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INTERNATIONAL UNION
FOR THE PROTECTION OF
NEW VARIETIES OF PLANTS

**WIPO-UPOV SYMPOSIUM ON
INTELLECTUAL PROPERTY RIGHTS
IN PLANT BIOTECHNOLOGY**

organized by
the World Intellectual Property Organization (WIPO)
and
the International Union for the Protection of
New Varieties of Plants (UPOV)

Geneva, October 24, 2003

PLANT BIOTECHNOLOGY DEVELOPMENTS
IN THE INTERNATIONAL FRAMEWORK

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Let me thank WIPO and UPOV for giving the WTO the chance to brief you on activities relating to plant biotechnology underway in the WTO.

Of course, the starting point for the work in the WTO in this matter is Article 27.3(b) of the TRIPS Agreement to which Francis has already made reference. This is a permissible exclusion from the normal rule in the TRIPS Agreement that patents should be available without discrimination as to the area of technology. So WTO Members are free to exclude from patentability plants and animals other than microorganisms 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 a combination of the two, and the provisions of this sub-paragraph shall be reviewed four years after the date of entry into force of the WTO Agreement.

Four years was 1999 and, since that time, the TRIPS Council has been engaged in a review of this provision and I think it is fair to say that that review has covered not only matters that are strictly related to allowable exceptions to patentability, but also matters concerning the relationship with biodiversity and traditional knowledge. In fact, following the Doha Ministerial Conference of the WTO in 2001, the work has been formalized under three headings: review of the provisions of Article 27.3(b), the relationship between the TRIPS Agreement and the Convention on Biological Diversity and protection of traditional knowledge and folklore. For this work, the Council has three overlapping mandates, as set out on the overhead.

You will notice, a reference in paragraph 19 of the Doha Declaration to paragraph 12 of the Doha Declaration. Paragraph 12 is the provision which provides for work to take place on implementation-related issues and concerns that have been raised by developing countries. A number of these specific implementation-related issues and concerns cover matters related to Article 27.3(b), biodiversity, and traditional knowledge and folklore. I might also mention that there are differences of view amongst WTO Members as to the extent to which paragraph 12 work on what we call outstanding implementation issues constitutes part of the new round of trade negotiations, or is outside them until any decision might be taken to bring them into the negotiations.

One of the activities of the TRIPS Council in conducting the review under Article 27.3(b) was to draw up a questionnaire, and to seek replies from Members on the basis of this questionnaire, as to how they are actually implementing Article 27.3(b) at present, both in relation to patent protection and *sui generis* protection of plant varieties. We have had replies from 37 Members, that is to say from the European Community and its member States and 22 other Members. Mostly developed countries or transition economy countries, but a number I think 5 developing countries also amongst that group. The Secretariat has attempted to summarize these replies in synoptic tables which I will make available to this Symposium.

I do not have time to go through these replies in any detail, but let me just mention a few points relating to *sui generis* plant variety protection systems. Now, all of the Members who responded except for two provide for a *sui generis* form of protection for new plant varieties. In the case of all of these countries except for one, the protection clearly conforms to the standard defined in one of the UPOV Acts and, in the other case, protection partially conforms, it seems, to UPOV. As regards the relevant UPOV Act, at the time that the notifications were made, and this may not be fully up to date, 17 of the replies referred to the 1991 Act and five to the 1978 Act. All of the Members replying provide for some form of

farmers' privilege. This work on the questionnaire is still ongoing and we hope for further replies, especially now that for developing countries the transition period has expired and they are applying Article 27.3(b) of the TRIPS Agreement.

In addition to this work, there has been wide-ranging discussion of views and proposals on the three topics that I mentioned and I would just like to flag some of the major points that have come up in this regard. Taking the issue of the patent provisions of Article 27.3(b), you will see from the overhead that amongst WTO Members there are four main types of approach that exist: those who believe that the exceptions to patentability are not really warranted; those who favor leaving Article 27.3(b) as it is, as it finds a good balance; those who think that Article 27.3(b) as it is is basically fine, but it would be beneficial to clarify certain of the terms in that Article; and those who believe that Article 27.3(b) should be amended or clarified to actually prohibit the patenting of life forms of plants and animals. So quite a wide spectrum of views as you can see.

On the next overhead I flag a number, but not an exhaustive list, of some of the main points that have come up in the discussion.

- To what extent does Article 27.3(b) require parts of plants and animals, including, for example, genes or DNA sequences to be patentable?
- What is the definition of microorganisms – is it feasible and desirable to attempt to agree on a definition?
- How adequate is the ethical exception to patentability provided for in Article 27.2 of the TRIPS Agreement?
- Is the distinction between discovery and invention - the application of the inventive step rule - being adequately applied worldwide? For example, different views have been expressed about the extent to which genetic materials that have been isolated from nature, but not modified, should be patentable.
- What is the proper definition of prior art and how adequate is the prior art base, especially when it comes to patent applications that involve traditional knowledge?
- How adequate and feasible is it to use the opposition and revocation procedure to deal with situations where patents may be, or may have been, inappropriately granted involving traditional knowledge or genetic material.

Let me now highlight some of the points that have come up in the discussion in regard to *sui generis* protection of plant varieties. In all of this discussion, there is a debate amongst WTO Members as to what is the desirability of further clarification of the rules in the TRIPS Agreement which would provide further legal security and clarity, but which, in the minds of some of our Members, might have the effect of limiting national discretion. Now, of course, the issue of the relationship of the TRIPS requirement to provide effective *sui generis* protection to UPOV systems of protection has come up, and I do not think there is any question amongst Members that the UPOV system constitutes a form of *sui generis* protection, but I also think that it is widely recognized that the TRIPS Agreement does not require WTO Members to necessarily use the UPOV system. The debate has been more about whether use of the UPOV system should be encouraged and, secondly, whether a reference to UPOV might be incorporated at some stage into the TRIPS Agreement, and also about whether the 1978 Act or 1991 Act of UPOV are the most appropriate reference points if the UPOV systems are to be used as a basis for national systems of protection. We have also had a fair amount of discussion as to what should be the characteristics that should be met by a *sui generis* system of protection if it is to be considered effective, especially if it departs

from the UPOV models, and, further, about the relationship of *sui generis* protection to farmers' rights and traditional farming practices, especially in regard to the right to save and exchange seeds, and compulsory licenses in certain situations, particularly where what could be described as subsistence or non-commercial farming is concerned.

Let me touch on another area of discussion in the work and that concerns the relationship between the TRIPS Agreement and the Convention on Biological Diversity. As you see, there are amongst our Members three broad approaches:

- those who believe there is an inherent conflict between the two;
- those who believe that there is no conflict, that in fact the TRIPS Agreement and the CBD are mutually supportive;
- and those who believe there is no inherent conflict, but there is a case for international action to ensure that the two are implemented in a mutually supportive way.

In regard to this latter point, the main focus of the discussion has been on the disclosure ideas that have already been referred to. A large number of developing countries have put forward proposals along the lines that you can read on this slide that would require Members to require patent applicants to disclose in their applications information on the origin of genetic material and traditional knowledge used in their inventions, evidence of prior informed consent and evidence of fair and equitable benefit-sharing.

In the discussion on these ideas, a number of the points have come up.

- How feasible is such a requirement? How burdensome would it be in relation to the potential benefits?
- What is the adequacy of the approach which would call for the conclusion of contracts based on national legislation between people who want to access and use genetic material and traditional knowledge and the competent authorities in the country of origin?
- What would be the TRIPS consistency of this?


We have had some more recent discussions where some of the developed country Members of the WTO have shown some openness to going perhaps some way down the road to meeting the concerns that have been expressed in these proposals in terms of possibly recognizing the merit of some kind of disclosure requirement in relation to the origin of genetic resources and traditional knowledge, but not as a condition of patentability.

So that is an attempt to summarize the ongoing work in the WTO. As I say, it is ongoing work and I cannot say very much to you at this stage about how it will be carried forward. It seemed likely that, if a substantive Ministerial text had been agreed in Cancun, these issues would have been addressed in broad terms, but as you know such a substantive text was not adopted.

[Annex I follows]

ANNEX I

Slide 1




Article 27.3(b) of the TRIPS Agreement

“3. Members may also exclude from patentability:

(b) 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.”

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Three mandates

- Article 27.3(b) review provision.
- Paragraph 19 of the Doha Declaration:

“19. We instruct the Council for TRIPS, in pursuing its work programme including under the review of Article 27.3(b), the review of the implementation of the TRIPS Agreement under Article 71.1 and the work foreseen pursuant to paragraph 12 of this Declaration, to examine, *inter alia*, the relationship between the TRIPS Agreement and the Convention on Biological Diversity, the protection of traditional knowledge and folklore, and other relevant new developments raised by Members pursuant to Article 71.1. In undertaking this work, the TRIPS Council shall be guided by the objectives and principles set out in Articles 7 and 8 of the TRIPS Agreement and shall take fully into account the development dimension.”
- Outstanding implementing issue.

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**Patent Provisions of
Article 27.3(b)**

- Four main positions:
 - remove exceptions to patentability;
 - leave Article 27.3(b) as is;
 - clarify certain terms in Article 27.3(b);
 - amend or clarify to prohibit patenting of life forms.

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**Issues regarding patentability of
inventions involving genetic
material and traditional knowledge**

- Parts of plants/animals.
- Definition of micro-organisms.
- Ethical exception to patentability (Article 27.2).
- Distinction discovery/invention (inventive step).
- Definition of and adequacy of information on prior art.
- Adequacy of opposition/revocation as a remedy.

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Plant Variety Protection

- Clarification vs national discretion.
- Relationship to UPOV:
 - no obligation to use UPOV;
 - should there be a reference to UPOV;
 - UPOV 1978 or 1991.
- Characteristics of an effective *sui generis* system.
- Relationship to farmers' rights and traditional farming practices.

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TRIPS Agreement and the Convention on Biological Diversity

- Three general views:
 - Inherent conflict:
 - amend TRIPS;
 - No conflict, mutually supportive;
 - No inherent conflict, but potential for conflict:
 - need for international action to ensure implemented in a mutually supportive way.

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Disclosure proposal

The TRIPS Agreement should be amended in order to provide that Members shall require that an applicant for a patent relating to biological materials or to traditional knowledge shall provide, as a condition of acquiring patent rights:

- (i) disclosure of the source and country of origin of the biological resource and of the traditional knowledge used in the invention;
- (ii) evidence of prior informed consent through approval of authorities under the relevant national regimes; and
- (iii) evidence of fair and equitable benefit sharing under the national regime of the country of origin.

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Discussion of disclosure proposal

- Feasibility, burdens.
- Adequacy of contracts approach.
- TRIPS consistency.
- Obligation to disclose, but not as a condition of patentability.

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[Annex II follows]

ANNEX II

**WIPO-UPOV Symposium on Intellectual Property
Rights in Plant Biotechnology
Geneva, 24 October 2003**

**EXCERPT FROM SECRETARIAT SUMMARY NOTE ON RESPONSES
TO ILLUSTRATIVE LIST OF QUESTIONS ON
ARTICLE 27.3(B) (IP/C/W/273/REV.1)**

The explanatory notes, referred to as Annexes III and IV, can be found in document IP/C/W/273/Rev.1 on the WTO website (<http://www.wto.org>).

SYNOPTIC TABLE I: PATENT SYSTEM

	AUS	BGR	CAN	CHE	CZE	EEC
1. <i>In your territory, is there any basis for denying a patent on an invention consisting of an entire plant or animal that is novel, capable of industrial application, involves an inventive step and has been adequately disclosed?</i>	No*	Yes	Yes*	Yes*	Yes*	Yes
2. <i>If the answer to question 1 is yes, please respond to the following questions:</i>						
(a) <i>Does your patent system exclude entire plants or animals as inventions?</i>	n.a.	No	Yes*	*	No*	No
(b) <i>If your patent system does recognize entire plants and animals as inventions, does it exclude all such inventions from being patentable subject-matter, or does it only exclude certain types of plants or animals? If it excludes only certain types, please identify the categories or characteristics of inventions that are excluded.</i>	n.a.	¹	n.a.	*, ¹	¹	¹
(c) <i>Is there any other basis in your law that precludes the grant of a patent on any categories of plant or animal inventions that otherwise are novel, involve an inventive step, are capable of industrial application and have been adequately disclosed?</i>	n.a.*	Yes*	No	*	Yes*	Yes*
3. <i>Other than with respect to subject-matter you defined as being ineligible to be patented under question (2), is it possible in your territory to obtain a patent claim defined in any of the following ways?</i>						
(a) <i>A patent claim that is not limited to a specific plant or animal variety.</i>	Yes	*	No	Yes	*	Yes
(b) <i>A patent claim that is expressly limited to a plant or animal variety.</i>	Yes	No*	No	No	*	No
(c) <i>A patent claim that is expressly limited to a group of plants or animals, where the group is defined through reference to a shared characteristic such as incorporation of a particular gene.</i>	Yes	*	No*	Yes	*	Yes
4. <i>Is it possible to obtain a patent in your territory on a micro-organism that is novel, involves an inventive step and is capable of industrial application?</i>	Yes	Yes	Yes*	Yes	Yes	Yes
5. <i>Is it possible to obtain a patent in your territory on an essentially biological process for the production of a plant or animal (i.e. a process limited to those acts that are necessary for sexual or asexual reproduction of a plant or animal)?</i>	Yes*	No*	No	No*	No*	No*
6. <i>Is it possible to obtain a patent in your territory for subject-matter that is identical to that found in nature (e.g. a plant or animal in its natural state)?</i>	No*	No*	No	No*	No*	*
7. <i>Does your patent system include any special provisions to ensure adequate disclosure regarding inventions covered by Article 27.3(b) (for example, micro-organisms)?</i>	Yes*	Yes*	Yes	Yes*	Yes*	

* See Annex III for further information.

¹ Plant and animal varieties are excluded.² Sexually reproduced plants are excluded.

	EST	HKC	HUN	ISL	JPN	KOR
1. <i>In your territory, is there any basis for denying a patent on an invention consisting of an entire plant or animal that is novel, capable of industrial application, involves an inventive step and has been adequately disclosed?</i>	Yes *	Yes *	Yes *	Yes *	No *	Yes
2. <i>If the answer to question 1 is yes, please respond to the following questions:</i> (a) <i>Does your patent system exclude entire plants or animals as inventions?</i> (b) <i>If your patent system does recognize entire plants and animals as inventions, does it exclude all such inventions from being patentable subject-matter, or does it only exclude certain types of plants or animals? If it excludes only certain types, please identify the categories or characteristics of inventions that are excluded.</i> (c) <i>Is there any other basis in your law that precludes the grant of a patent on any categories of plant or animal inventions that otherwise are novel, involve an inventive step, are capable of industrial application and have been adequately disclosed?</i>	No * 1	No * 1	No No	No 1*	n.a. n.a.	No * 2
3. <i>Other than with respect to subject-matter you defined as being ineligible to be patented under question (2), is it possible in your territory to obtain a patent claim defined in any of the following ways?</i> (a) <i>A patent claim that is not limited to a specific plant or animal variety.</i> (b) <i>A patent claim that is expressly limited to a plant or animal variety.</i> (c) <i>A patent claim that is expressly limited to a group of plants or animals, where the group is defined through reference to a shared characteristic such as incorporation of a particular gene.</i>	Yes No Yes	Yes * No * *	Yes Yes Yes	Yes No Yes	Yes Yes Yes	Yes Yes Yes
4. <i>Is it possible to obtain a patent in your territory on a micro-organism that is novel, involves an inventive step and is capable of industrial application?</i>	Yes *	Yes *	Yes	Yes *	Yes	Yes *
5. <i>Is it possible to obtain a patent in your territory on an essentially biological process for the production of a plant or animal (i.e. a process limited to those acts that are necessary for sexual or asexual reproduction of a plant or animal)?</i>	No *	No *	No *	No *	Yes	No *
6. <i>Is it possible to obtain a patent in your territory for subject-matter that is identical to that found in nature (e.g. a plant or animal in its natural state)?</i>	*	*	No	*	No *	No
7. <i>Does your patent system include any special provisions to ensure adequate disclosure regarding inventions covered by Article 27.3(b) (for example, micro-organisms)?</i>		Yes *	Yes *			No

	LTU	NOR	NZL	POL	ROM
1. <i>In your territory, is there any basis for denying a patent on an invention consisting of an entire plant or animal that is novel, capable of industrial application, involves an inventive step and has been adequately disclosed?</i>	Yes*	Yes*	No*	Yes	No
2. <i>If the answer to question 1 is yes, please respond to the following questions:</i> (a) <i>Does your patent system exclude entire plants or animals as inventions?</i> (b) <i>If your patent system does recognize entire plants and animals as inventions, does it exclude all such inventions from being patentable subject-matter, or does it only exclude certain types of plants or animals? If it excludes only certain types, please identify the categories or characteristics of inventions that are excluded.</i> (c) <i>Is there any other basis in your law that precludes the grant of a patent on any categories of plant or animal inventions that otherwise are novel, involve an inventive step, are capable of industrial application and have been adequately disclosed?</i>	No* *1 Yes*	n.a. n.a. No	n.a. n.a. n.a.	No 1 n.a.	n.a. n.a. n.a.
3. <i>Other than with respect to subject-matter you defined as being ineligible to be patented under question (2), is it possible in your territory to obtain a patent claim defined in any of the following ways?</i> (a) <i>A patent claim that is not limited to a specific plant or animal variety.</i> (b) <i>A patent claim that is expressly limited to a plant or animal variety.</i> (c) <i>A patent claim that is expressly limited to a group of plants or animals, where the group is defined through reference to a shared characteristic such as incorporation of a particular gene.</i>	 *	No No No	Yes Yes Yes	No* No* Yes/ No*	No Yes* No
4. <i>Is it possible to obtain a patent in your territory on a micro-organism that is novel, involves an inventive step and is capable of industrial application?</i>	Yes*	Yes	Yes	Yes*	Yes
5. <i>Is it possible to obtain a patent in your territory on an essentially biological process for the production of a plant or animal (i.e. a process limited to those acts that are necessary for sexual or asexual reproduction of a plant or animal)?</i>	No*	No	Yes	No*	Yes
6. <i>Is it possible to obtain a patent in your territory for subject-matter that is identical to that found in nature (e.g. a plant or animal in its natural state)?</i>	No*	No*	No*	No*	No*
7. <i>Does your patent system include any special provisions to ensure adequate disclosure regarding inventions covered by Article 27.3(b) (for example, micro-organisms)?</i>	Yes*	Yes*	No*	Yes*	Yes

	SVK	SVN	THA	USA	ZAF	ZMB
1. <i>In your territory, is there any basis for denying a patent on an invention consisting of an entire plant or animal that is novel, capable of industrial application, involves an inventive step and has been adequately disclosed?</i>	Yes*	No	Yes*	No	Yes	Yes
2. <i>If the answer to question 1 is yes, please respond to the following questions:</i> (a) <i>Does your patent system exclude entire plants or animals as inventions?</i> (b) <i>If your patent system does recognize entire plants and animals as inventions, does it exclude all such inventions from being patentable subject-matter, or does it only exclude certain types of plants or animals? If it excludes only certain types, please identify the categories or characteristics of inventions that are excluded.</i> (c) <i>Is there any other basis in your law that precludes the grant of a patent on any categories of plant or animal inventions that otherwise are novel, involve an inventive step, are capable of industrial application and have been adequately disclosed?</i>	No* *1 Yes*		Yes* n.a. *	n.a. n.a. n.a.	No *1 Yes*	No n.a. Yes*
3. <i>Other than with respect to subject-matter you defined as being ineligible to be patented under question (2), is it possible in your territory to obtain a patent claim defined in any of the following ways?</i> (a) <i>A patent claim that is not limited to a specific plant or animal variety.</i> (b) <i>A patent claim that is expressly limited to a plant or animal variety.</i> (c) <i>A patent claim that is expressly limited to a group of plants or animals, where the group is defined through reference to a shared characteristic such as incorporation of a particular gene.</i>	* No* *	Yes Yes Yes		Yes Yes Yes	No No	Yes Yes Yes
4. <i>Is it possible to obtain a patent in your territory on a micro-organism that is novel, involves an inventive step and is capable of industrial application?</i>	Yes	Yes	Yes*	Yes	Yes	Yes
5. <i>Is it possible to obtain a patent in your territory on an essentially biological process for the production of a plant or animal (i.e. a process limited to those acts that are necessary for sexual or asexual reproduction of a plant or animal)?</i>	No*	Yes	No*	No*	No	
6. <i>Is it possible to obtain a patent in your territory for subject-matter that is identical to that found in nature (e.g. a plant or animal in its natural state)?</i>	No*	Yes*	No*	No*	No*	
7. <i>Does your patent system include any special provisions to ensure adequate disclosure regarding inventions covered by Article 27.3(b) (for example, micro-organisms)?</i>			No*	Yes*	n.a.	No

SYNOPTIC TABLE II: PLANT VARIETY PROTECTION SYSTEMS

	AUS	BGR	CAN	CHE	CZE	EEC
1. Do the laws applicable to your territory provide for a <i>sui generis</i> form of protection for a new plant variety?	Yes	Yes	Yes	Yes	Yes	Yes
2. If the answer to question 1 is "yes", does that protection conform to the standards defined in one of the Acts of the International Convention for the Protection of New Varieties of Plants (UPOV)?	Yes	Yes	Yes	Yes	Yes	Yes
3. If the answer to question 2 is "yes", please specify the Act of the UPOV Convention upon which your legislation is based (i.e. the 1991 Act, the 1978 Act or the 1961/1972 Act).	1991	1991	1978	1978*	1991*	1991
4. If <i>sui generis</i> protection for plant varieties is provided in your territory, would any of the following acts require the prior authorization of the right holder: (a) acts performed for research or experimental purposes, or to develop new varieties of plants? (b) acts performed to commercially exploit a variety distinct from the protected variety but sharing its essential characteristics? (c) acts performed by a farmer of harvesting seed from his planting of a protected variety legitimately obtained, storage of that seed, and replanting of that seed on the farmer's land? If prior authorization is not required for any of the above examples of activities, is there any requirement that the party undertaking the specified actions provide the right holder with remuneration in any form?	No Yes* No* No*	No No* No*	No No No	No* No* No* No	No Yes No* Yes*	No Yes No* Yes*
5. Would acts done privately and for non-commercial purposes require the authorization from the right holder?	No	No*	No	No*	*	
6. Does your legislation provide for other exceptions to the rights conferred?	Yes*	Yes	Yes		*	
7. Can protection be obtained for a plant variety that was known to the public, or was publicly available, prior to the application for <i>sui generis</i> protection for that plant variety, and, if so, under what conditions (i.e. what are the time-limits during which public disclosure or availability will not preclude the grant of protection)?	*	Yes*	Yes*	Yes*	Yes* (1/4/6)	Yes*
8. To be entitled to rights under <i>sui generis</i> plant variety protection does one have to be the person who bred, or discovered and developed the variety, or his successor in title?	Yes	Yes	Yes		*	
9. Can protection be predicated on identification of an unexpressed gene, on an unexpressed set of genes present in the genome of the plant variety, or on the characteristics of germplasm, rather than the expressed characteristics of plant varieties derived from such genes or germplasm?	No	No*	No	No	No	No
10. What are the conditions that your law require for protection? ¹	d,u,s,n ¹	d,u,s,n,pd ¹	d,u,s,n,pd ¹		d,u,s,n,pd ¹	
11. What is the duration of protection?	25/20*	30/25*	18*		25/30*	

* See Annex IV for further information.

¹ d=distinctness; u=uniformity; s=stability; n=novelty; pd=proper denomination

	EST	HKC	HUN	ISL	JPN	KOR
1. Do the laws applicable to your territory provide for a <u>sui generis</u> form of protection for a new plant variety?	Yes	Yes	No	Yes*	Yes	Yes
2. If the answer to question 1 is "yes", does that protection conform to the standards defined in one of the Acts of the International Convention for the Protection of New Varieties of Plants (UPOV)?	Yes	Yes*	Yes	Yes	Yes	Yes
3. If the answer to question 2 is "yes", please specify the Act of the UPOV Convention upon which your legislation is based (i.e. the 1991 Act, the 1978 Act or the 1961/1972 Act).	1991	1991*	1978	1991	1991	1991
4. If <u>sui generis</u> protection for plant varieties is provided in your territory, would any of the following acts require the prior authorization of the right holder: (a) acts performed for research or experimental purposes, or to develop new varieties of plants? (b) acts performed to commercially exploit a variety distinct from the protected variety but sharing its essential characteristics? (c) acts performed by a farmer of harvesting seed from his planting of a protected variety legitimately obtained, storage of that seed, and replanting of that seed on the farmer's land? If prior authorization is not required for any of the above examples of activities, is there any requirement that the party undertaking the specified actions provide the right holder with remuneration in any form?	No* Yes* No* Yes*	No* Yes* Yes* No*	n.a. n.a. n.a. n.a.	No* Yes* No* Yes*	No Yes* No* No	No Yes No No
5. Would acts done privately and for non-commercial purposes require the authorization from the right holder?	No*	No*	n.a.	No*		No
6. Does your legislation provide for other exceptions to the rights conferred?		Yes*	Yes			Yes
7. Can protection be obtained for a plant variety that was known to the public, or was publicly available, prior to the application for <u>sui generis</u> protection for that plant variety, and, if so, under what conditions (i.e. what are the time-limits during which public disclosure or availability will not preclude the grant of protection)?	Yes* (1/4/6)	Yes* (1/4/6)	Yes*	Yes* (1/4/6)	Yes*	Yes*
8. To be entitled to rights under <u>sui generis</u> plant variety protection does one have to be the person who bred, or discovered and developed the variety, or his successor in title?		Yes*	Yes			Yes
9. Can protection be predicated on identification of an unexpressed gene, on an unexpressed set of genes present in the genome of the plant variety, or on the characteristics of germplasm, rather than the expressed characteristics of plant varieties derived from such genes or germplasm?	*	*	No	No	No	No
10. What are the conditions that your law require for protection? ¹		d,u,s,n* ¹	d,u,s,n,pd ¹			d,u,s,n,pd ¹
11. What is the duration of protection?		20/25*	15/18*			25/20*

	LTU	MAR	NOR	NZL	POL	ROM
1. Do the laws applicable to your territory provide for a <i>sui generis</i> form of protection for a new plant variety?	Yes	Yes	Yes	Yes	Yes	Yes
2. If the answer to question 1 is "yes", does that protection conform to the standards defined in one of the Acts of the International Convention for the Protection of New Varieties of Plants (UPOV)?	Yes*	Yes	Yes	Yes	Yes	Yes*
3. If the answer to question 2 is "yes", please specify the Act of the UPOV Convention upon which your legislation is based (i.e. the 1991 Act, the 1978 Act or the 1961/1972 Act).	1991	1991*	1978*	1978	1991	1991
4. If <i>sui generis</i> protection for plant varieties is provided in your territory, would any of the following acts require the prior authorization of the right holder: (a) acts performed for research or experimental purposes, or to develop new varieties of plants? (b) acts performed to commercially exploit a variety distinct from the protected variety but sharing its essential characteristics? (c) acts performed by a farmer of harvesting seed from his planting of a protected variety legitimately obtained, storage of that seed, and replanting of that seed on the farmer's land? If prior authorization is not required for any of the above examples of activities, is there any requirement that the party undertaking the specified actions provide the right holder with remuneration in any form?	No* No* No* Yes*	No* Yes* No* No*	No* No* No* No	No No No No	No No No No	No Yes No No*
5. Would acts done privately and for non-commercial purposes require the authorization from the right holder?	No*	No*		No	No	No
6. Does your legislation provide for other exceptions to the rights conferred?	Yes*	Yes*		Yes*	Yes	Yes*
7. Can protection be obtained for a plant variety that was known to the public, or was publicly available, prior to the application for <i>sui generis</i> protection for that plant variety, and, if so, under what conditions (i.e. what are the time-limits during which public disclosure or availability will not preclude the grant of protection)?	Yes* (1/4/6)	Yes*	Yes*	Yes*	Yes*	Yes*
8. To be entitled to rights under <i>sui generis</i> plant variety protection does one have to be the person who bred, or discovered and developed the variety, or his successor in title?	Yes*	Yes*		Yes*	Yes	Yes*
9. Can protection be predicated on identification of an unexpressed gene, on an unexpressed set of genes present in the genome of the plant variety, or on the characteristics of germplasm, rather than the expressed characteristics of plant varieties derived from such genes or germplasm?	*		No	No*	*	No
10. What are the conditions that your law require for protection? ¹	d,u,s,n ^{*1}	d,u,s,n,pd ¹		d,u,s,n ¹	d,u,s,n,pd ¹	d,u,s,n,pd ¹
11. What is the duration of protection?	25/30*	20/25/30*		23/20*	30/25*	30/25*

	SVK	SVN	THA	USA	ZAF	ZMB
1. Do the laws applicable to your territory provide for a <i>sui generis</i> form of protection for a new plant variety?	Yes	Yes	Yes	Yes*	Yes	No*
2. If the answer to question 1 is "yes", does that protection conform to the standards defined in one of the Acts of the International Convention for the Protection of New Varieties of Plants (UPOV)?	Yes	Yes	*	Yes	Yes	n.a.
3. If the answer to question 2 is "yes", please specify the Act of the UPOV Convention upon which your legislation is based (i.e. the 1991 Act, the 1978 Act or the 1961/1972 Act).	1991*	1991	*	1991	1991*	n.a.
4. If <i>sui generis</i> protection for plant varieties is provided in your territory, would any of the following acts require the prior authorization of the right holder: (a) acts performed for research or experimental purposes, or to develop new varieties of plants? (b) acts performed to commercially exploit a variety distinct from the protected variety but sharing its essential characteristics? (c) acts performed by a farmer of harvesting seed from his planting of a protected variety legitimately obtained, storage of that seed, and replanting of that seed on the farmer's land? If prior authorization is not required for any of the above examples of activities, is there any requirement that the party undertaking the specified actions provide the right holder with remuneration in any form?	No Yes No No	No Yes No Yes*	No* No* No* Yes	No* Yes No* No	No No No	n.a. n.a. n.a. n.a.
5. Would acts done privately and for non-commercial purposes require the authorization from the right holder?			No*	No	No	n.a.
6. Does your legislation provide for other exceptions to the rights conferred?			Yes*		Yes	n.a.
7. Can protection be obtained for a plant variety that was known to the public, or was publicly available, prior to the application for <i>sui generis</i> protection for that plant variety, and, if so, under what conditions (i.e. what are the time-limits during which public disclosure or availability will not preclude the grant of protection)?	Yes* (1/4/6)	Yes*	*	Yes*	No*	n.a.
8. To be entitled to rights under <i>sui generis</i> plant variety protection does one have to be the person who bred, or discovered and developed the variety, or his successor in title?				Yes	Yes*	n.a.
9. Can protection be predicated on identification of an unexpressed gene, on an unexpressed set of genes present in the genome of the plant variety, or on the characteristics of germplasm, rather than the expressed characteristics of plant varieties derived from such genes or germplasm?	No	No*	*	No*	*	n.a.
10. What are the conditions that your law require for protection? ¹			d,u,s,n ^{*1}		d,u,s,n ¹	*
11. What is the duration of protection?			12/17/27*	25/20*	25/20*	n.a.