#### The Course of DUS Test of Tomato

## Benefit of UPOV membership for DUS testing

Jun Koide Technical/Regional Officer (Asia/Pacific), UPOV

> Hanoi, Viet Nam November 30, 2015

#### Overview

 Overall benefits of the UPOV system of Plant Variety Protection and UPOV membership

2. Benefits of UPOV membership for DUS testing

#### BENEFITS OF PVP SYSTEM AND UPOV MEMBERSHIP

#### (a) Breeders

- Diversity of breeders
- Number of breeders
- Investment in breeding

#### (b) Improved varieties

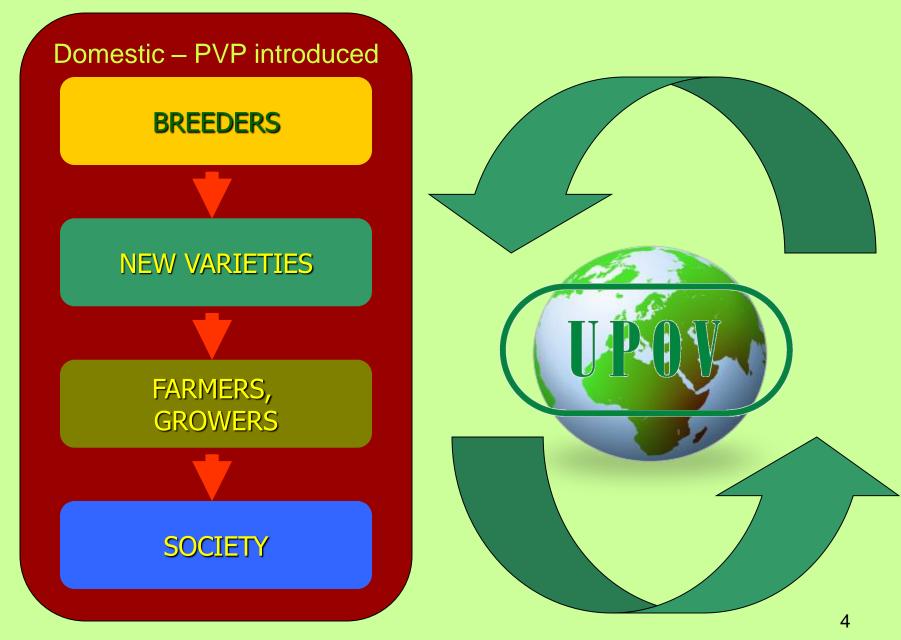
#### (c) Farmers, Growers, Consumers

- Delivering improved varieties to farmers growers
- Delivering added value to consumers
- Income and Knowledge

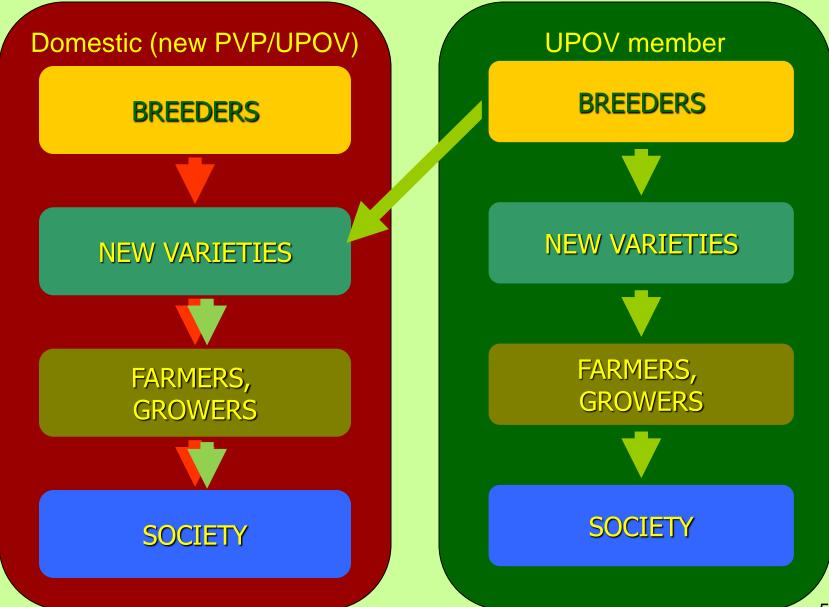
#### (d) International dimension

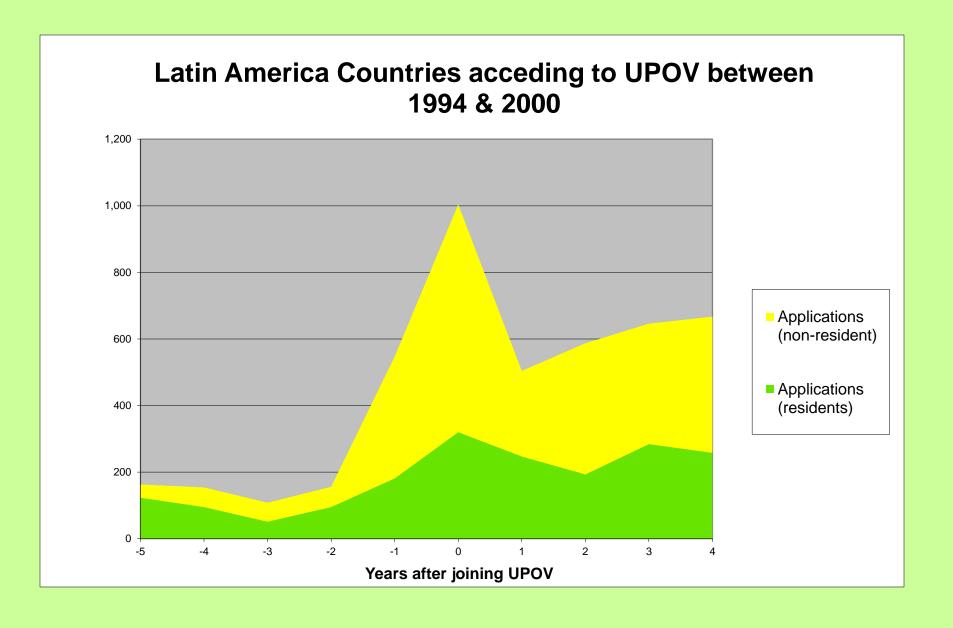
- Development of new industry on foreign markets
- Access to foreign varieties and enhanced domestic programs

#### **Benefits of UPOV: the International Dimension**

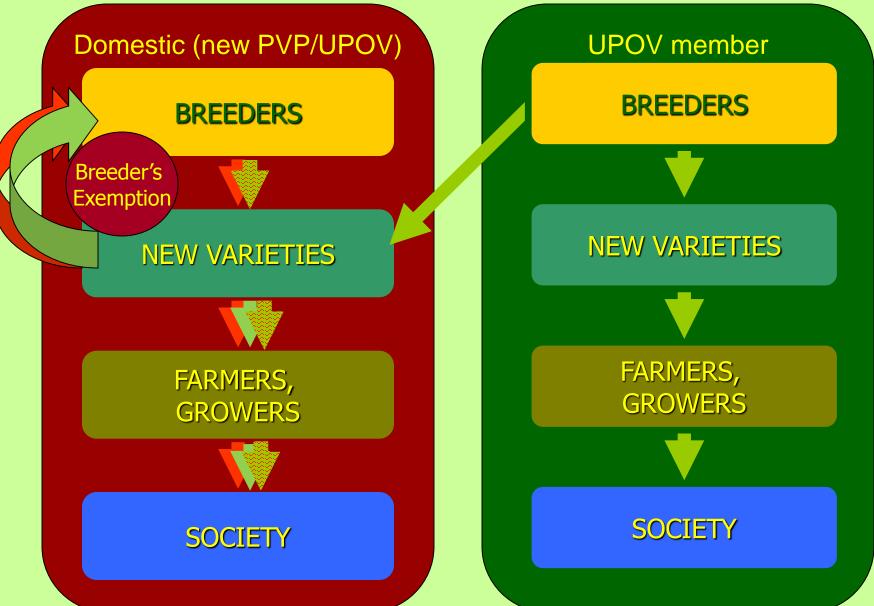


#### **Benefits of UPOV**

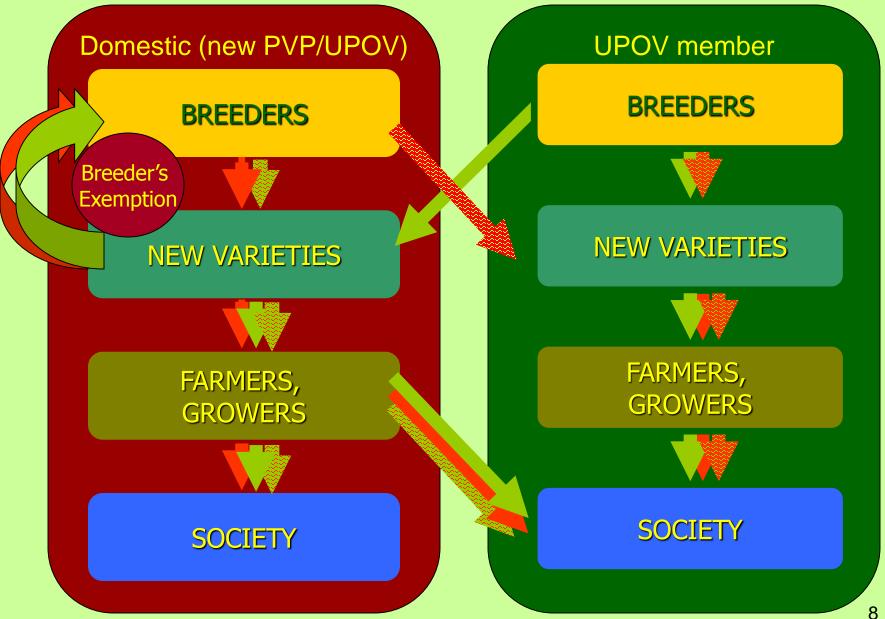




#### **Benefits of UPOV**

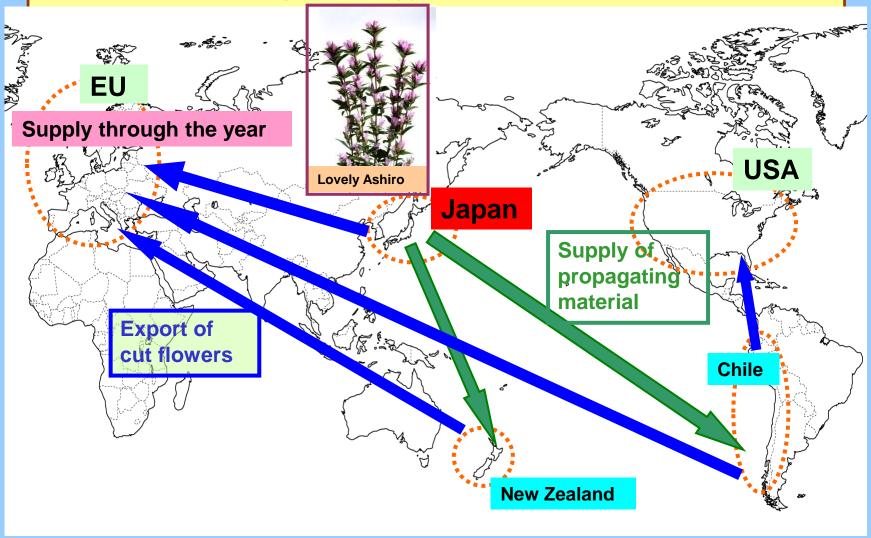


#### **Benefits of UPOV**



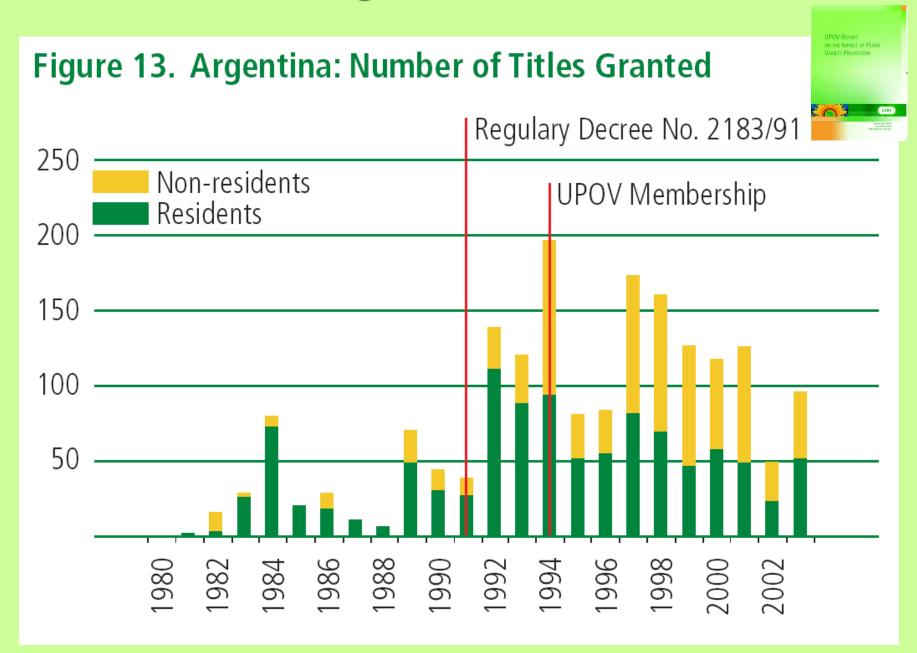
#### **International Market Development**

World Branding Strategy of "Ashiro" based on PBR

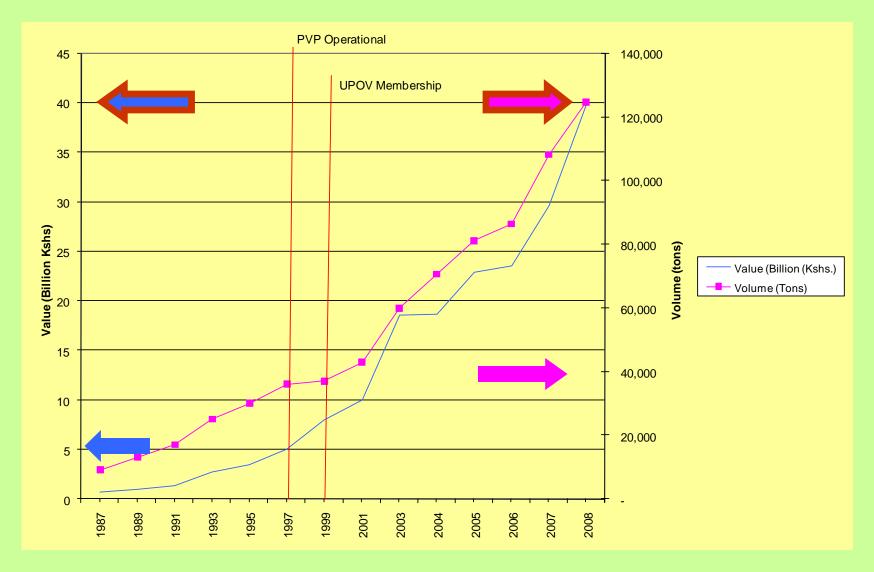


Yasunori Ebihara, International Symposium (Seoul, August 2009)

#### **Foreign New Varieties**



#### **Export of Kenyan Cut Flowers**



Evans Sikinyi, Second World Seed Conference

## Benefits of UPOV membership for DUS testing

### 1. Cooperation

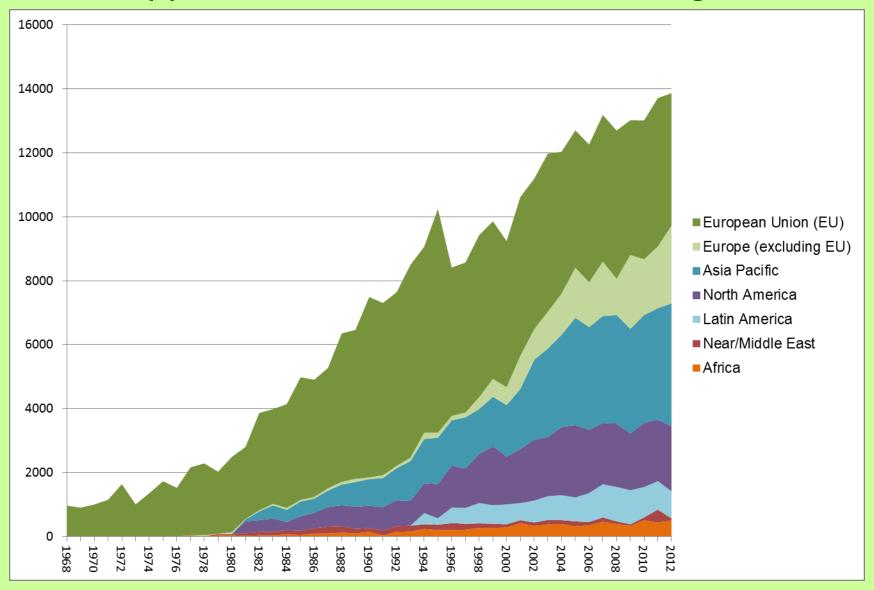
- Protecting all genera and species
- Information: GENIE database
- DUS testing cooperation
- DUS test report and Variety Description

#### 2. Test Guidelines

### Protecting all genera and species

Workload?
How to overcome?

#### Applications for Plant Breeders' Rights



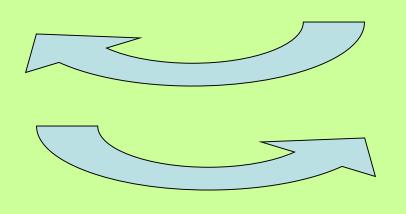
#### Cooperation between members



Number of genera/species for which varieties protected by members of the Union: > 3,500

(>11,000 titles granted /annum)

Practical DUS
experience
offered for
>3,300 genera
and species



Agreements for cooperation between members of the Union: > 2,000

# Cooperation between members of the Union is a key benefit of UPOV membership

Where to find the information?

#### **GENIE** database

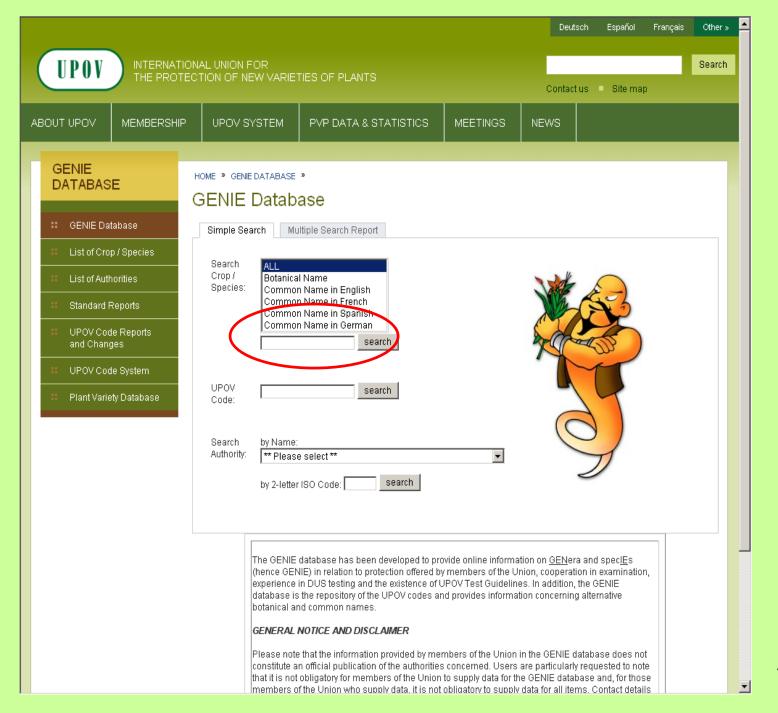
- Experience
- Cooperation

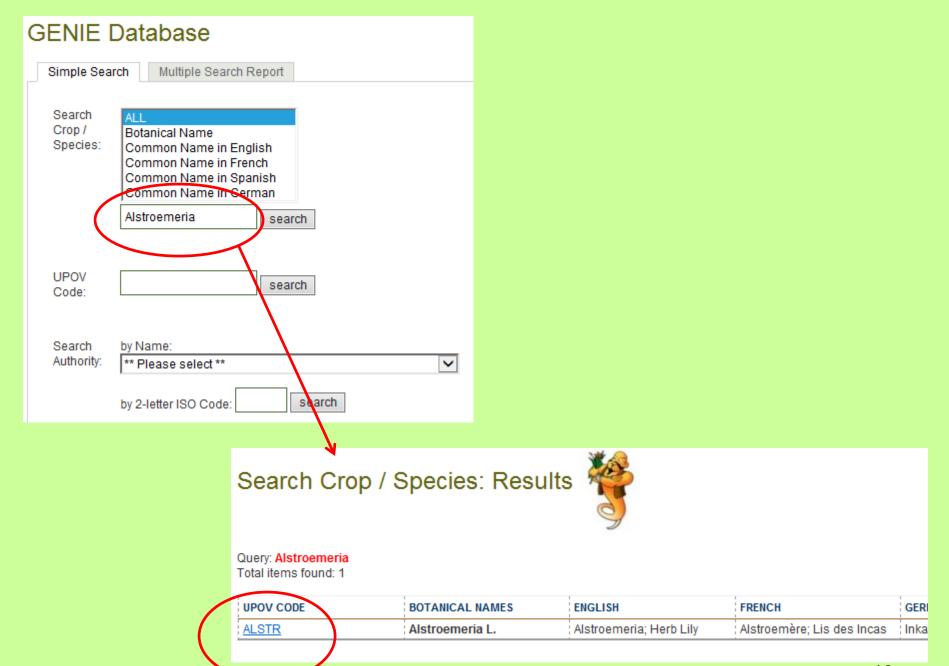
#### **GENIE Database**

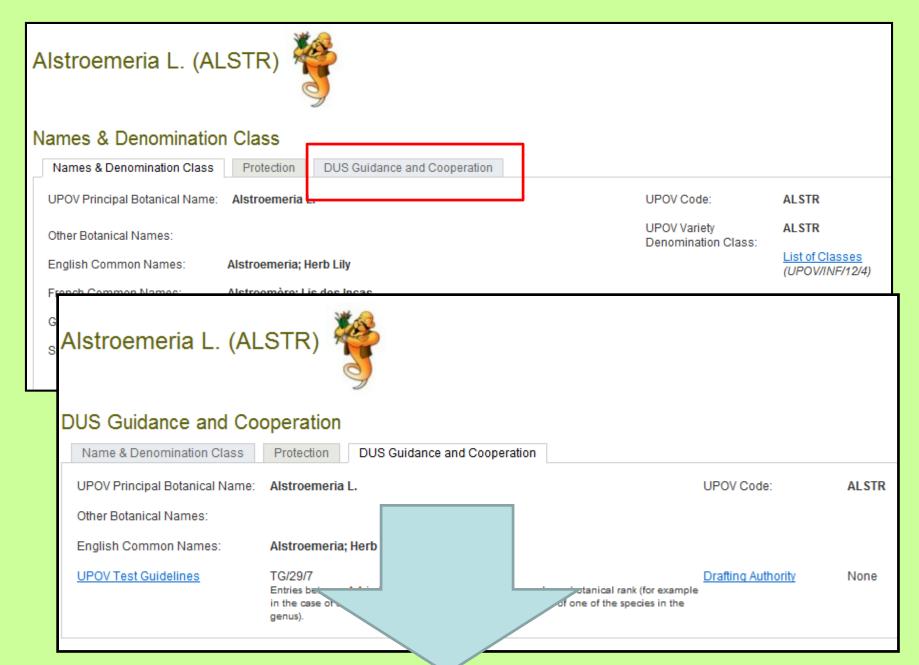
(Genus / species)



http://www.upov.int/genie/en/







#### Cooperation in DUS Examination (key to abbreviations)

- Authorities with Practical Experience
- Agreements for Cooperation in DUS Examination
- Utilization of Existing DUS Reports
- Authorities which have granted variety protection: please refer to the UPOV-ROM Plant Variety Database

#### Authorities with Practical Experience

Entries in parenthesis indicate experience at the level of a higher botanical rank (for example in the case of a species: there is experience at the level of the genus to which it belongs).

Entries between ^ ^ indicate experience at the level of a lower botanical rank (for example in the case).

Entries between ^ ^ indicate experience at the level of a lower botanical rank (for example in the case of a genus: there is experience at the level of one the species in the genus).

AUTHORITY	NOTES
<u>Canada</u>	
European Union (Community Plant Variety Office (CPVO))	
<u>Italy</u>	
Japan	
Netherlands	
Poland	
Republic of Korea	
Russian Federation	
South Africa	

#### Agreements for Cooperation in DUS Examination

- in the receiving column indicates that the authority specified in the offering column offers to carry out examinations for any interested member of the Union.
- (): Genus or species covered by agreement for a taxon of a higher rank to which it belongs (e.g. in the case of a species: the genus or family is covered by an agreement).

OFFERING AUTHORITY / EXAMINATION OFFICE	AUTHORITIES RECEIVING EXAMINATION REPORTS	NOTES
(<>)	( <u>Switzerland</u> )	(Switzerland): DUS tests are not conducted in Switzerland. In cases where a DUS test report is not available from a member of the Union, the Office of Plant Variety Protection will request an appropriate authority or testing of a member of the Union to perform a DUS test on its behalf.
European Union (Community Plant Variety Office (CPVO))	<u>Argentina</u>	
<u>Netherlands</u>	4	

CPVO carry out DUS examination of Alstroemeria on behalf of Argentina

Office (OF YOT)		
<u>Netherlands</u>	<u>Argentina</u>	1 1 1
	<u>Belgium</u>	
	<u>Denmark</u>	
	European Union (Community	
	Plant Variety Office (CPVO))	
	<u>France</u>	
	Germany	
	Norway	1 1 1
	<u>Sweden</u>	
	United Kingdom	I I

#### Utilization of Existing DUS Reports

- (utilizing) indicates that the authority specified in providing column will, in general, provide existing DUS reports to any member of the Union.
- (providing) indicates that the authority specified in the utilizing column will, in general, utilize existing DUS reports provided by any member of the Union.
- (): Genus or species covered by agreement for a taxon of a higher rank to which it belongs (e.g. in the case of a species: the genus or family is covered by an agreement).

UTILIZING AUTHORITY	PROVIDING AUTHORITY/EXAMINATION OFFICE	NOTES
(<>)	(Australia)	Australia will provide copies of all its DUS test reports to other UPOV members.
(<>)	(Brazil)	Brazil will provide copies of all its DUS test reports to other UPOV members.
(<>)	(Canada)	Canada will provide existing DUS reports to any member of the Union for any taxa for which it has experience in DUS testing.
(<>)	(European Union (Community Plant Variety Office (CPVO)))	

Mexico buys DUS test reports of Alstroemeria created by CPVO

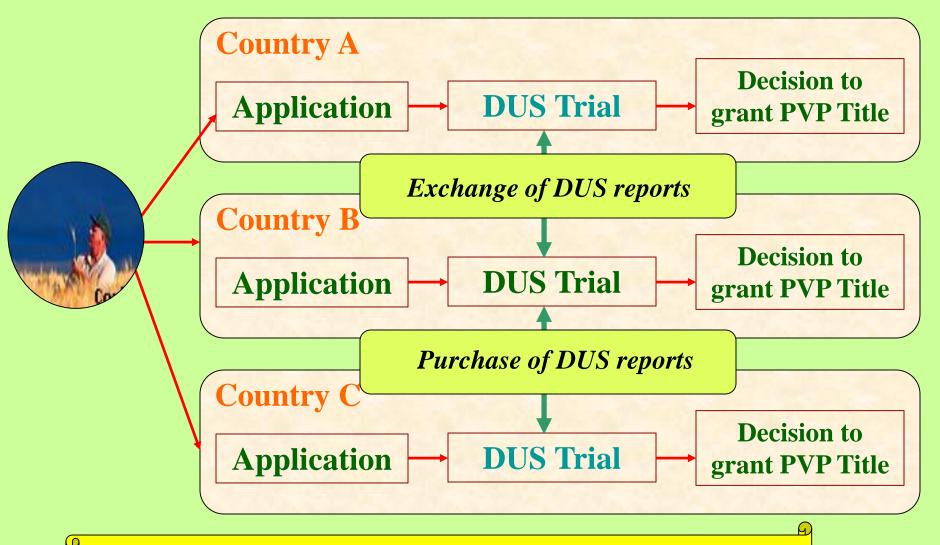
_		
<u>Argentina</u>	<	
(Australia)	(❖)	Australia generally accepts DUS reports from UPOV members for any taxon except Solanum tuberosum L In deciding whether such test reports are wholly sufficient for the Australian examination of the variety, the Authority refers to the relevant sections of the Plant Breeder's Rights Act (1994).
<u>Brazil</u>	European Union (Community Plant Variety Office (CPVO))	
(Canada)	(❖)	Canada generally accepts existing DUS reports from other members of the Union for varieties of any taxa which are vegetatively propagated and for which the DUS tests were conducted in a controlled environment greenhouse.
Ecuador	European Union (Community Plant Variety Office (CPVO))	
<u>Kenya</u>	European Union (Community Plant Variety Office (CPVO))	
<u>Mexico</u>	European Union (Community Plant Variety Office (CPVO))	
( <u>Switzerland</u> )	(⋄)	Switzerland will, in general, utilize existing DUS reports provided by any member of the Union.

## Cooperation between Authorities

Cooperation between Authorities can involve:

- purchase of DUS Test Reports from other Authorities (e.g. QZ-MX)
- bilateral arrangements to remove the need for duplication of DUS Tests (e.g. QZ-AR)
- centralized DUS testing at regional or global level

### **Cooperation in DUS Trial**



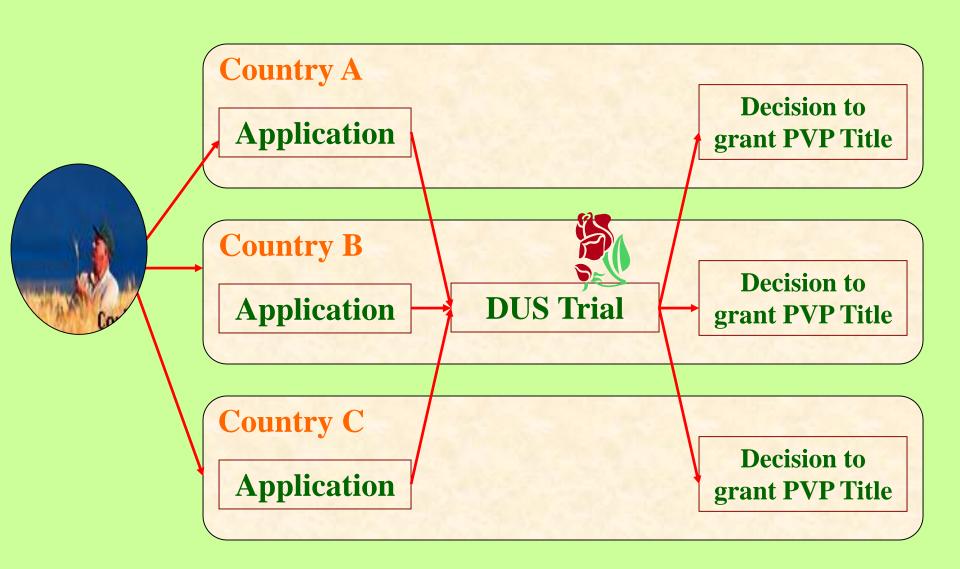
UPOV Model administrative agreement (TGP/5): 350 CHF

## Cooperation between Authorities

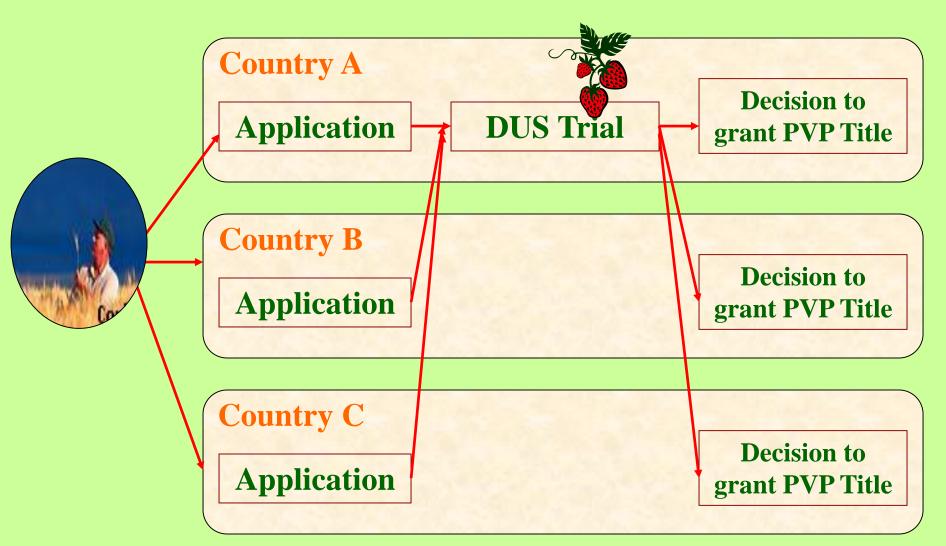
Cooperation between Authorities can involve:

- purchase of DUS Test Reports from other Authorities
- bilateral arrangements to remove the need for duplication of DUS Tests
- centralized DUS testing at regional or global level (e.g. QZ)

## Cooperation in Examination (centralized examination)



## Cooperation in Examination (centralized examination)



## Cooperation between Authorities

Cooperation between Authorities is important for:

- minimizing the time for DUS examination
- minimizing the cost of DUS examination
- optimizing examination of Distinctness in growing trials
- offering protection for all plant genera and species

#### **DUS Test Report**

## DOCUMENT TGP/5 "EXPERIENCE AND COOPERATION IN DUS TESTING"

Section 6:
UPOV Report on Technical Examination
and
UPOV Variety Description

### **DUS Test Report**

### TGP/5: Section 6/2

1	UPOV REPORT ON TECHNICAL EXAMINATION
1.	Reference number of Reporting Authority
2.	Requesting Authority
3.	Reference number of Requesting Authority
4.	Breeder's reference
5.	Date of application in requesting member of the Union
6.	Applicant (name and address)
7.	Agent (name and address) (if applicable)
8.	(a) Botanical name of taxon
	(b) UPOV code
9.	Common name of taxon

16. RESULTS OF THE TECHNICAL EXAMINATION		
(a) Report on Distinctness		
The variety		
·	- is distinct	[]
	- is not distinct	ij
according to the UPOV Convention		
Variety(ies) from which it is not distinct (if	applicable)	
variety (100) from which it is not distinct (if		
(b) Report on Uniformity	•	
The variety		
The variety	- is uniform	[]
	- is not uniform	ii
according to the UPOV Convention	- is not uniform	LJ
Characteristic(s) for which the variety is no	tuniform and avalanation of	the lack of
		the fack of
uniformity (if applicable) are provided in an a	annex to this report.	
(a) Danast an Stability		
(c) Report on Stability  The variety		
(c) <u>Report on <b>Stability</b></u> The variety	2m m4m11m = F.1	
•	- is stable []	
The variety	<ul><li>is stable []</li><li>is not stable</li></ul>	[]
The variety according to the UPOV Convention	- is not stable	
The variety  according to the UPOV Convention Characteristic(s) for which the variety is no	- is not stable  t stable and explanation of th	
The variety according to the UPOV Convention	- is not stable  t stable and explanation of th	
The variety  according to the UPOV Convention Characteristic(s) for which the variety is no	- is not stable  t stable and explanation of th	
The variety  according to the UPOV Convention Characteristic(s) for which the variety is no	- is not stable  t stable and explanation of the nnex to this report.	
The variety  according to the UPOV Convention Characteristic(s) for which the variety is no stability (if applicable) are provided in an ar	- is not stable  t stable and explanation of the nex to this report.  n annex to this report	e lack of
The variety  according to the UPOV Convention Characteristic(s) for which the variety is no stability (if applicable) are provided in an article (d) A description of the variety is provided in a	- is not stable  t stable and explanation of the nex to this report.  n annex to this report  ).	e lack of
The variety  according to the UPOV Convention Characteristic(s) for which the variety is no stability (if applicable) are provided in an article of the variety is provided in a (if the variety is distinct, uniform and stable)	- is not stable  t stable and explanation of the nex to this report.  n annex to this report  ).  an be provided on request.)	e lack of
The variety  according to the UPOV Convention Characteristic(s) for which the variety is no stability (if applicable) are provided in an article of the variety is provided in a (if the variety is distinct, uniform and stable (If the variety is not distinct, a description of the variety is not distinct, and stable (If the variety is not distinct, a description of the variety is not distinct, and stable (If the variety is not distinct, a description of the variety is not distinct, and stable (If the variety is not distinct).	- is not stable  t stable and explanation of the nex to this report.  n annex to this report  ).  an be provided on request.)	e lack of

### **UPOV Variety Description**

		TGP/5: Section 6/2	ANNEX
		UPOV VARIETY DES	SCRIPTION
1.	Reference number of R	eporting Authority	
2.	Reference number of R	equesting Authority	
3.	Breeder's reference		•••••
4.	Applicant (name and ac	ldress)	
5.	(a) Botanical name of ta	axon	
	(b) UPOV code	•••••	
6.	Common name of taxor	1	
7.	Variety denomination		
8.	Date and document num	nber of UPOV Test Gui	delines
9.	Date and/or document r	number of Reporting Au	thority's test guidelines
10.	Reporting Authority		
11.	Testing station(s) and p	lace(s)	•••••
12.	Period of testing		
13.	Date and place of issue	of document	
14.	<b>Group</b> : (if characteristi	cs of number 15 are use	ed for grouping, they are marked with a
	G in that number)		
LIDO			
UPC	1 0	O1	
No.	Authority No.	Characteristics	States of Expression Note
	Remarks		

### **UPOV Variety Description**

TGP/5: Section 6/2 Annex, page 2	TGP/5:	Section	6/2 Annex.	page 2
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Reference number of Reporting Authority

15. Characteristics Included in the UPOV Test Guidelines or Reporting Authority's Test Guidelines

UPOV Reporting
No. Authority N

Authority No. Characteristics

States of Expression

Note

Remarks

#### 16. Similar Varieties and Differences from These Varieties

Denomination(s) of variety(ies) similar to the candidate variety	Characteristic(s) in which the candidate variety differs from the similar variety( <u>ies</u> )°)	State of expression of the characteristic(s) for the similar variety(ies)	State of expression of the characteristic(s) for the candidate variety

 In the case of identical states of expression of both varieties, please indicate the size of the difference.

#### 17. Additional Information

- (a) Additional Data
- (b) Photograph (if appropriate)
- (c) RHS Colour Chart version used (if appropriate)
- (d) Remarks

## Benefits of UPOV membership for DUS testing

#### 1. Cooperation

#### 2. Test Guidelines

- Role of TGs on cooperation
- Initiate creation of TGs
- Leading Expert

### Organization of the DUS Examination Cooperation between Authorities

## DOCUMENT TGP/5 "EXPERIENCE AND COOPERATION IN DUS TESTING"

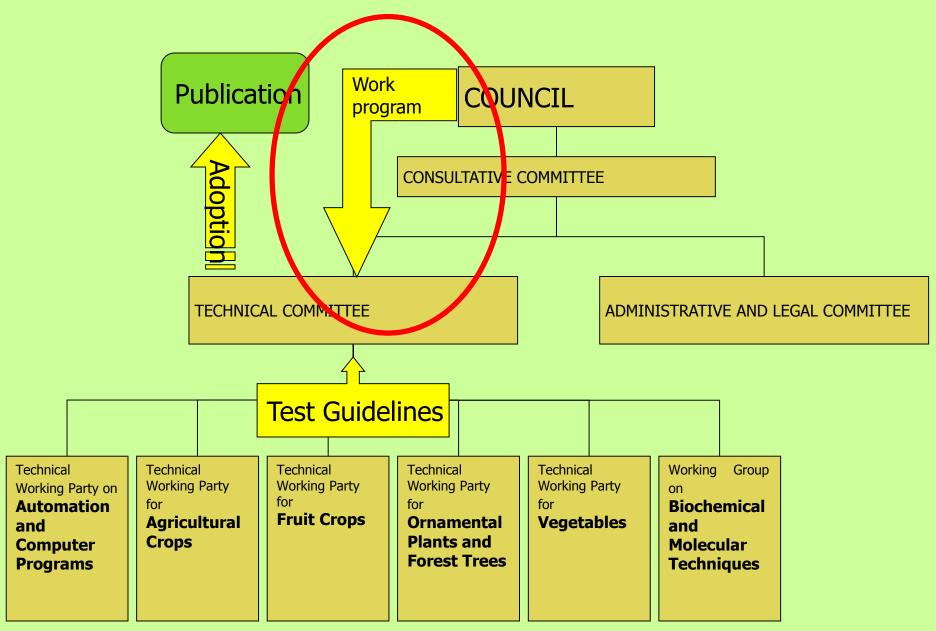
#### **Section 1:**

Model Administrative Agreement for International Cooperation in the Testing of Varieties

#### Article 2

Where the Council of UPOV has adopted Guidelines for the Conduct of Tests for Distinctness, Uniformity and Stability ("Test Guidelines") for a genus or species covered by this Agreement, the examination shall be conducted according to those Test Guidelines. ...

#### **Test Guidelines**



### TGP/7: Development of TGs

Section 2: Procedure for the Introduction and Revision of UPOV TGs

2.2.2.2 In recognition of the importance of international harmonization, the Technical Committee will take into account the following factors when considering and prioritizing the commissioning of Test Guidelines:

- (a) Total number of applications for plant breeders' rights within the territories of the members of the Union.
- (b) Number of authorities receiving applications for the varieties which would be covered by the Test Guidelines.
- (c) Number of foreign applications received by members of the Union.

...and others.

### Who can be a Leading Expert?

TGP/7: Development of TGs

#### 2.1.4 Leading Expert

The procedure recognizes that the drafting of Test Guidelines is led by an expert or experts (referred to as the "Leading Expert" in this document) from within one of the UPOV Technical Working Parties (TWPs).

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