laxum
OTHER FORAGES	
Atriplex	halimus, nummularia
Salsola	vermiculata

Appendix 2: Definitions of Key Terms

Access or *collection* means the taking of native plant materials for research and development purposes, including taxonomic research, breeding, and development of novel crops and foods, etc.

Benefit Sharing means the sharing of benefits derived from the access and use of the collected native plant materials. ‘Access’ and ‘benefit sharing’ are two important objectives of the *Convention on Biological Diversity* (CBD), the Nagoya Protocol, and the *International Treaty on Plant Genetic Resources for Food and Agriculture* (the Plant Treaty).

Biodiscovery or *bioprospecting* is the process whereby any genetic resources or biochemical compounds that comprise or are contained in the collected native plant materials are used for the purpose of subsequent research and development.

Collected from the wild means the collection of native plant material from the ecosystem or natural habitat where it grows (such as National Parks, State Forests, Crown land, roadsides, private land, and Indigenous land).

Collected from intermediaries means the collection of native plant material from locations other than the ecosystem or natural habitat in which the plant lives, for example, from individuals or institutions such as gene and seed banks, herbaria, botanic gardens, museums, plant nurseries, plant and seed trading enterprises, retail outlets that sell garden supplies, public and private research institutions, non-governmental organisations, neighbours, colleagues, friends, and relatives.

International Treaty on Plant Genetic Resources for Food and Agriculture (the Plant Treaty) is an international agreement that entered into force on 29 June 2004. The Treaty provides for the conservation and sustainable use of plant genetic resources for food and agriculture and the fair and equitable sharing of the benefits that accrue from the use of these resources. A key feature of the Plant Treaty is its ‘Multilateral System’, which is a global mechanism to ensure access to plant materials and benefit sharing. The Multilateral System covers plant materials of 64 food and forage crop species that are listed in Annex 1 of the Plant Treaty. Plant materials that are included in the Multilateral System must be accessed by using the non-negotiable Standard Material Transfer Agreement (SMTA).

Nagoya Protocol is an international agreement that entered into force on 12 October 2014. The Protocol establishes binding legal obligations relating to the access and use of genetic resources. The Protocol is supplementary to the United Nations’ *Convention on Biological Diversity* (CBD). The Protocol requires the user of genetic resources and traditional knowledge to obtain prior informed consent from the provider of these resources and to establish mutually agreed terms of access and benefit sharing with the provider.

Native plant material means any plant material that is indigenous to Australia.

Patents are a form of intellectual property rights. A patent is granted for any device, substance, method, process or system that is new, inventive and useful. Patents are also known as limited monopoly rights, which subsist up to the maximum period of protection granted under law, which in most countries is 20 years.

Plant Breeder's Rights are a set of exclusive intellectual property rights to produce or reproduce, offer for sale, sell, and to import and export propagating material of the registered plant variety. To obtain plant breeder's rights protection, the plant variety must be distinct, uniform and stable. In addition, the variety must not have been previously commercially exploited (i.e. it has to be 'new') for a certain period of time, typically between one and four years. Plant breeder's rights last for a minimum of 25 years in the case of trees and vines, and 20 years in the case of all other varieties.

Standard Material Transfer Agreement (SMTA) is a standardised template agreement for access and benefit sharing in relation to plant genetic resources that are included in the Multilateral System of the *International Treaty on Plant Genetic Resources for Food and Agriculture*.