UPOV

TECHNICAL WORKING PARTY

FOR AGRICULTURAL CROPS

Thirty-eight Session
Seoul, Rep. of Korea 2009

PREPARATORY WORKSHOP

August 30, 2009

UPOV

PROGRAM

1. Introduction to UPOV
2. Introduction to the Technical Working Parties
3. Overview of the General Introduction (document TG/1/3 and TGP documents)
4. Test Guidelines (document TGP/7)
   - (a) Introduction
   - (b) Guidance on drafting characteristics
   - (c) Method of observation (VG; MG; MS; VS)
   - (d) Asterisked, grouping and TQ characteristics
   - (e) Example varieties
   - (f) The process for developing UPOV Test Guidelines
5. UPOV databases
6. The UPOV website
7. Agenda for the TWP meeting
8. Feedback

EXERCISES

UPOV

1. INTRODUCTION TO UPOV

UPOV

UPOV

The International Convention for the Protection of New Varieties of Plants

established in 1961

The International Union for the Protection of New Varieties of Plants

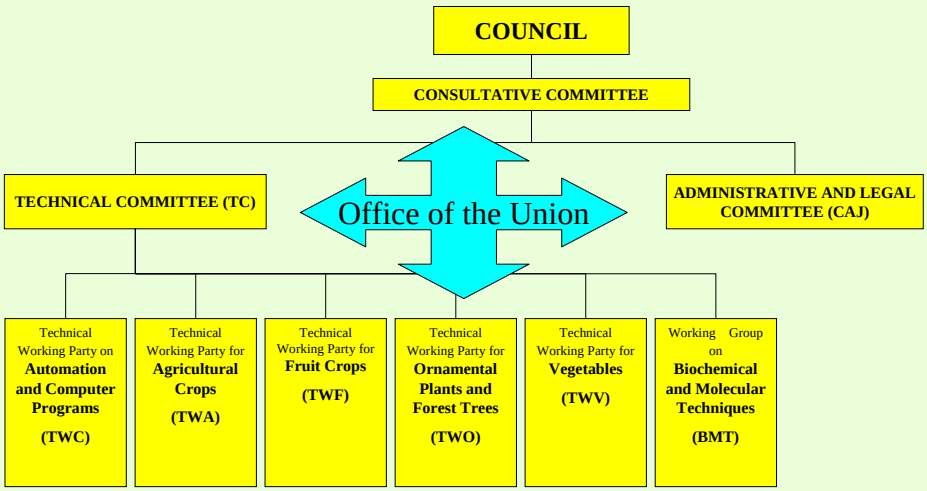
Union internationale pour la protection des obtentions végétales

UPOV

- **Members of the Union**
  - States
  - Intergovernmental Organization(s)
- **Organs established by the Convention**
  - Council
  - Office of the Union
- **Other Bodies**

UPOV

UPOV Structure



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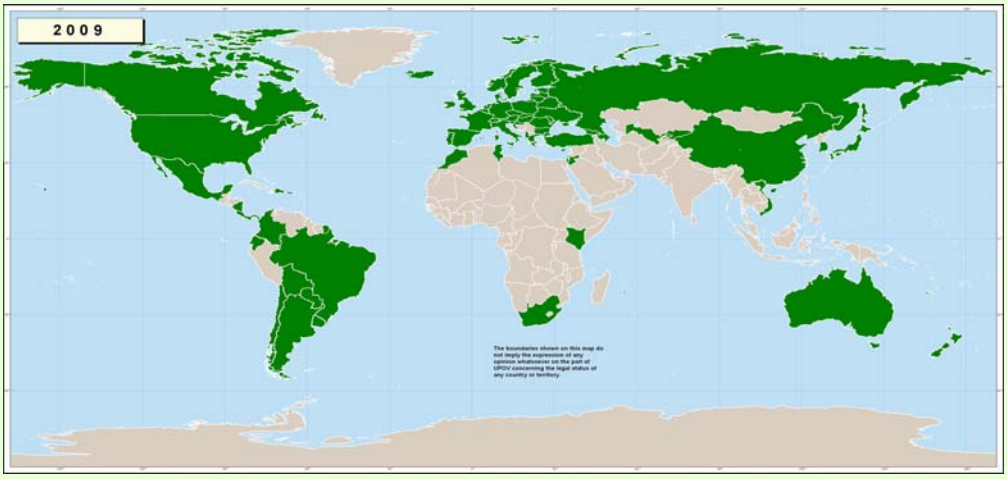
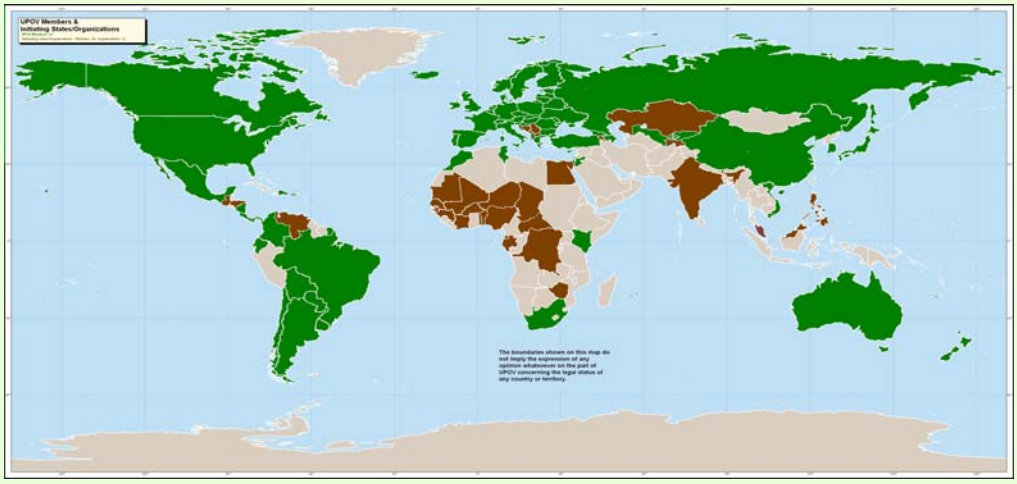
UPOV Membership / Territories covered
67 members



UPOV

Members of UPOV (green) and initiating States and organizations (brown)



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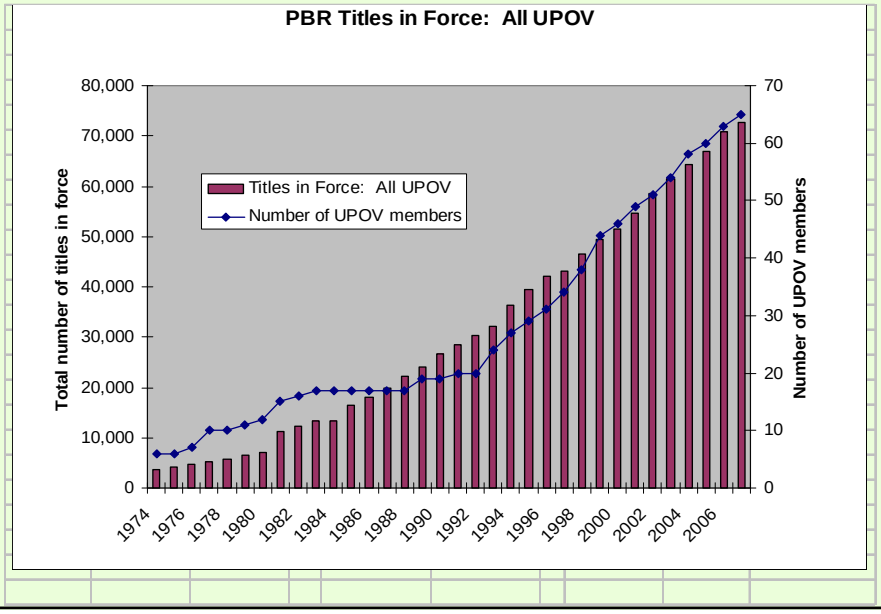
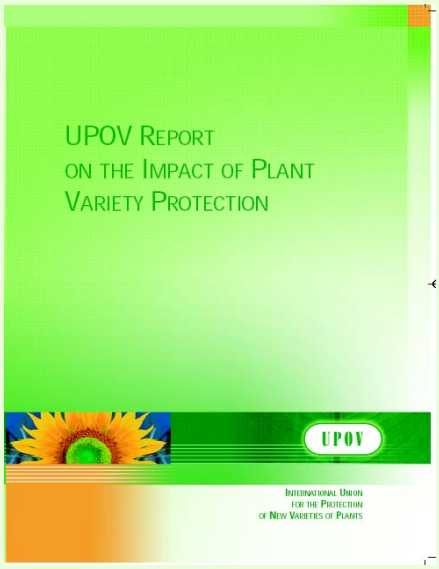
Development of Plant Variety Protection



UPOV

UPOV MISSION STATEMENT

"To provide and promote an *effective system* of plant variety protection, with the aim of encouraging the development of *new varieties of plants*, for the *benefit of society*"



Available at: www.upov.int "News & Events"

2. INTRODUCTION TO THE UPOV TECHNICAL WORKING PARTIES (THE DUS EXAMINATION)

UPOV

THE CONDITIONS FOR GRANTING A BREEDER'S RIGHT

Criteria to be satisfied

- NOVELTY

- **D**ISTINCTNESS
- **U**NIFORMITY
- **S**TABILITY

} **"DUS"**

UPOV

THE CONDITIONS FOR GRANTING A BREEDER'S RIGHT

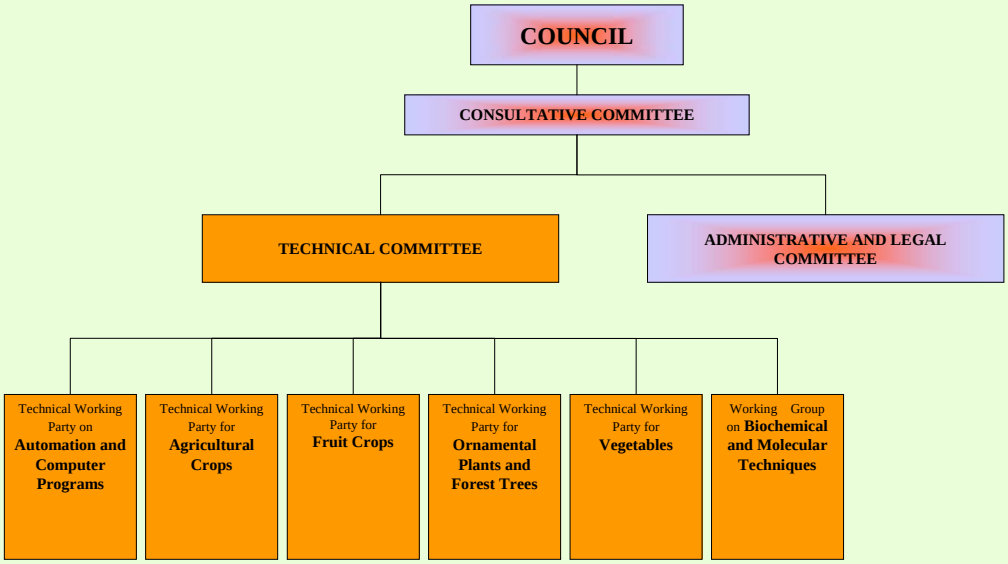
Other conditions

- VARIETY DENOMINATION
- FORMALITIES
- PAYMENT OF FEES

NO OTHER CONDITIONS!

UPOV

UPOV Structure



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3. OVERVIEW OF THE GENERAL INTRODUCTION

(DOCUMENT TG/1/3 AND TGP DOCUMENTS)

GUIDANCE FOR DUS EXAMINATION

Guidance for DUS Examination

facilitates:

BEST PRACTICE (based on experience)

=> good decisions

=> good definition of the object of protection (strong protection)

=> efficiency in method of examination (learn from the best)

HARMONIZATION

=> efficiency

- mutual acceptance of DUS reports (minimize cost of examination for individual authorities)
- mutual recognition of variety descriptions (all parties speak the same "language")
- simple and cheap system for applicants (minimize cost for breeders)

UPOV provides guidance by:

- The "General Introduction" (TG/1/3)
  - General technical principles
  - Organization of DUS Testing
  - Associated "TGP" Documents (e.g. statistical methods)

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TG/1/3 General Introduction

"Associated" TGP Documents

Ref.	Title
TG/00	List of TGP Documents and Latest Issue Dates
TGP/1	General Introduction With Explanations
TGP/2	List of Test Guidelines Adopted by UPOV
TGP/3	Varieties of Common Knowledge
TGP/4	Constitution and Maintenance of Variety Collections
TGP/5	Experience and Cooperation in DUS testing
TGP/6	Arrangements for DUS testing
TGP/7	Development of Test Guidelines
TGP/8	Trial Design and Techniques Used in the Examination of DUS
TGP/9	Examining Distinctness
TGP/10	Examining Uniformity
TGP/11	Examining Stability
TGP/12	Special Characteristics
TGP/13	Guidance for New Types and Species
TGP/14	Glossary of Technical, Botanical and Statistical Terms Used in UPOV Documents
TGP/15	New Types of Characteristics

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4. TEST GUIDELINES

(a) Introduction

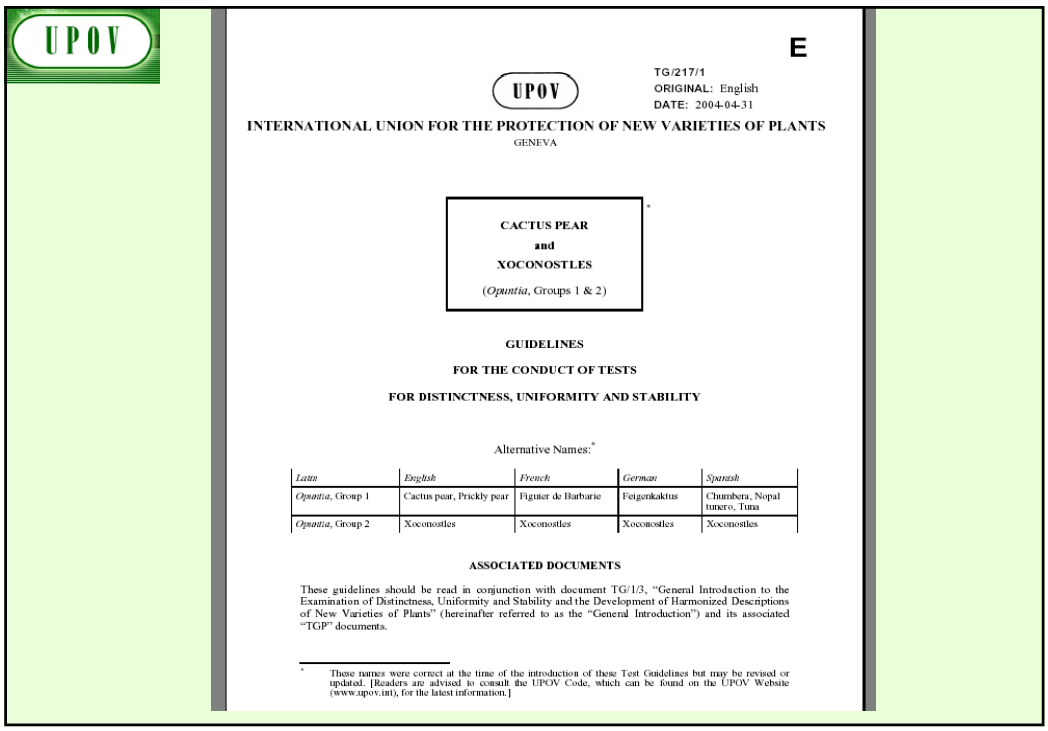
UPOV

UPOV provides guidance by:

- The "General Introduction" (TG/1/3)
  - General technical principles
  - Organization of DUS Testing
  - Associated "TGP" Documents (e.g. statistical methods)

AND

- **"Test Guidelines"**
  - **Species/Crop-specific recommendations developed by crop experts**
  - **TGP/7 "Development of Test Guidelines" adopted**



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TG/217/1
ORIGINAL: English
DATE: 2004-04-31

INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS
GENEVA

CACTUS PEAR
and
XOCONOSTLES
(*Opuntia*, Groups 1 & 2)

GUIDELINES
FOR THE CONDUCT OF TESTS
FOR DISTINCTNESS, UNIFORMITY AND STABILITY

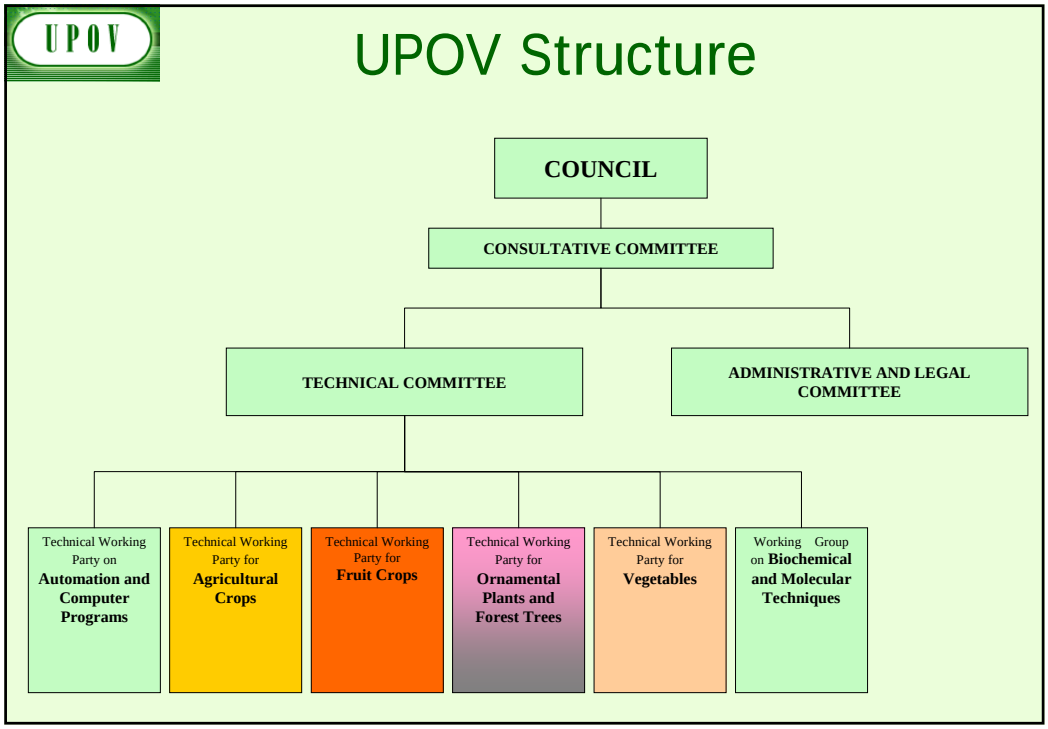
Alternative Names:*

Latin	*English*	*French*	*German*	*Spanish*
Opuntia, Group 1	Cactus pear, Prickly pear	Figuier de Barbarie	Feigenkaktus	Chumbera, Nopal tunero, Tuna
Opuntia, Group 2	Xoconostles	Xoconostles	Xoconostles	Xoconostles

ASSOCIATED DOCUMENTS

These guidelines should be read in conjunction with document TG/1/3, "General Introduction to the Examination of Distinctness, Uniformity and Stability and the Development of Harmonized Descriptions of New Varieties of Plants" (hereinafter referred to as the "General Introduction") and its associated "TGP" documents.

* These names were correct at the time of the introduction of these Test Guidelines but may be revised or updated. [Readers are advised to consult the UPOV Code, which can be found on the UPOV Website (www.upov.int), for the latest information.]



UPOV Structure

COUNCIL

CONSULTATIVE COMMITTEE

TECHNICAL COMMITTEE

ADMINISTRATIVE AND LEGAL COMMITTEE

- Technical Working Party on **Automation and Computer Programs**
- Technical Working Party for **Agricultural Crops**
- Technical Working Party for **Fruit Crops**
- Technical Working Party for **Ornamental Plants and Forest Trees**
- Technical Working Party for **Vegetables**
- Working Group on **Biochemical and Molecular Techniques**

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TGP/7 "Development of Test Guidelines"

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1. Introduction

2. Procedure for the Introduction and Revision of UPOV Test Guidelines

3. Guidance for Drafting Test Guidelines

- The **TG Template**
- **Additional Standard Wording** for the TG Template
- **Guidance Notes** for the TG Template

E

TG/[xx]
ORIGINAL: [xx]
DATE: [xx]

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INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS
GENEVA

DRAFT

Please select: "View" then "Comments" from the Word menu to see all notes

{MAIN COMMON NAME}
{[types of] botanical name}
{UPOV Code}
{ GN 1 – Botanical name }

GUIDELINES
FOR THE CONDUCT OF TESTS
FOR DISTINCTNESS, UNIFORMITY AND STABILITY

prepared by [an expert] / [experts] from [drafting country(ies)] / organization(s)]

to be considered by the Technical Working Party for [xxx] at its [xxx] session, to be held in [xxx] from [xxx]

Alternative Names:*

Botanical name	English	French	German	Spanish
....	....	....	....	....

The purpose of these guidelines ("Test Guidelines") is to elaborate the principles contained in the General Introduction (document TG/1/3), and its associated TGP documents, into detailed practical guidance for the harmonized examination of distinctness, uniformity and stability (DUS) and, in particular, to identify appropriate characteristics for the examination of DUS and production of harmonized variety descriptions.

* These names were correct at the time of the introduction of these Test Guidelines but may be revised or updated. [Readers are advised to consult the UPOV Code, which can be found on the UPOV Website (www.upov.int), for the latest information.]

10 Chapters of UPOV Test Guidelines

1. Subject of the Test Guidelines
2. Material Required
3. Methods of Examination
4. Assessment of Distinctness, Uniformity and Stability
5. Grouping of Varieties and Organization of the Growing Trial
6. Introduction to the Table of Characteristics
7. **Table of Characteristics**
8. Explanation on the Table of Characteristics
9. Literature
10. Technical Questionnaire

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4. TEST GUIDELINES

(b) Guidance on drafting characteristics

- selection of characteristics
- types of expression (QL, QN, PQ)
- states of expression / notes

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"CHARACTERISTICS"

- may have direct commercial relevance
  - Flower color (ornamental)
  - Fruit color
- but **commercial relevance NOT required**
  - Leaf shape

Selection of Characteristics

The basic requirements that a characteristic should fulfill before it is used for DUS testing or producing a variety description are that its expression (TG/1/3: Section 4.2.1) :

(a) **results from a given genotype** or combination of genotypes;

(b) is sufficiently **consistent and repeatable** in a **particular environment**;

(c) exhibits sufficient **variation between varieties** to be able to establish distinctness;

(d) is capable of **precise definition and recognition**;

(e) allows **uniformity requirements** to be fulfilled;

(f) allows **stability requirements** to be fulfilled, meaning that it produces consistent and repeatable results after repeated propagation or, where appropriate, at the end of each cycle of propagation.

Selection of Characteristics

- **Yield ???**
- **Straw strength ???**

Etc.

Selection of Characteristics

Criteria	Fruit: color	Leaf: shape	Yield
(a) results from a given genotype or combination of genotypes	Yes	Yes	
(b) sufficiently consistent and repeatable in a particular environment	Yes	Yes	
(c) exhibits sufficient variation between varieties to be able to establish distinctness	Yes	Yes	
(d) is capable of precise definition and recognition	Yes	Yes	
(e) allows uniformity requirements to be fulfilled	Yes	Yes	
(f) allows stability requirements to be fulfilled	Yes	Yes	
Commercial value	Yes	No	
ACCEPTABILITY	Yes	Yes	

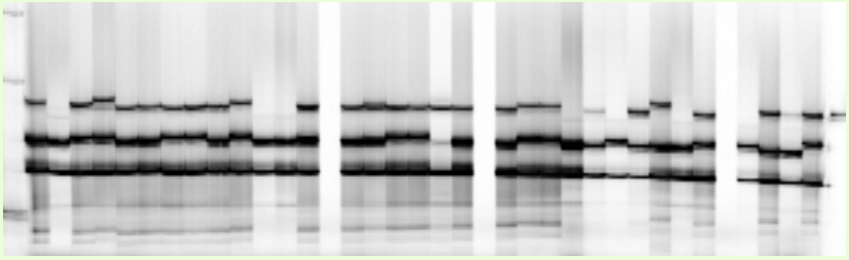
Selection of Characteristics

Criteria	Fruit: color	Leaf: shape	Yield
(a) results from a given genotype or combination of genotypes	Yes	Yes	Yes
(b) sufficiently consistent and repeatable in a particular environment	Yes	Yes	(No)
(c) exhibits sufficient variation between varieties to be able to establish distinctness	Yes	Yes	???
(d) is capable of precise definition and recognition	Yes	Yes	(No)
(e) allows uniformity requirements to be fulfilled	Yes	Yes	???
(f) allows stability requirements to be fulfilled	Yes	Yes	???
Commercial value	Yes	No	Yes
ACCEPTABILITY	Yes	Yes	No

Special Characteristics: Disease Resistance

Criteria	Disease Resistance
(a) results from a given genotype or combination of genotypes	*Knowledge of nature of genetic control of resistance is important
(b) sufficiently consistent and repeatable in a particular environment	*Standardize conditions (greenhouse / laboratory) & methodology *Standardize inoculum *Ring-test
(c) exhibits sufficient variation between varieties to be able to establish distinctness	*Susceptible / Resistant OR varying degrees of resistance?
(d) is capable of precise definition and recognition	*Define and recognize races and strains
(e) allows uniformity requirements to be fulfilled	see above
(f) allows stability requirements to be fulfilled	see above
	Difficult and expensive

Molecular Techniques?



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TYPE OF EXPRESSION OF CHARACTERISTICS (QL, QN, PQ):

and consequences for consideration of ***distinctness***

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7. Table of Characteristics/Tableau des caractères/Merkmalstabelle/Tabla de caracteres

Char. No.	English	français	Deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
1. (*) (+)	**Plant: growth habit**	**Plante : port**	**Pflanze: Wuchsform**	**Planta: porte**		
QN	upright	dressé	aufrecht	erecto	Inuppink	1
	semi-upright	semi dressé	halbaufrecht	semierecto	D0158-1	2
	spreading	étalé	breitwüchsig	abierto	Sumnem 03	3
	semi-trailing	semi-étalé	halbhängend	semirrastrero	Inupsaf	4
	trailing	coureux	hängend	rastrero	Organza	5
2. (+)	**Plant: height**	**Plante : hauteur**	**Pflanze: Höhe**	**Planta: altura**		
QN	short	basse	niedrig	baja	Yateye	3
	medium	moyenne	mittel	media	D0158-1	5
	tall	haute	hoch	alta	Inuppink	7

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QUALITATIVE Characteristics

"Qualitative characteristics" are those that are **expressed in discontinuous states** (e.g. sex of plant: dioecious female (1), dioecious male (2), monoecious unisexual (3), monoecious hermaphrodite (4)).

These states are self-explanatory and independently meaningful. All states are necessary to describe the full range of the characteristic, and every form of expression can be described by a single state. The order of states is not important. As a rule, the **characteristics are not influenced by environment**.

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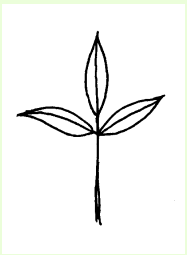
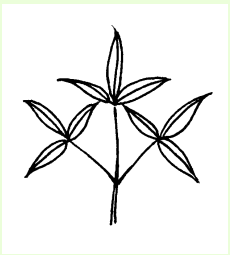
Qualitative characteristic

Clematis: Leaf: type

1
simple



2
ternate



3
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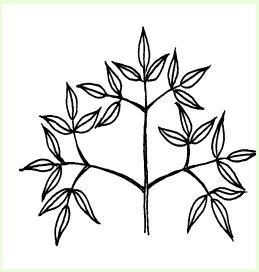

4
triternate

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Qualitative Characteristics: **distinctness**

In qualitative characteristics, the difference between two varieties may be considered clear if one or more characteristics have expressions that fall into **two different states in the Test Guidelines**. Varieties should not be considered distinct for a qualitative characteristic if they have the same state of expression.

(e.g. sex of plant: dioecious female (1), dioecious male (2), monoecious unisexual (3), monoecious hermaphrodite (4)).

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QUANTITATIVE Characteristics

"Quantitative characteristics" are those where the expression covers the full range of variation from one extreme to the other. The **expression can be recorded on a one-dimensional, continuous or discrete, linear scale**. The range of expression is divided into a number of states for the purpose of description (e.g. length of stem: very short (1), short (3), medium (5), long (7), very long (9)). The division seeks to provide, as far as is practical, an even distribution across the scale. The Test Guidelines do not specify the difference needed for distinctness. The states of expression should, however, be meaningful for DUS

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Quantitative Characteristics: **distinctness**

Quantitative characteristics are considered for distinctness according to the method of observation and the features of propagation of the variety concerned...

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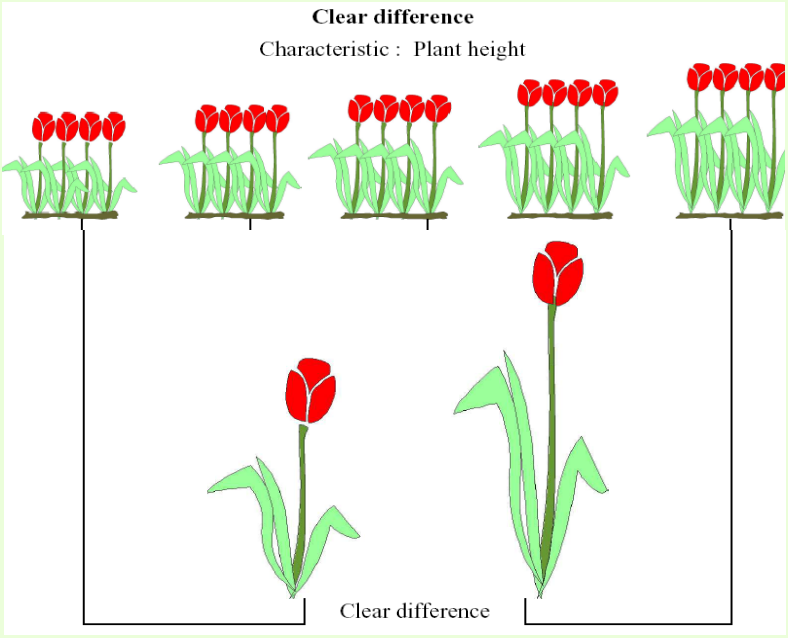
Quantitative Characteristic



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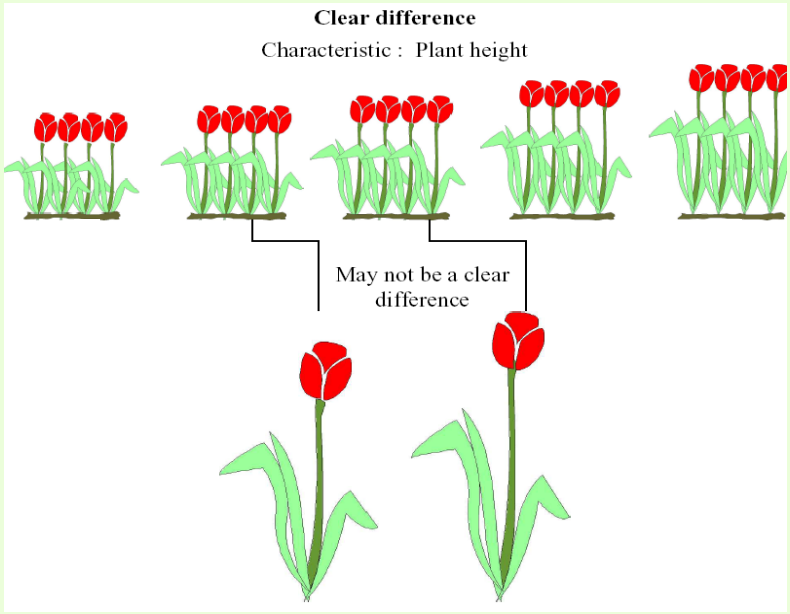
Quantitative Characteristic



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Quantitative Characteristics: distinctness

Quantitative characteristics are considered for distinctness according to the method of observation and the features of propagation of the variety concerned.

Test Guidelines (TGP/7 proposed revised text)

Difference of **two Notes to represent a clear difference if** the **comparison** between two varieties is performed **at the level of Notes**:

e.g.

Quantitative Characteristics: **distinctness**

TG/233/1
Diascia/Diascie, 2007-03-28
- 9 -

		English	français	Deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
6. (*)	**(a)**	**Leaf blade: length**	**Limbe: longueur**	**Blattspreite: Länge**	**Limbo: longitud**		
QN		short	courte	kurz	corto	Codıter, Strawberry Sundae	3
		medium	moyenne	mittel	medio	Codıusre	5
		long	longue	lang	largo	Balwhislapı, Balwhiswhit	7

1 to 9 scale: **Notes 1 and 3**, **Notes 2 and 4**, Notes 3 and 5 **etc.** represent a clear difference

Quantitative Characteristics: **distinctness**

TG/233/1
Diascia/Diascie, 2007-03-28
- 9 -

	English	français	Deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
5.	**Stem: anthocyanin coloration below inflorescence**	**Tige: pigmentation anthocyanique sous inflorescence**	**Trieb: Anthocyanfärbung unter dem Blütenstand**	**Tallo: pigmentación antociánica por debajo de la inflorescencia**		
QN	absent or weak	absente ou faible	fehlend oder gering	ausente o débil	Heccharm	1
	medium	moyenne	mittel	media	Hecrace	2
	strong	forte	stark	fuerte		3

1 to 3 scale: **only Notes 1 and 3** represent a clear difference

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PSEUDO-QUALITATIVE Characteristics

In the case of "pseudo-qualitative characteristics," the **range of expression is at least partly continuous, but varies in more than one dimension** (e.g. shape: ovate (1), elliptic (2), circular (3), obovate (4)) and cannot be adequately described by just defining two ends of a linear range. In a similar way to qualitative (discontinuous) characteristics – hence the term "pseudo-qualitative" – each individual state of expression needs to be identified to adequately describe the range of the characteristic.

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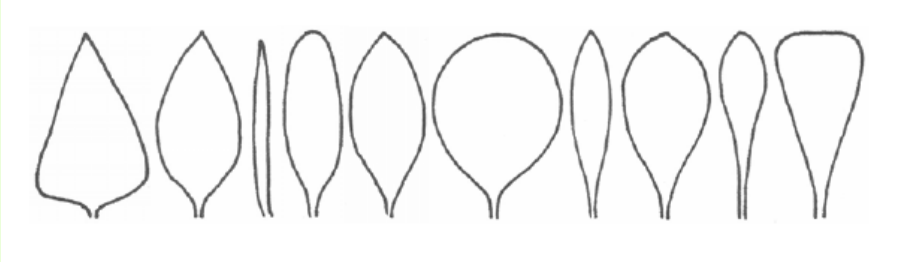
Example



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← broadest part →		
(below middle)	at middle	(above middle)

broad (compressed) ← width (ratio length/width) → narrow (elongated)					
		3 linear			
		4 oblong	7 oblanceolate	9 spatulate	
1 triangular	2 ovate	5 elliptic	8 obovate		10 obtriangular
		6 circular			

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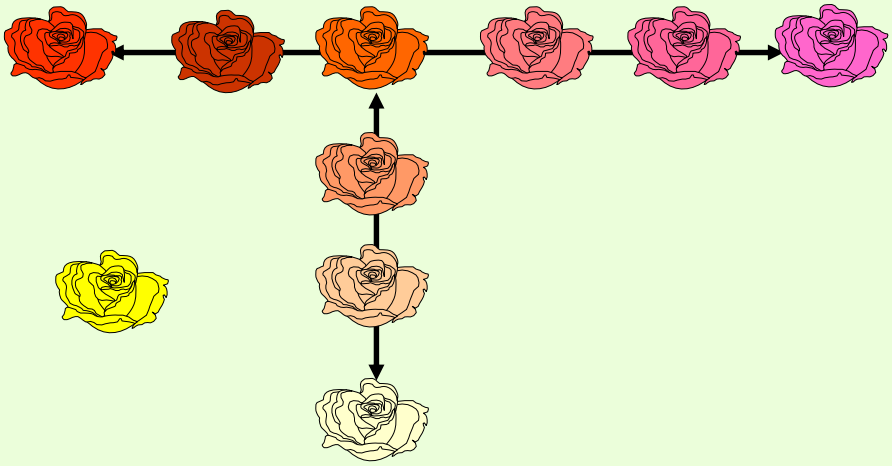
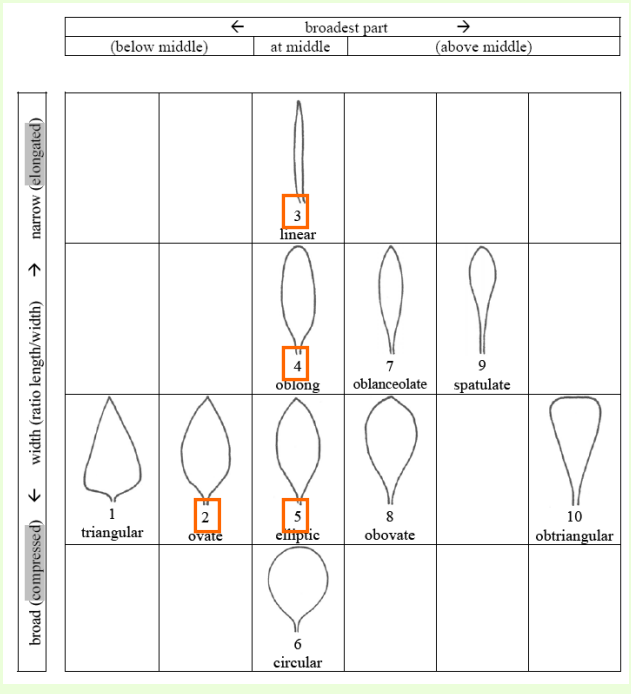
Rose: flower color



Pseudo-Qualitative Characteristics: **distinctness**

A different state in the Test Guidelines may not be sufficient to establish distinctness (see also section 5.5.2.3). However, in certain circumstances, varieties described by the same state of expression may be clearly distinguishable.



STATES / NOTES for QL, QN ,PQ

Qualitative Characteristics

(typical example)

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
19. VG (*) (+)	**Inflorescence: type**					
QL	Type 1					1
	Type 2					2
	Type 3					3
		1 Type 1	2 Type 2	3 Type 3		

Qualitative Characteristics

(special cases)

Char No.	Method of Examination	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
1. (*)	**MS C**	**Plant: ploidy**					
QL		diploid					2
		tetraploid					4
3. (*)	**VG**	**Stem: anthocyanin coloration**					
QL		absent				Gumpoong	1
		present				Chunpoong, Gopoong	9

Quantitative Characteristics

weak/strong
short/long
small/large

Note	State
1	very weak (or: absent or very weak)
2	very weak to weak
3	**weak**
4	weak to medium
5	**medium**
6	medium to strong
7	**strong**
8	strong to very strong
9	very strong

Note	State
1	very small (or: absent or very small)
2	very small to small
3	**small**
4	small to medium
5	**medium**
6	medium to large
7	**large**
8	large to very large
9	very large

Quantitative Characteristics

Standard Range Version 1	Standard Range Version 2	Standard Range Version 3	Standard Range Version 4
1 very weak (or: absent or very weak)	1 very weak (or: absent or very weak)	-	-
3 weak	3 weak	3 weak	3 weak
5 medium	5 medium	5 medium	5 medium
7 strong	7 strong	7 strong	7 strong
9 very strong	-	9 very strong	-

Quantitative Characteristics

State	Example 1 **Size relative to:**	Example 2 **Angle:**	Example 3 **Position:**	Example 4 **Length in relation to:**
1	**much smaller**	**very acute**	**at base**	**equal**
3	moderately smaller	moderately acute	one quarter from base	slightly shorter
5	**same size**	**right angle**	**in middle**	**moderately shorter**
7	moderately larger	moderately obtuse	one quarter from apex end	much shorter
9	**much larger**	**very obtuse**	**at apex**	**very much shorter**

Quantitative Characteristics

Limited range

State	Example 1 **Stem: attitude**
1	erect
3	semi-erect
5	prostrate

Condensed range

Example 1	
1	e.g. absent or very weak *(absent or very weakly expressed)*
2	weak *(weakly expressed)*
3	strong *(strongly expressed)*

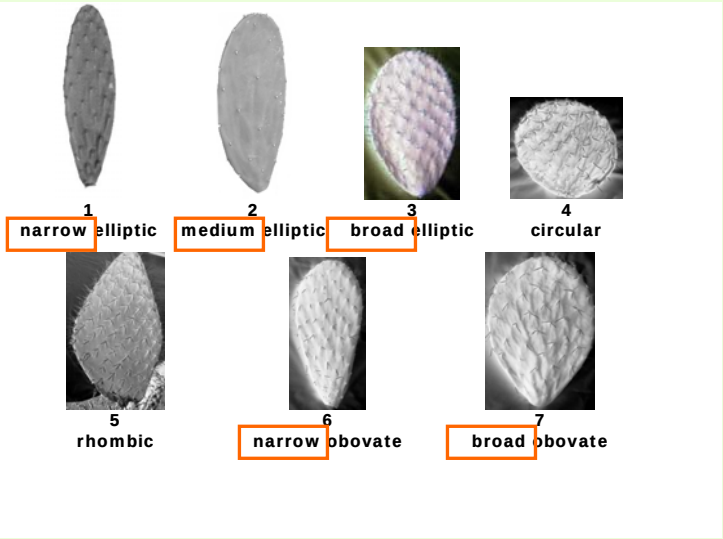
Example 2	
1	e.g. absent or weak *(absent or weakly expressed)*
2	moderate (or medium) *(moderately expressed)*
3	strong *(strongly expressed)*

Pseudo-qualitative Characteristics

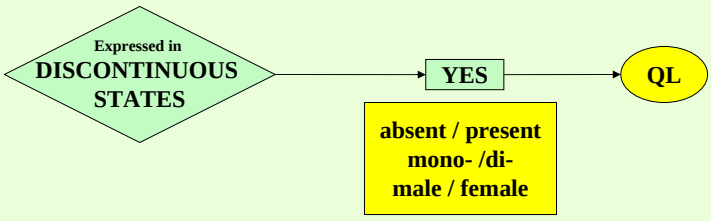
(typical examples)

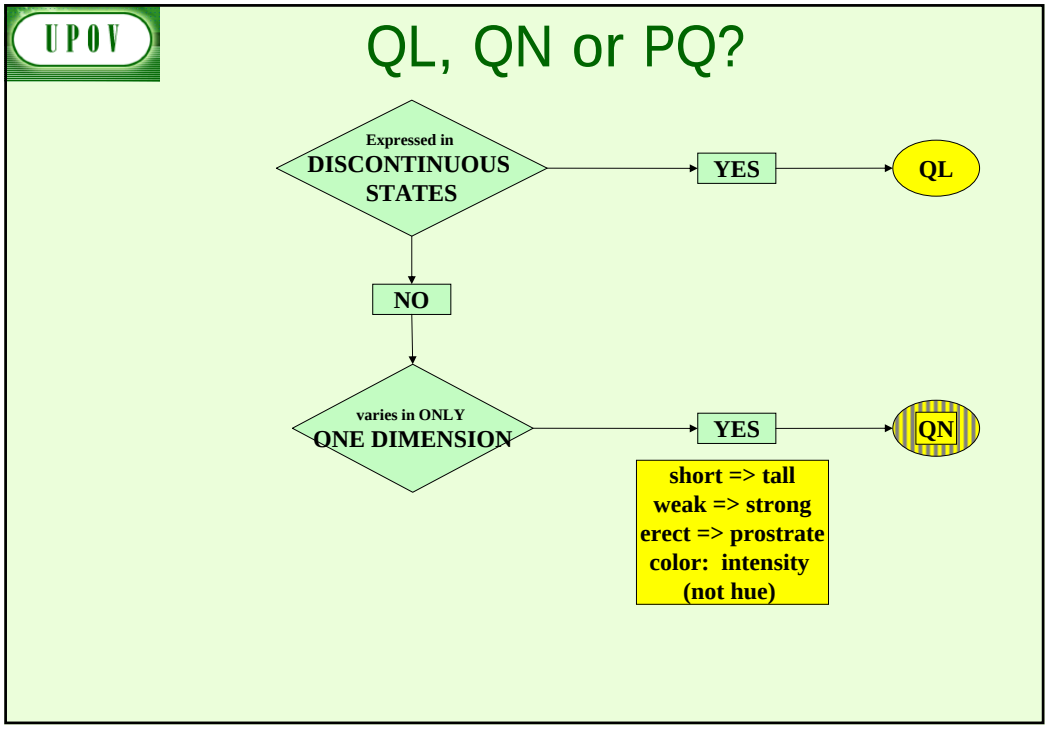
	24. (+)	**Flower: color of the center**	**Fleur: couleur du centre**	**Farbe der Mitte**	**Flor: color del centro**	
PQ		green	vert	grün	verde	1
		yellow	jaune	gelb	amarillo	2
		orange	orange	orange	naranja	3
		pink	rose	rosa	rosa	4
		red	rouge	rot	rojo	5
		purple	pourpre	purpurn	púrpura	6

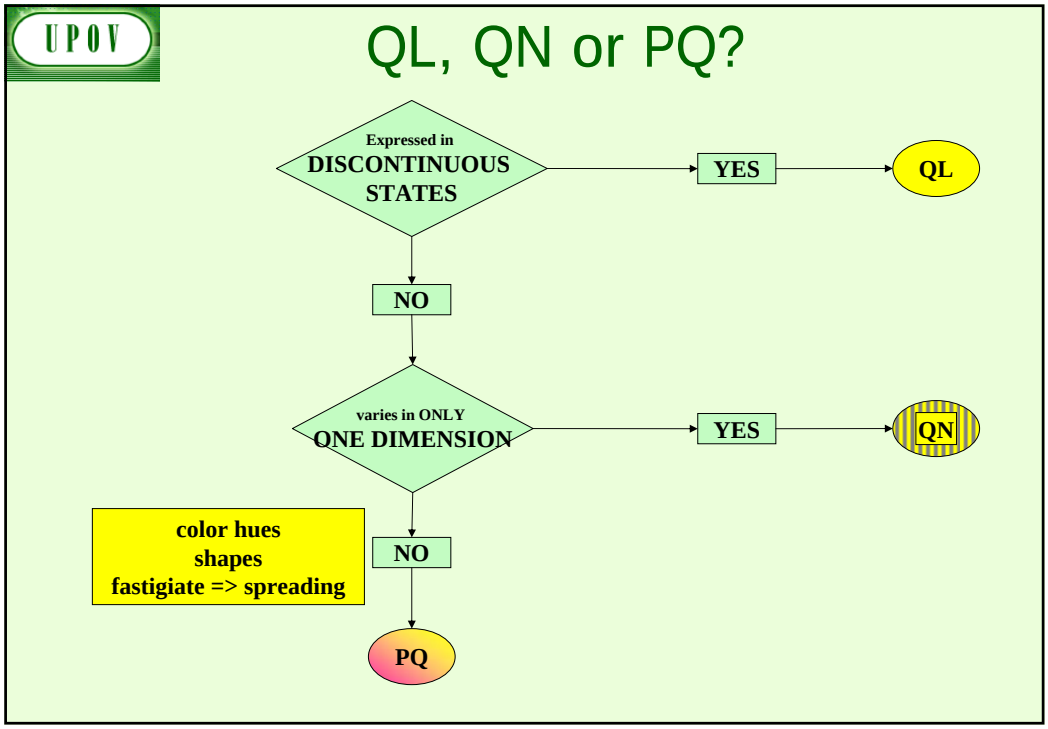
Opuntia: Shape of Cladode



QL, QN or PQ?

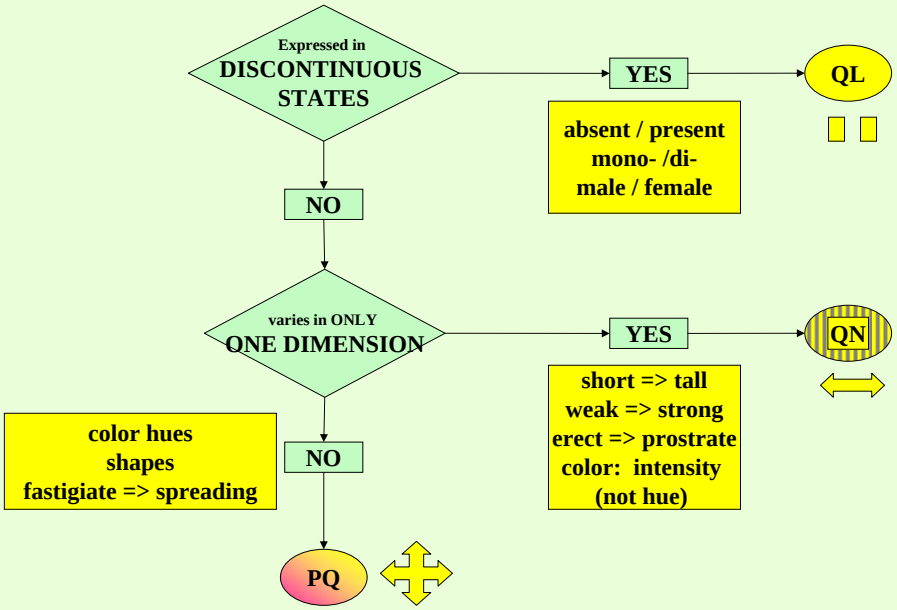



UPOV
QL, QN or PQ?
Expressed in
DISCONTINUOUS
STATES
YES
QL
NO
varies in ONLY
ONE DIMENSION
YES
QN
short => tall
weak => strong
erect => prostrate
color: intensity
(not hue)


UPOV
QL, QN or PQ?
Expressed in
DISCONTINUOUS
STATES
YES
QL
NO
varies in ONLY
ONE DIMENSION
YES
QN
color hues
shapes
fastigiate => spreading
NO
PQ

UPOV

QL, QN or PQ?



UPOV

EXERCISE

UPOV

(a) What type of Expression?

QL: Qualitative
QN: Quantitative
PQ: Pseudo-qualitative

(b) Which Notes represent a clear difference?

UPOV

		Note/ Nota
1.	**Plant: ploidy**	
	diploid	2
	tetraploid	4
	hexaploid	6
	octoploid	8

UPOV

2. Leaf sheath: anthocyanin coloration

absent or very weak	1
weak	3
medium	5
strong	7
very strong	9

UPOV

3. Plant: rhizomes

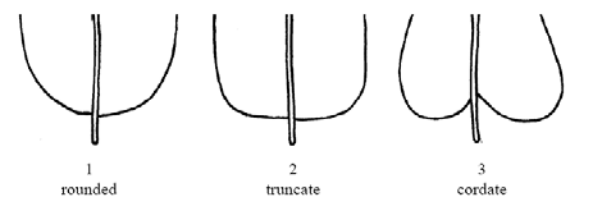
absent	1
present	9

4.	**Petal: color**	
	white	1
	yellow	2
	orange	3
	red	4
	pink	5
	purple	6

5.	**Leaf blade: intensity of green color of upper side**	
	light	3
	medium	5
	dark	7

6. Leaf blade: shape of base

rounded	1
truncate	2
cordate	3



7. Petal: color

RHS Colour Chart
(indicate reference number)

UPOV

8.	**Leaf blade: profile in cross section**	
	straight or weakly concave	1
	moderately concave	2
	strongly concave	3

UPOV

4. TEST GUIDELINES (document TGP/7)

(c) Method of observation (visual / measurement; single record / several records)

Method of Observation

M: Measurement:
an objective **observation against a calibrated, linear scale** e.g. using a ruler, weighing scales, colorimeter, dates, counts, etc.);

V: Visual observation:
includes observations where the expert uses **reference points** (e.g. diagrams, example varieties, side-by-side comparison) or non-linear charts (e.g. color charts).

"Visual" observation refers to the sensory observations of the expert and, therefore, also **includes smell, taste and touch**.

Type of Record

(for the purposes of distinctness)

G: **single record** for a variety, or a **GROUP of plants** or parts of plants;

In most cases, "G" provides a single record per variety and it is not possible or necessary to apply statistical methods in a plant-by-plant analysis for the assessment of distinctness.

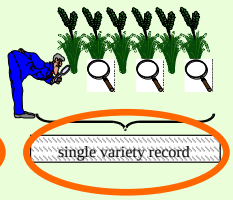
S: **records** for a number of **SINGLE**, individual **plants** or parts of plants …

UPOV

Single record for a group of plants or parts of plants (G)

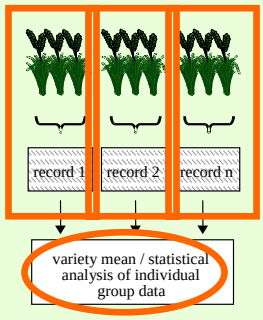
Section 4.3.2.3
Example (VG): Flower: type
(tulip: vegetatively propagated)

Section 4.3.2.3
Example (VG): Lowest leaf: hairiness of leaf sheaths
(barley: self-pollinated)



Section 4.3.2.3
Example (MG): Plant: height
(wheat: self-pollinated)

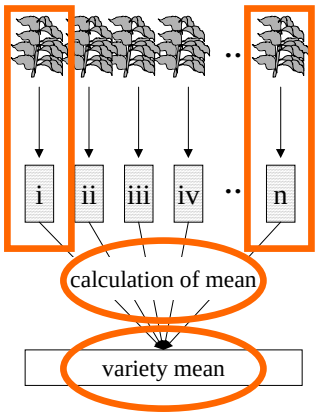
Section 4.3.2.4
Example: (statistical analysis)



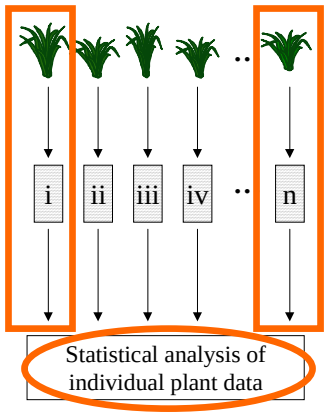
UPOV

Records for a number of single, individual plants or parts of plants (S)

Section 4.3.3.1
Example (MS): Leaflet: length
(pea: self-pollinated)



Section 4.3.3.2
Example (MS): Plant: natural height
Example (VS): Plant: growth habit
(ryegrass: cross-pollinated)



UPOV

EXERCISE

MG ?
MS ?
VG ?
VS ?

UPOV

4.5 Summary

The following table summarizes the common method of observation and type of record for the assessment of distinctness, although there may be exceptions:

	Type of expression of characteristic		
Method of propagation of the variety	QL	PQ	QN
Vegetatively propagated	VG	VG	VG/MG/MS
Self-pollinated	VG	VG	VG/MG/MS
Cross-pollinated	VG/(VS*)	VG/(VS*)	VS/VG/MS/MG
Hybrids	VG/(VS*)	VG/(VS*)	**

* Records of individual plants only necessary if segregation is to be recorded.
** To be considered according to the type of hybrid.

1.		**Plant: height (at time of harvest)**	
QN		very short	1
		short	3
		medium	5
		tall	7
		very tall	9

2.		**Leaf: twisting of tip**	
QN		absent or very weak	1
		weak	3
		medium	5
		strong	7
		very strong	9

3.	**Leaf: undulation of margin of blade**		
QN	absent or very weak	1	
	intermediate	2	
	strong	3	

4.	**Tassel: number of primary lateral branches**		
QN	absent or very few	1	
	few	3	
	medium	5	
	many	7	
	very many	9	

5.	**Leaf: width of blade**	
QN	very narrow	1
	narrow	3
	medium	5
	wide	7
	very wide	9

6.	**Plant: time of inflorescence emergence (without vernalization)**	
QN	very early	1
	early	3
	medium	5
	late	7
	very late	9

7.	**Plant: vegetative growth habit (without vernalization)**	
QN	erect	1
	semi-erect	3
	medium	5
	semi-prostrate	7
	prostrate	9

4. TEST GUIDELINES (document TGP/7)

(d) Asterisked, grouping and TQ characteristics (functional categories)

Standard
Test Guidelines Characteristic

Function	Criteria
1.Characteristics that are **accepted by UPOV for examination of DUS** and from which members of the Union can select those suitable for their particular circumstances.	1.Must satisfy the criteria for use of any characteristic for DUS as set out in **Chapter 4, section 4.2**. 2.Must have been **used** to develop a variety description **by at least one member of the Union**. 3.Where there is a long list of such characteristics and, where considered appropriate, there may be an indication of the extent of use of each characteristic.

Asterisked Characteristic

7. Table of Characteristics/Tableau des caractères/Merkmalstabelle/Tabla de caracteres

Char. No.	English	français	Deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
1. (*) (+)	**Plant: growth habit**	**Plante : port**	**Pflanze: Wuchsform**	**Planta: porte**		
QN	upright	dressé	aufrecht	erecto	Inuppink	1
	semi-upright	semi dressé	halbaufrecht	semierecto	D0158-1	2
	spreading	étalé	breitwüchsig	abierto	Sumnem 03	3
	semi-trailing	semi-étalé	halbhängend	semirrastrero	Inupsaf	4
	trailing	coureux	hängend	rastrero	Organza	5

Asterisked Characteristic

Function	Criteria
1.Characteristics that are important **for the international harmonization of variety descriptions**.	1.Must be a characteristic included in the Test Guidelines. 2.**Should always be examined** for DUS and included in the variety description **by all members of the Union** **EXCEPT** when the state of expression of a preceding characteristic or regional environmental conditions render this inappropriate. 3.Must be useful for function 1. 4.Particular care should be taken before selection of disease resistance characteristics.

Grouping Characteristic

5. Grouping of Varieties and Organization of the Growing Trial

5.1 The selection of varieties of common knowledge to be grown in the trial with the candidate varieties and the way in which these varieties are divided into groups to facilitate the assessment of distinctness are aided by the use of grouping characteristics.

5.2 Grouping characteristics are those in which the documented states of expression, even where produced at different locations, can be used, either individually or in combination with other such characteristics: (a) to select varieties of common knowledge that can be excluded from the growing trial used for examination of distinctness; and (b) to organize the growing trial so that similar varieties are grouped together.

5.3 The following have been agreed as useful grouping characteristics:

(a) Plant: growth habit (characteristic 1)
(b) Leaf blade: variegation (characteristic 11)
(c) Upper lobes of corolla: main color (characteristic 24), with the following groups:
Gr. 1: white
Gr. 2: yellow
Gr. 3: orange
Gr. 4: pink
Gr. 5: red
Gr. 6: red purple
Gr. 7: violet
Gr. 8: blue

Grouping Characteristic

Function	Criteria
characteristics in which the **documented states of expression**, even where recorded **at different locations**, can be used either individually or in combination with other such characteristics: **1. to select varieties of common knowledge that can be excluded from the growing trial** used for examination of distinctness, and/or **2. to organize the growing trial so that similar varieties are grouped together**	1.(a) Qualitative characteristics or (b) Quantitative or pseudo-qualitative characteristics which provide useful discrimination between the varieties of common knowledge from documented states of expression recorded at different locations. 2.Must be useful for functions 1 and 2. 3.Should be an **asterisked characteristic** and/or included in the **Technical Questionnaire** or application form.

Relationship between functions

(a) **GROUPING CHARACTERISTICS** selected from the Table of Characteristics should, in general, **receive an asterisk** in the Table of Characteristics and be **included in the Technical Questionnaire**.

(b) **TQ CHARACTERISTICS** selected from the Table of Characteristics should, in general, **receive an asterisk** in the Table of Characteristics and be **used as grouping characteristics**. TQ characteristics are **not restricted to** those characteristics used as **grouping characteristics**;

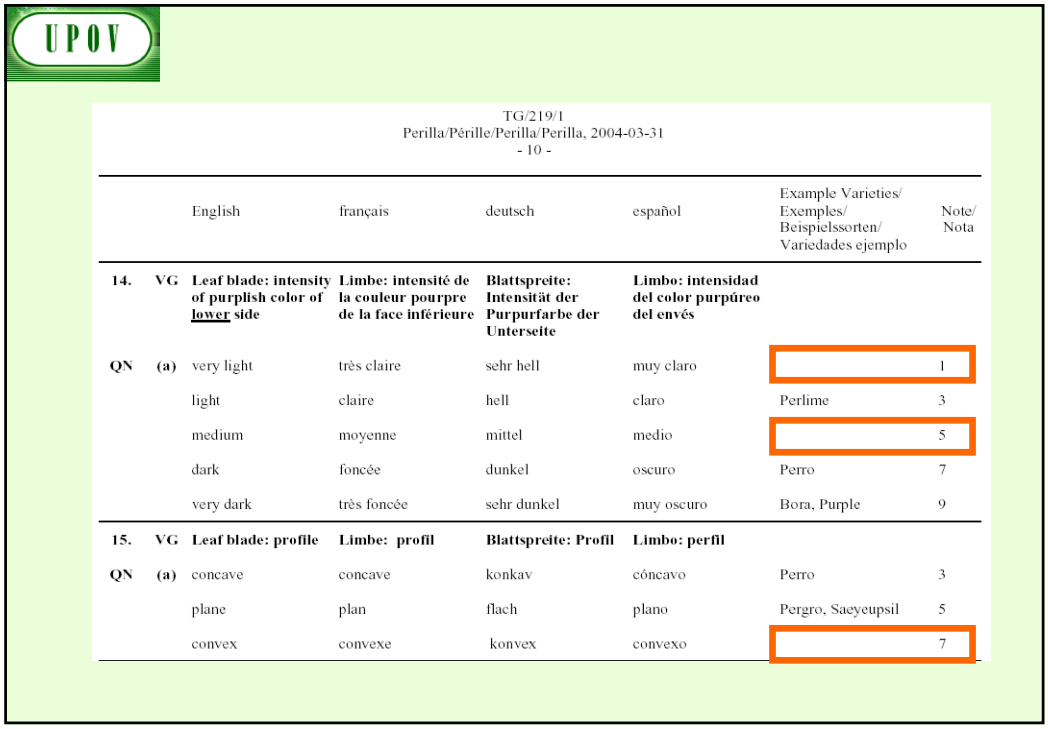
(c) **ASTERISKED CHARACTERISTICS** are **not restricted to** those characteristics selected as **grouping or TQ characteristics**.

4. TEST GUIDELINES (document TGP/7)

(e) Example varieties

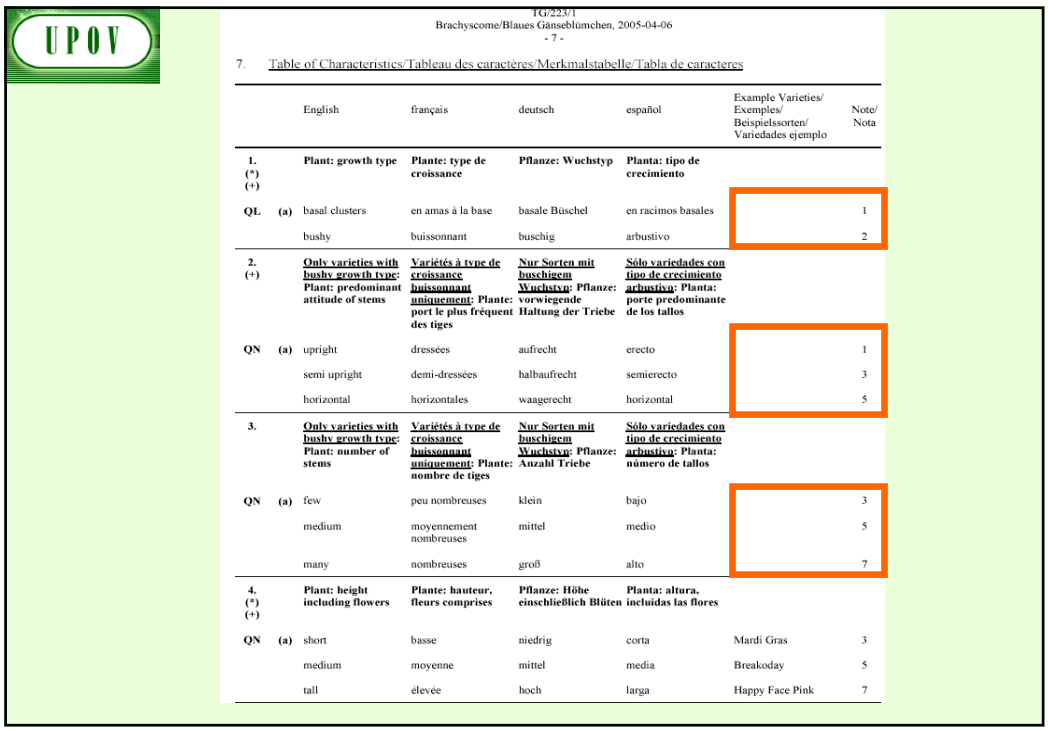
7. Table of Characteristics/Tableau des caractères/Merkmalstabelle/Tabla de caracteres

	English	français	Deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
1. (*)	**Seed: color**	**Semence: couleur**	**Samen: Farbe**	**Semilla: color**		
	white	blanche	weiß	blanco	Verpia	1
	yellow	jaune	gelb	amarillo	Durango	2
	black	noire	schwarz	negro	Kagraner Sommer	3
2. (*) (+)	**Seedling: anthocyanin coloration**	**Plantule: pigmentation anthocyanique**	**Keimpflanze: Anthocyanfärbung**	**Plántula: pigmentación antociánica**		
	absent	absente	fehlend	ausente	Verpia	1
	present	présente	vorhanden	presente	Pirat	9
3.	**Seedling: size of cotyledon (fully developed)**	**Plantule: taille du cotylédon (à complet développement)**	**Keimpflanze: Größe des Keimblatts (voll entwickelt)**	**Plántula: tamaño del cotiledón (plenamente desarrollado)**		
	small	petit	klein	pequeño	Romance	3
	medium	moyen	mittel	medio	Expresse	5
	large	grand	groß	grande	Verpia	7



TG/219/1
Perilla/Pérille/Perilla/Perilla, 2004-03-31
- 10 -

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
14.	**VG**	**Leaf blade: intensity of purplish color of lower side**	**Limbe: intensité de la couleur pourpre de la face inférieure**	**Blattspreite: Intensität der Purpurfarbe der Unterseite**	**Limbo: intensidad del color purpúreo del envés**		
QN	**(a)**	very light	très claire	sehr hell	muy claro		1
		light	claire	hell	claro	Perlime	3
		medium	moyenne	mittel	medio		5
		dark	foncée	dunkel	oscuro	Perro	7
		very dark	très foncée	sehr dunkel	muy oscuro	Bora, Purple	9
15.	**VG**	**Leaf blade: profile**	**Limbe: profil**	**Blattspreite: Profil**	**Limbo: perfil**		
QN	**(a)**	concave	concave	konkav	cóncavo	Perro	3
		plane	plan	flach	plano	Pergro, Saeyeupsil	5
		convex	convexe	konvex	convexo		7



TG/223/1
Brachyscome/Blaues Gänseblümchen, 2005-04-06
- 7 -

7. Table of Characteristics/Tableau des caractères/Merkmalstabelle/Tabla de caracteres

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
1. **(*)** **(+)**		**Plant: growth type**	**Plante: type de croissance**	**Pflanze: Wuchstyp**	**Planta: tipo de crecimiento**		
QL	**(a)**	basal clusters	en amas à la base	basale Büschel	en racimos basales		1
		bushy	buissonnant	buschig	arbustivo		2
2. **(+)**		**Only varieties with bushy growth type: Plant: predominant attitude of stems**	**Variétés à type de croissance buissonnant uniquement: Plante: port le plus fréquent des tiges**	**Nur Sorten mit buschigem Wuchstyp: Pflanze: vorwiegende Haltung der Triebe**	**Sólo variedades con tipo de crecimiento arbustivo: Planta: porte predominante de los tallos**		
QN	**(a)**	upright	dressées	aufrecht	erecto		1
		semi upright	demi-dressées	halbaufrecht	semierecto		3
		horizontal	horizontales	waagerecht	horizontal		5
3.		**Only varieties with bushy growth type: Plant: number of stems**	**Variétés à type de croissance buissonnant uniquement: Plante: nombre de tiges**	**Nur Sorten mit buschigem Wuchstyp: Pflanze: Anzahl Triebe**	**Sólo variedades con tipo de crecimiento arbustivo: Planta: número de tallos**		
QN	**(a)**	few	peu nombreuses	klein	bajo		3
		medium	moyennement nombreuses	mittel	medio		5
		many	nombreuses	groß	alto		7
4. **(*)** **(+)**		**Plant: height including flowers**	**Plante: hauteur, fleurs comprises**	**Pflanze: Höhe einschließlich Blüten**	**Planta: altura, incluidas las flores**		
QN	**(a)**	short	basse	niedrig	corta	Mardi Gras	3
		medium	moyenne	mittel	media	Breakoday	5
		tall	élevée	hoch	larga	Happy Face Pink	7

UPOV

Example Varieties: the Objective

Clarify states of expression

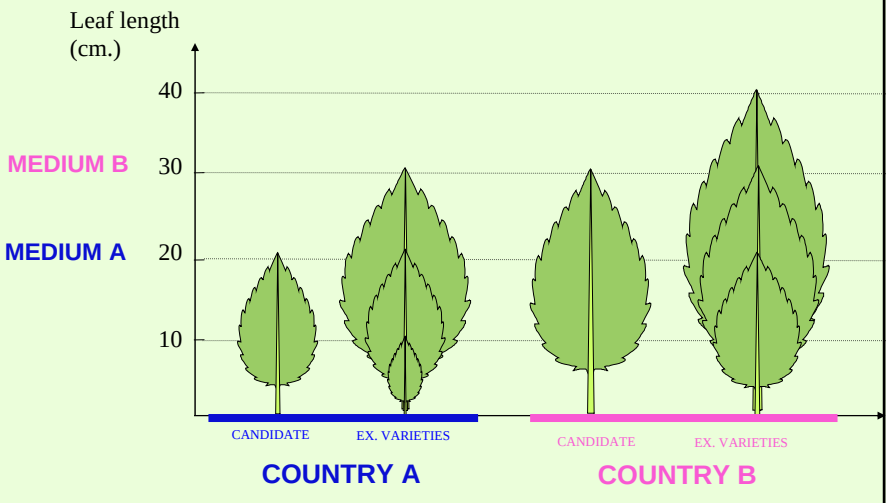
- **Illustrate characteristics**
- **Determine the state of expression**

⇩

Harmonized descriptions

UPOV

Example Varieties versus Measurements



UPOV

Example Varieties –the need

UPOV

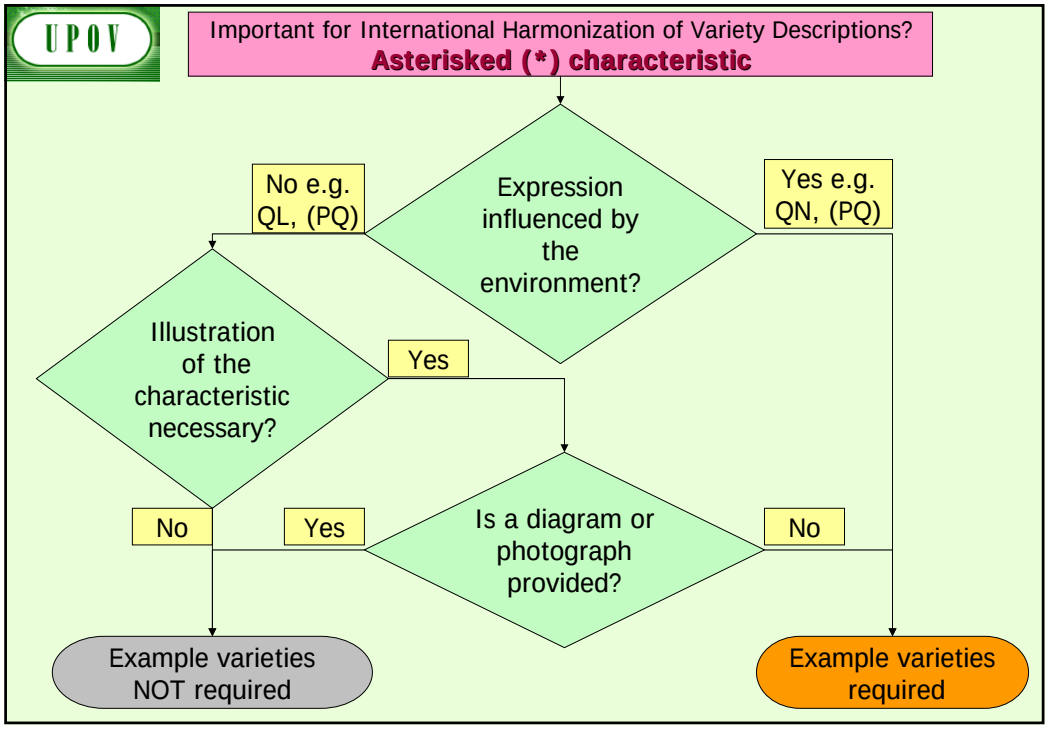
Example Varieties – the need

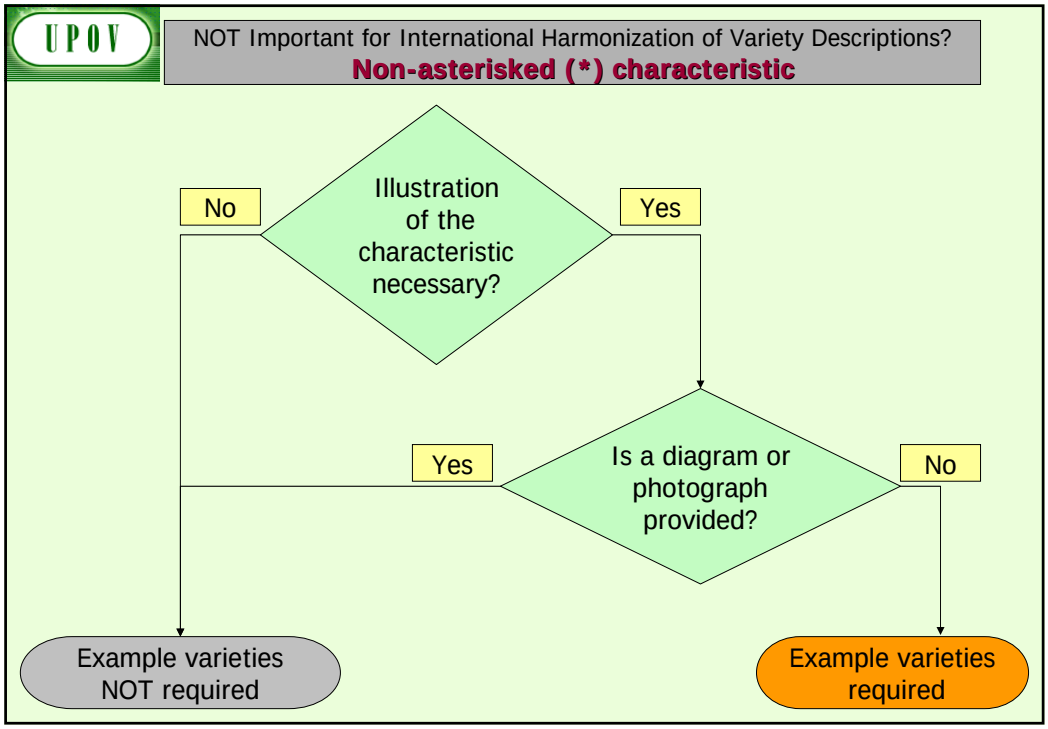
NEED

in characteristics used to **harmonize descriptions**

and

which are **influenced by the environment**


UPOV
Important for International Harmonization of Variety Descriptions?
Asterisked (*) characteristic
Expression influenced by the environment?
No e.g. QL, (PQ)
Yes e.g. QN, (PQ)
Illustration of the characteristic necessary?
Yes
No
Yes
Is a diagram or photograph provided?
No
Example varieties NOT required
Example varieties required


UPOV
NOT Important for International Harmonization of Variety Descriptions?
Non-asterisked (*) characteristic
Illustration of the characteristic necessary?
No
Yes
Yes
Is a diagram or photograph provided?
No
Example varieties NOT required
Example varieties required

Example Varieties - availability

widely and freely available

- National Authority
- DUS examiners
- Breeders

Example Varieties within the collection

must show the range of expression in the collection

- QN
  - **3 : short**
  - **5 : medium**
  - **7 : long**
- PQ:
  - **cover the whole range**

Example Varieties Fluctuation

Maintain the expression for the characteristic in relation to the other varieties in the collection

Example Varieties number

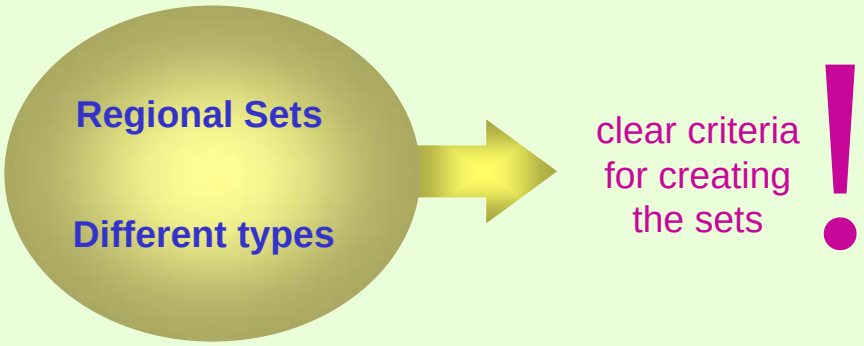
All desired characteristics covered with the minimum number of example varieties

Example Varieties - agreement

Proposed by the Leading Expert of the TG (in cooperation with interested experts)

Accepted if no objections are presented

Example Varieties - multiple sets



UPOV

4. TEST GUIDELINES (document TGP/7)

(f) The process for developing UPOV Test Guidelines

UPOV

Test Guidelines

- **257 Test Guidelines** adopted

but...

- **>2,500 genera and species** with varieties examined for PBR

PRIORITY for UPOV Test Guidelines

PRIORITY for species or crops with high:

- **number of authorities receiving PBR applications;**
- **number of PBR applications;**
- **number of foreign applications received by UPOV members;**
- **economic importance;**
- **level of breeding activity**

EXAMPLE (New Test Guidelines)

Test Guidelines: ***Plantus magnifica*** **L.**
(Common name: Alpha)

Technical Working Party: **TWX**

TWX (2005):	Alpha (proj.**1**)
TWX (2006):	Alpha (proj.**2**)
TWX (2007):	Alpha (proj.**3**)
Enlarged Editorial Committee (2008):	Alpha (proj.**4**)
Technical Committee (2008):	Alpha (proj.**5**)
Final adopted document (2008):	**TG/500/1**

UPOV

5. UPOV DATABASES

UPOV

Article 20 of the 1991 Act
(Variety denominations)

(2) [*Characteristics of the* ***denomination***]

In particular, it **must be different from every denomination** which designates, in the territory of any Contracting Party, **an existing variety** of the same plant species or of a closely related species.

UPOV

GENIE Database

(Genus / species)

UPOV

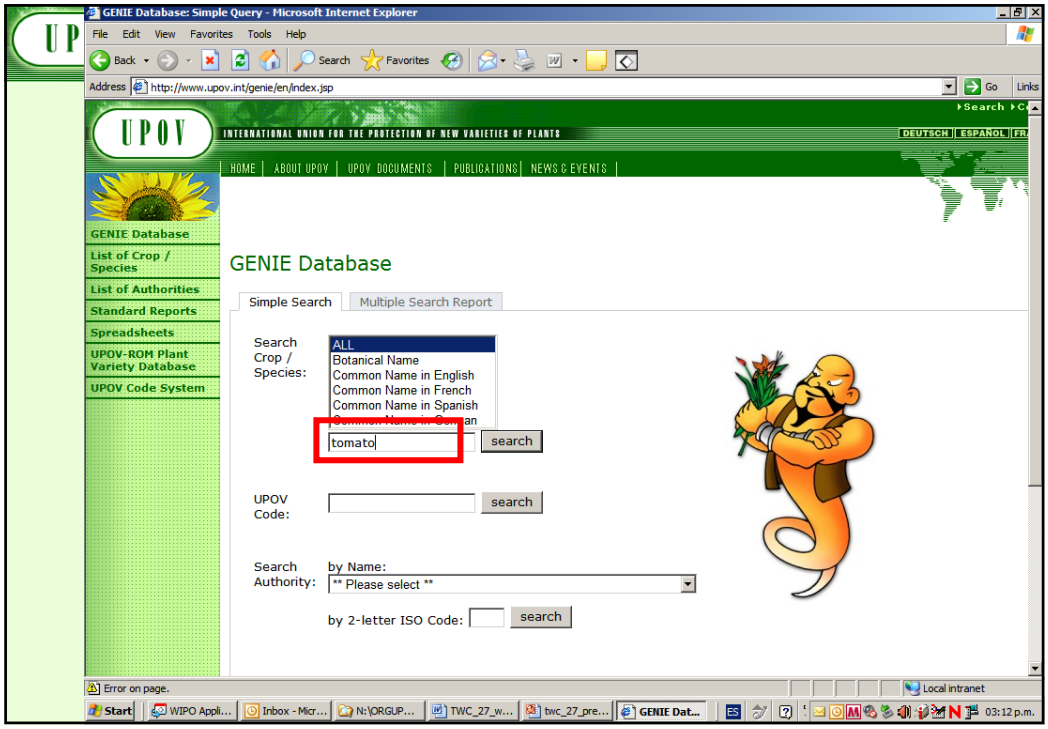
GENIE Database 

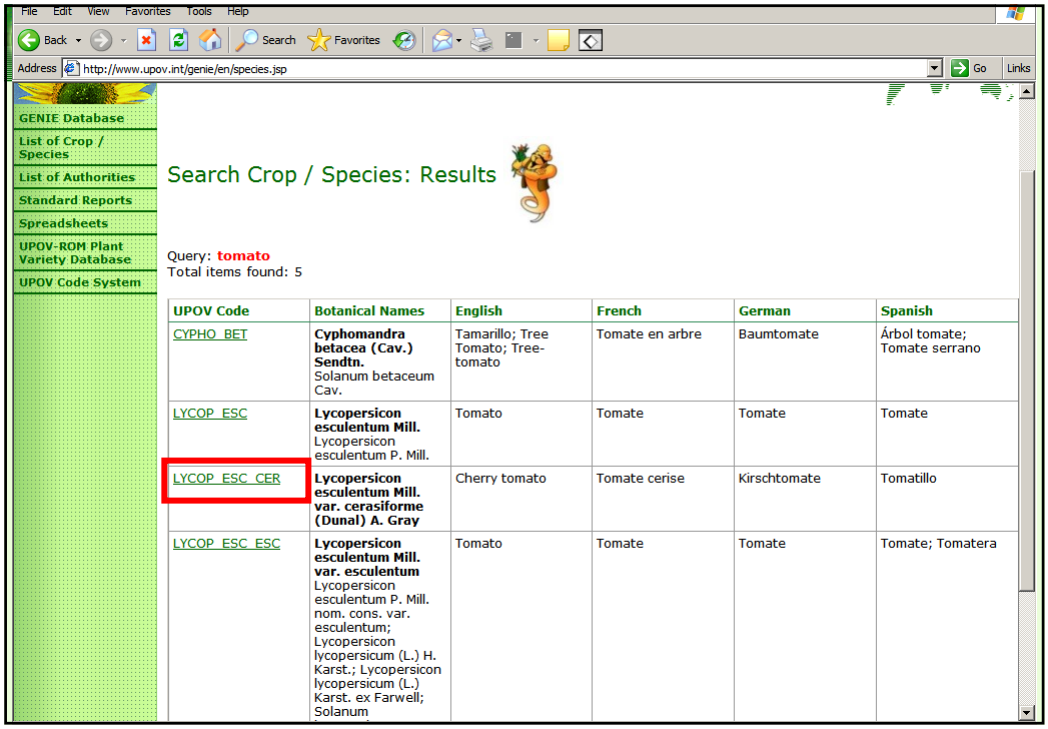
Variety denomination related information

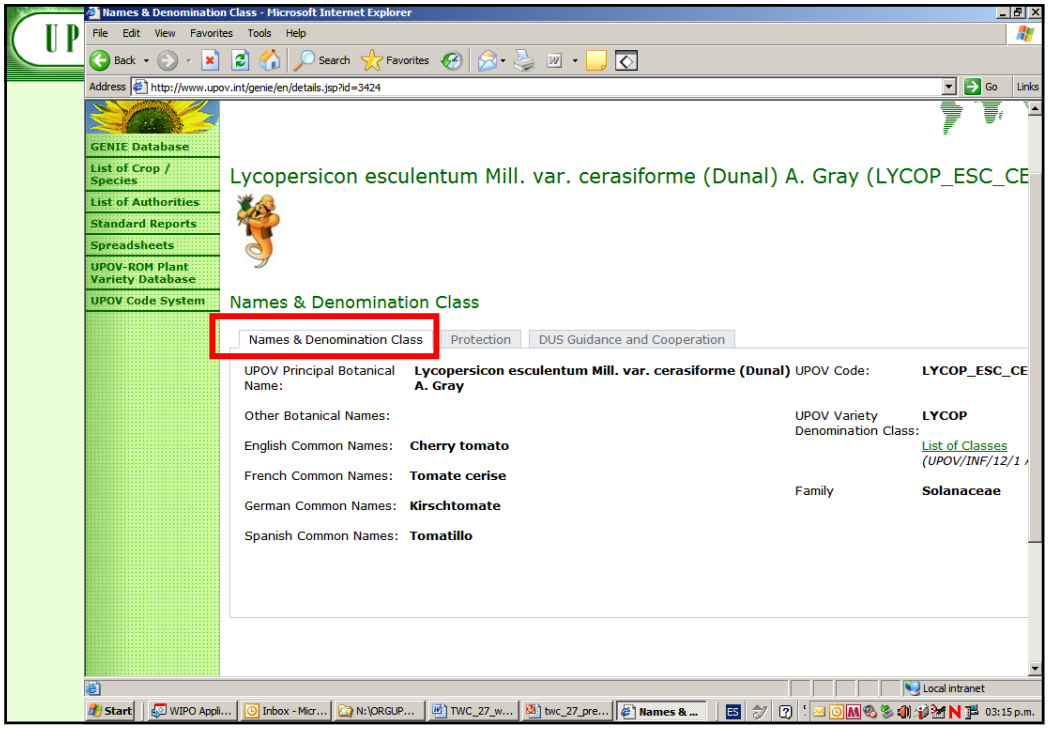
Protection offered by UPOV members

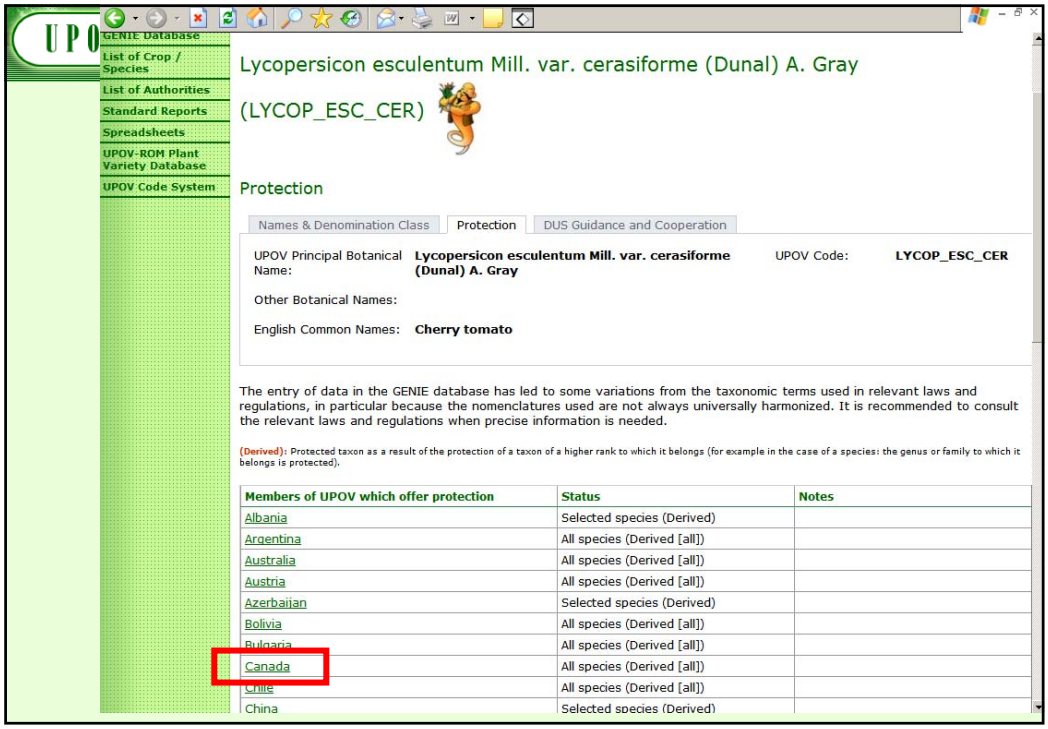
DUS information

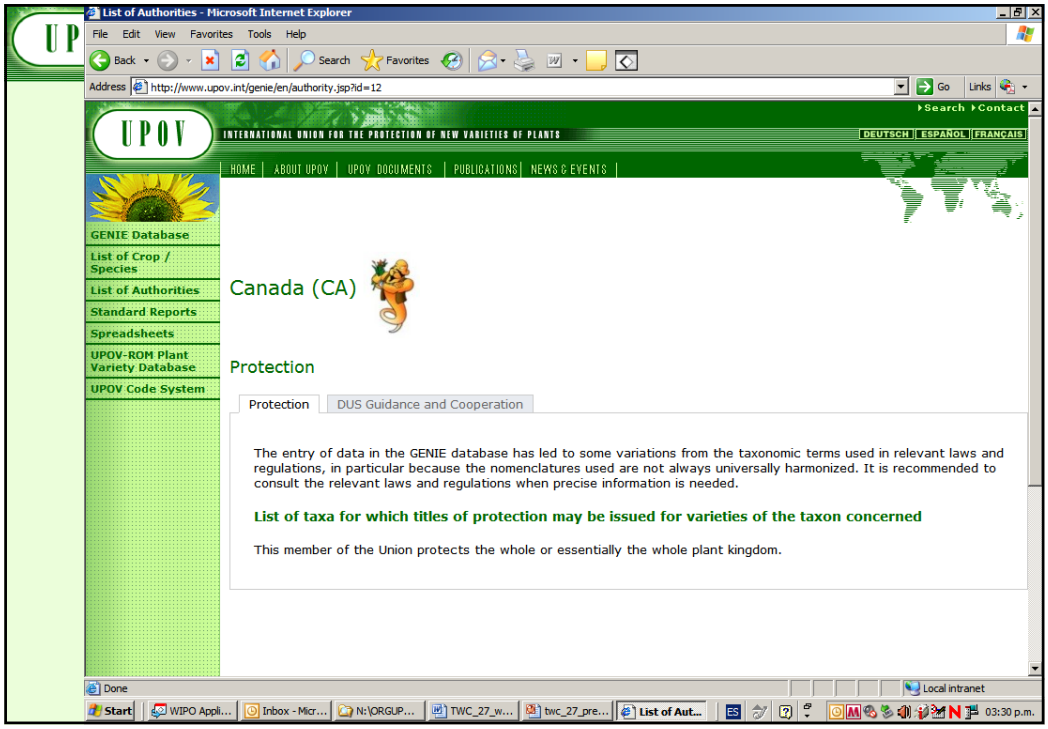
- UPOV Test Guidelines
- practical experience of UPOV (document TC/44/4)
- cooperation in DUS examination (document C/41/5)

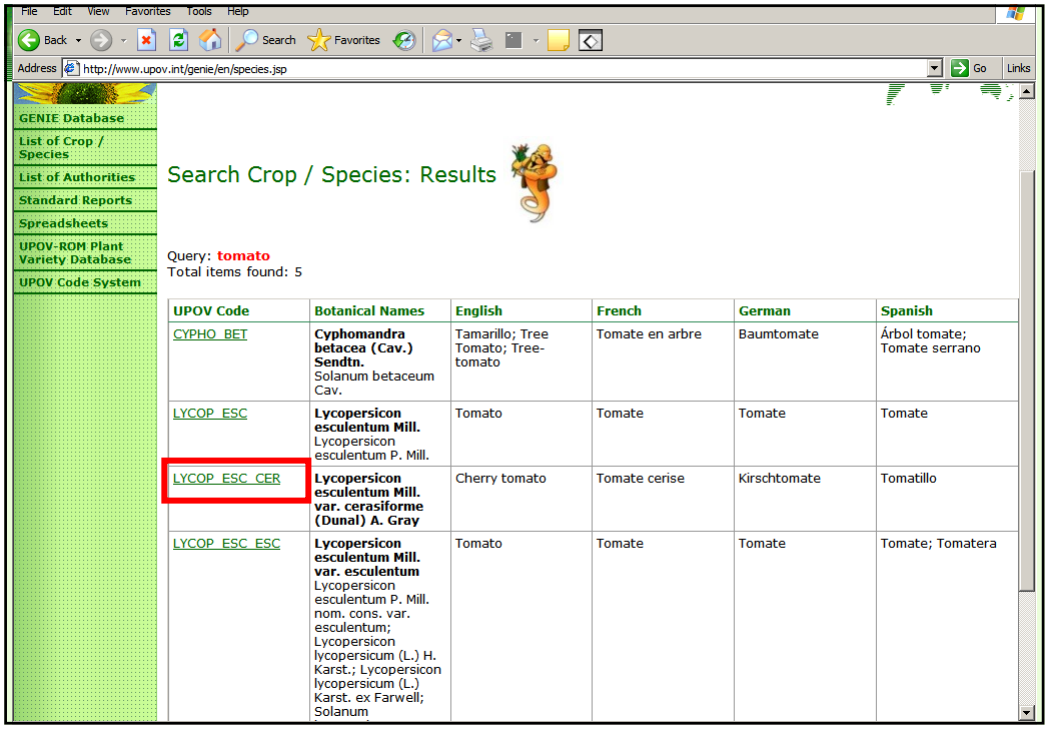

GENIE Database: Simple Query - Microsoft Internet Explorer
http://www.upov.int/genie/en/index.jsp
UPOV
INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS
HOME | ABOUT UPOV | UPOV DOCUMENTS | PUBLICATIONS | NEWS & EVENTS
GENIE Database
List of Crop / Species
List of Authorities
Standard Reports
Spreadsheets
UPOV-ROM Plant Variety Database
UPOV Code System
GENIE Database
Simple Search
Multiple Search Report
Search Crop / Species:
ALL
Botanical Name
Common Name in English
Common Name in French
Common Name in Spanish
tomato
search
UPOV Code:
search
Search Authority:
by Name:
** Please select **
by 2-letter ISO Code:
search

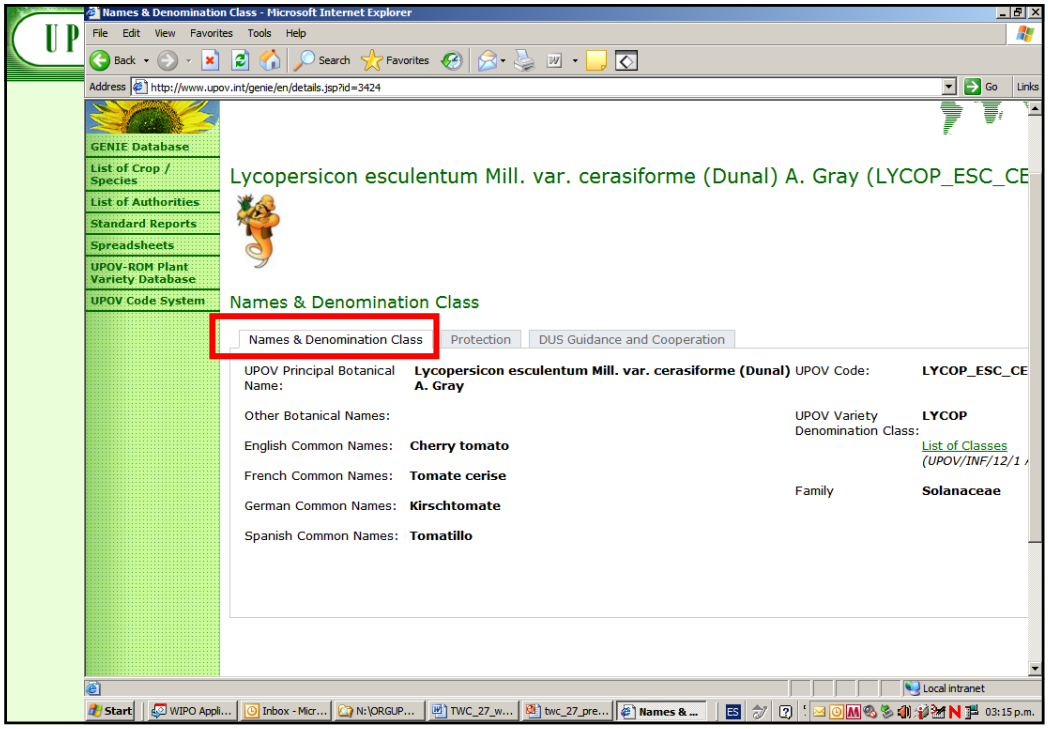

http://www.upov.int/genie/en/species.jsp
GENIE Database
List of Crop / Species
List of Authorities
Standard Reports
Spreadsheets
UPOV-ROM Plant Variety Database
UPOV Code System
Search Crop / Species: Results
Query: tomato
Total items found: 5
UPOV Code | Botanical Names | English | French | German | Spanish
CYPHO_BET | Cyphomandra betacea (Cav.) Sendtn. Solanum betaceum Cav. | Tamarillo; Tree Tomato; Tree-tomato | Tomate en arbre | Baumtomate | Árbol tomate; Tomate serrano
LYCOP_ESC | Lycopersicon esculentum Mill. Lycopersicon esculentum P. Mill. | Tomato | Tomate | Tomate | Tomate
LYCOP_ESC_CER | Lycopersicon esculentum Mill. var. cerasiforme (Dunal) A. Gray | Cherry tomato | Tomate cerise | Kirschtomate | Tomatillo
LYCOP_ESC_ESC | Lycopersicon esculentum Mill. var. esculentum Lycopersicon esculentum P. Mill. nom. cons. var. esculentum; Lycopersicon lycopersicum (L.) H. Karst.; Lycopersicon lycopersicum (L.) Karst. ex Farwell; Solanum | Tomato | Tomate | Tomate | Tomate; Tomatera


Names & Denomination Class - Microsoft Internet Explorer
http://www.upov.int/genie/en/details.jsp?id=3424
GENIE Database
List of Crop / Species
List of Authorities
Standard Reports
Spreadsheets
UPOV-ROM Plant Variety Database
UPOV Code System
Lycopersicon esculentum Mill. var. cerasiforme (Dunal) A. Gray (LYCOP_ESC_CE
Names & Denomination Class
Names & Denomination Class
Protection
DUS Guidance and Cooperation
UPOV Principal Botanical Name: Lycopersicon esculentum Mill. var. cerasiforme (Dunal) A. Gray
UPOV Code: LYCOP_ESC_CE
Other Botanical Names:
UPOV Variety Denomination Class: LYCOP
English Common Names: Cherry tomato
List of Classes (UPOV/INF/12/1
French Common Names: Tomate cerise
Family Solanaceae
German Common Names: Kirschtomate
Spanish Common Names: Tomatillo


GENIE Database
List of Crop / Species
List of Authorities
Standard Reports
Spreadsheets
UPOV-ROM Plant Variety Database
UPOV Code System
Lycopersicon esculentum Mill. var. cerasiforme (Dunal) A. Gray
(LYCOP_ESC_CER)
Protection
Names & Denomination Class
Protection
DUS Guidance and Cooperation
UPOV Principal Botanical Name: Lycopersicon esculentum Mill. var. cerasiforme (Dunal) A. Gray
UPOV Code: LYCOP_ESC_CER
Other Botanical Names:
English Common Names: Cherry tomato
The entry of data in the GENIE database has led to some variations from the taxonomic terms used in relevant laws and regulations, in particular because the nomenclatures used are not always universally harmonized. It is recommended to consult the relevant laws and regulations when precise information is needed.
(Derived): Protected taxon as a result of the protection of a taxon of a higher rank to which it belongs (for example in the case of a species: the genus or family to which it belongs is protected).
Members of UPOV which offer protection | Status | Notes
Albania | Selected species (Derived)
Argentina | All species (Derived [all])
Australia | All species (Derived [all])
Austria | All species (Derived [all])
Azerbaijan | Selected species (Derived)
Bolivia | All species (Derived [all])
Bulgaria | All species (Derived [all])
Canada | All species (Derived [all])
Chile | All species (Derived [all])
China | Selected species (Derived)


List of Authorities - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Address http://www.upov.int/genie/en/authority.jsp?id=12
UPOV
INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS
Search Contact
DEUTSCH ESPAÑOL FRANÇAIS
HOME ABOUT UPOV UPOV DOCUMENTS PUBLICATIONS NEWS & EVENTS
GENIE Database
List of Crop / Species
List of Authorities
Standard Reports
Spreadsheets
UPOV-ROM Plant Variety Database
UPOV Code System
Canada (CA)
Protection
Protection
DUS Guidance and Cooperation
The entry of data in the GENIE database has led to some variations from the taxonomic terms used in relevant laws and regulations, in particular because the nomenclatures used are not always universally harmonized. It is recommended to consult the relevant laws and regulations when precise information is needed.
List of taxa for which titles of protection may be issued for varieties of the taxon concerned
This member of the Union protects the whole or essentially the whole plant kingdom.
Done
Local intranet
Start
03:30 p.m.


File Edit View Favorites Tools Help
Address http://www.upov.int/genie/en/species.jsp
GENIE Database
List of Crop / Species
List of Authorities
Standard Reports
Spreadsheets
UPOV-ROM Plant Variety Database
UPOV Code System
Search Crop / Species: Results
Query: tomato
Total items found: 5
UPOV Code | Botanical Names | English | French | German | Spanish
CYPHO_BET | Cyphomandra betacea (Cav.) Sendtn. Solanum betaceum Cav. | Tamarillo; Tree Tomato; Tree-tomato | Tomate en arbre | Baumtomate | Árbol tomate; Tomate serrano
LYCOP_ESC | Lycopersicon esculentum Mill. Lycopersicon esculentum P. Mill. | Tomato | Tomate | Tomate | Tomate
LYCOP_ESC_CER | Lycopersicon esculentum Mill. var. cerasiforme (Dunal) A. Gray | Cherry tomato | Tomate cerise | Kirschtomate | Tomatillo
LYCOP_ESC_ESC | Lycopersicon esculentum Mill. var. esculentum Lycopersicon esculentum P. Mill. nom. cons. var. esculentum; Lycopersicon lycopersicum (L.) H. Karst.; Lycopersicon lycopersicum (L.) Karst. ex Farwell; Solanum | Tomato | Tomate | Tomate | Tomate; Tomatera


Names & Denomination Class - Microsoft Internet Explorer
http://www.upov.int/genie/en/details.jsp?id=3424
GENIE Database
List of Crop / Species
List of Authorities
Standard Reports
Spreadsheets
UPOV-ROM Plant Variety Database
UPOV Code System
Lycopersicon esculentum Mill. var. cerasiforme (Dunal) A. Gray (LYCOP_ESC_CE
Names & Denomination Class
Names & Denomination Class
Protection
DUS Guidance and Cooperation
UPOV Principal Botanical Name: Lycopersicon esculentum Mill. var. cerasiforme (Dunal) A. Gray
UPOV Code: LYCOP_ESC_CE
Other Botanical Names:
UPOV Variety Denomination Class: LYCOP
English Common Names: Cherry tomato
List of Classes (UPOV/INF/12/1
French Common Names: Tomate cerise
Family Solanaceae
German Common Names: Kirschtomate
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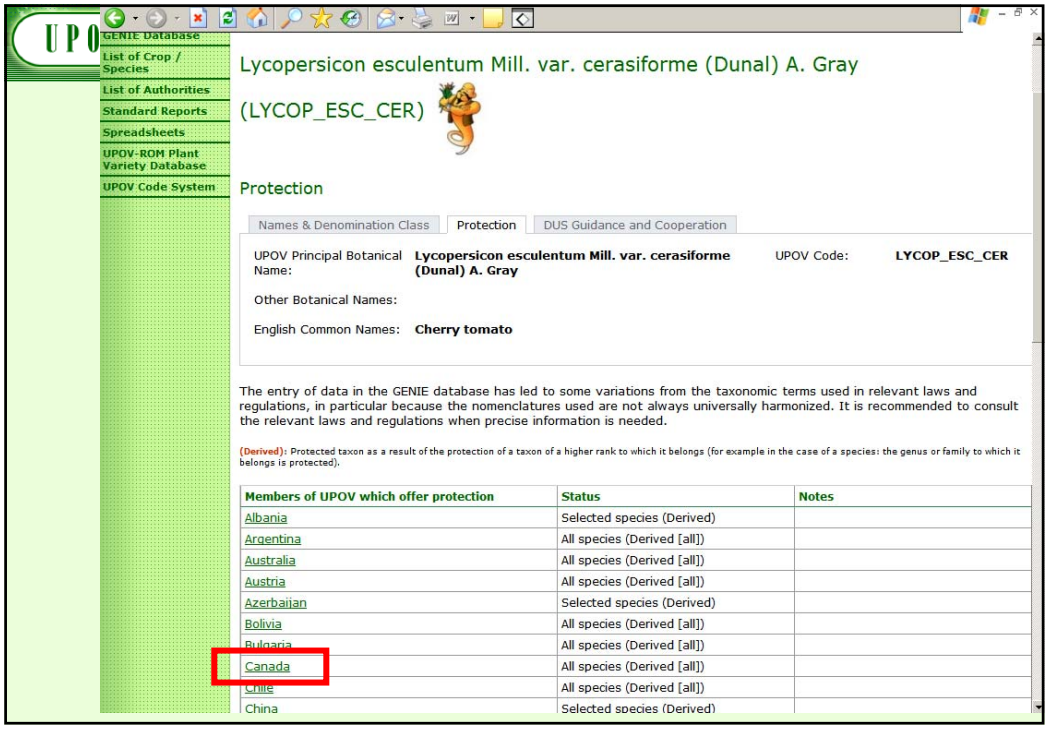
GENIE Database
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UPOV-ROM Plant Variety Database
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(LYCOP_ESC_CER)
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Names & Denomination Class
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DUS Guidance and Cooperation
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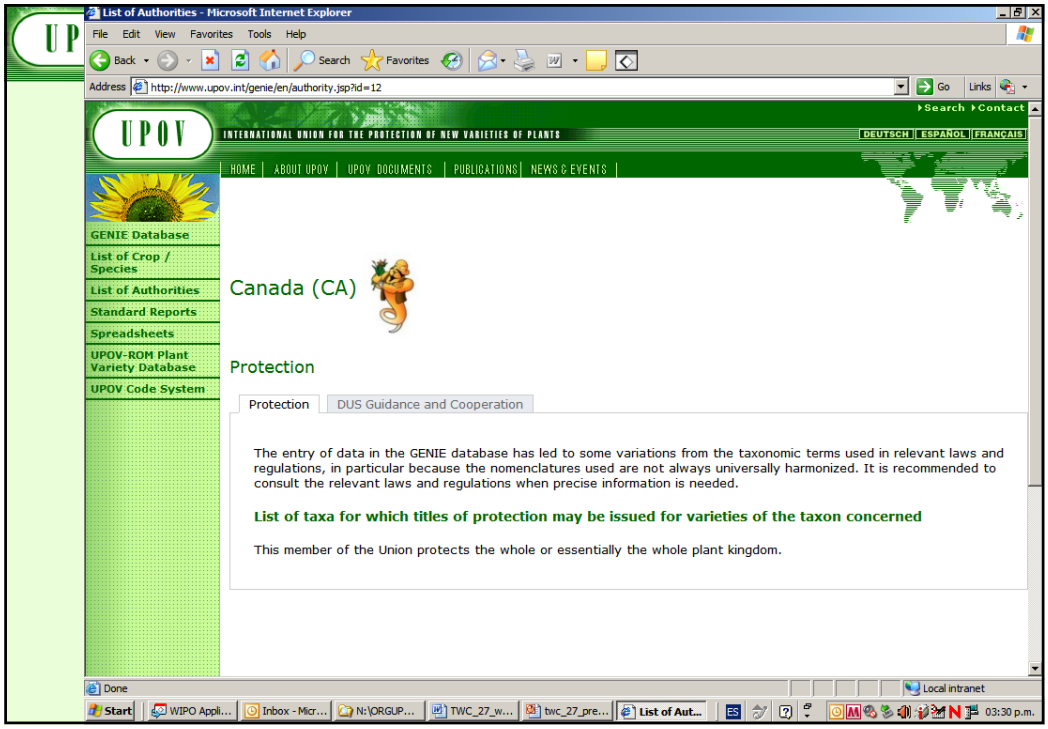
Azerbaijan | Selected species (Derived)
Bolivia | All species (Derived [all])
Bulgaria | All species (Derived [all])
Canada | All species (Derived [all])
Chile | All species (Derived [all])
China | Selected species (Derived)


List of Authorities - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Address http://www.upov.int/genie/en/authority.jsp?id=12
UPOV
INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS
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Canada (CA)
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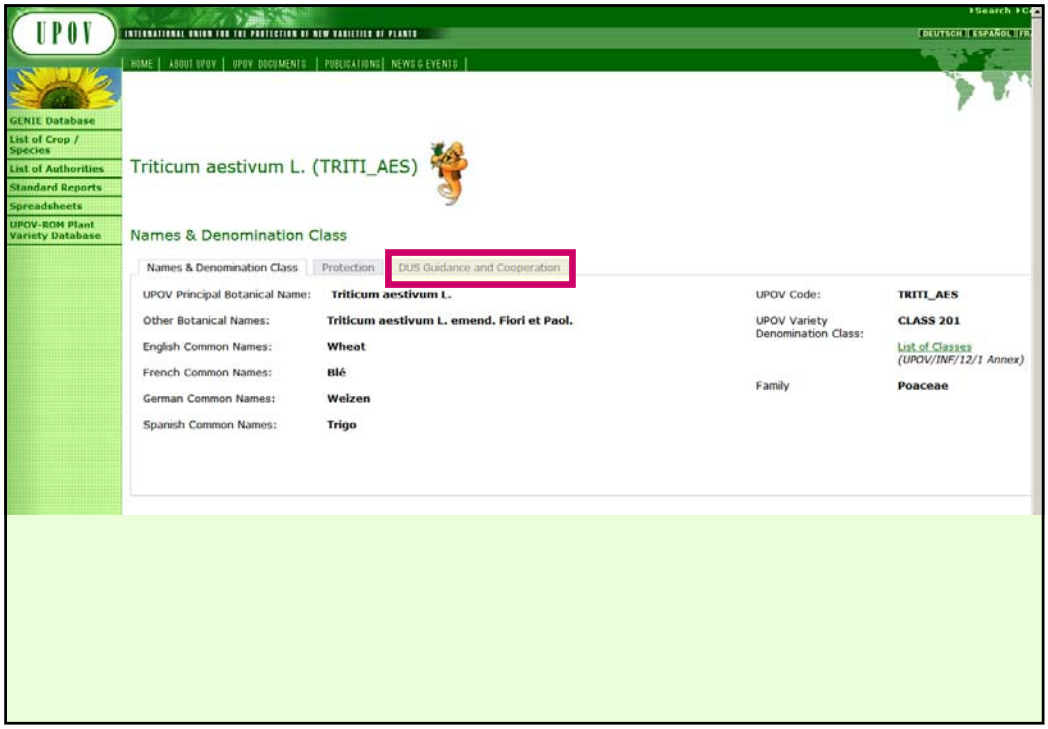
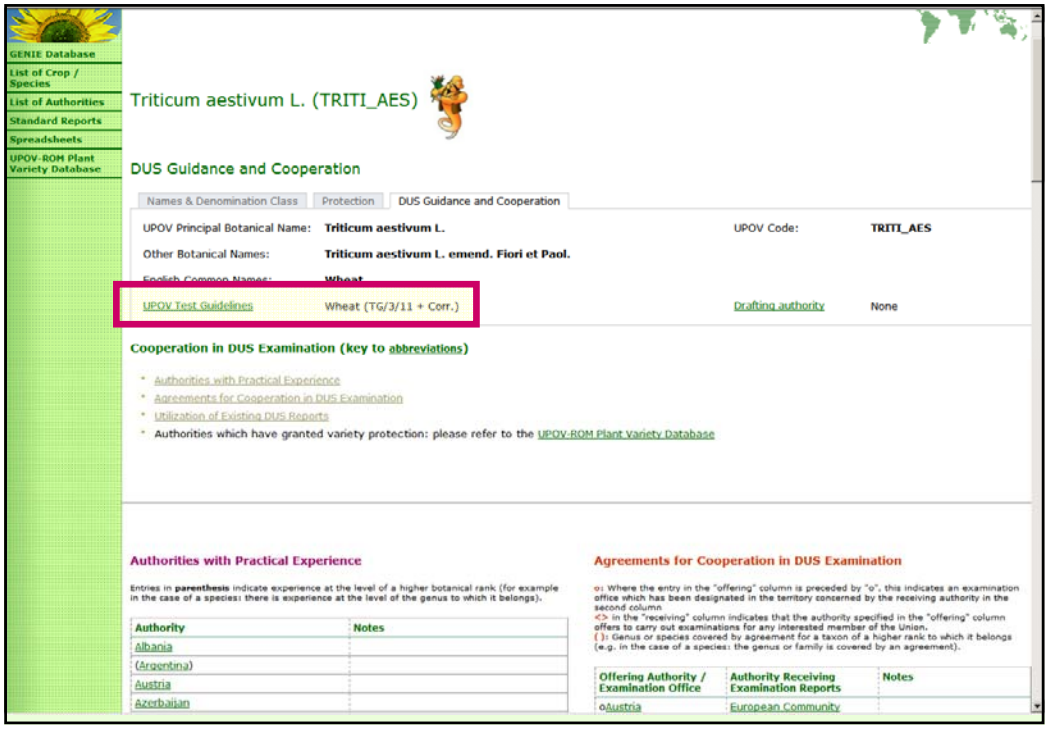
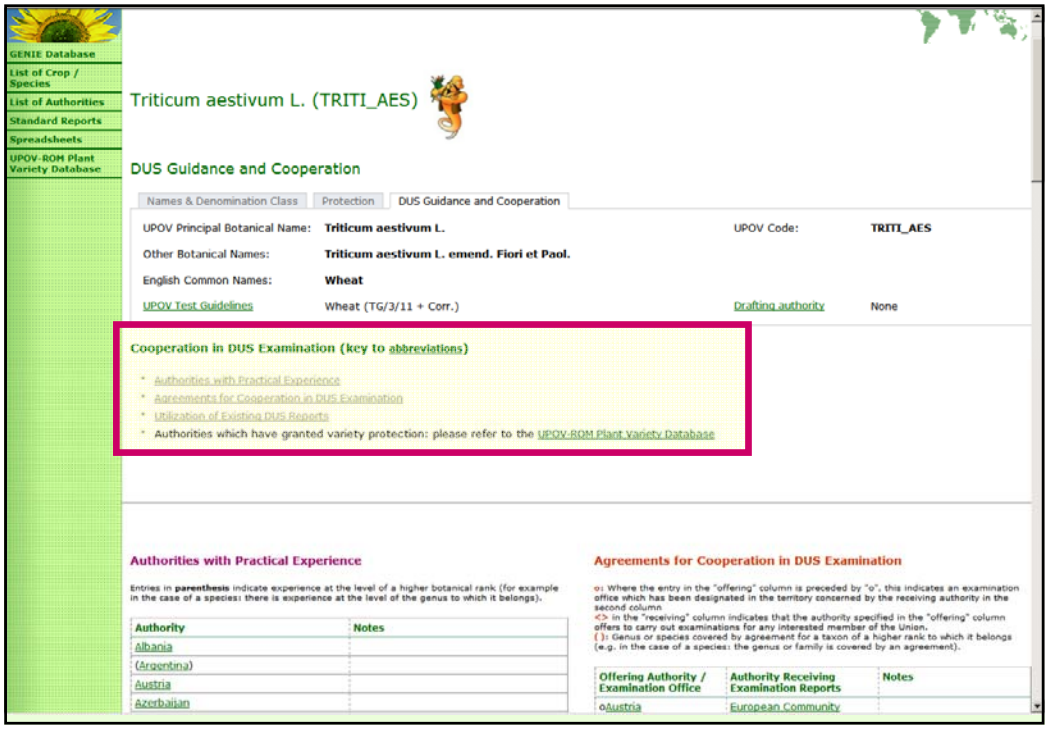
DUS Guidance and Cooperation
The entry of data in the GENIE database has led to some variations from the taxonomic terms used in relevant laws and regulations, in particular because the nomenclatures used are not always universally harmonized. It is recommended to consult the relevant laws and regulations when precise information is needed.
List of taxa for which titles of protection may be issued for varieties of the taxon concerned
This member of the Union protects the whole or essentially the whole plant kingdom.
Done
Local intranet
Start
03:30 p.m.


UPOV
HOME ABOUT UPOV UPOV DOCUMENTS PUBLICATIONS NEWS & EVENTS
GENIE Database
List of Crop / Species
List of Authorities
Standard Reports
Spreadsheets
UPOV-ROM Plant Variety Database
Triticum aestivum L. (TRITI_AES)
Names & Denomination Class
Names & Denomination Class
Protection
DUS Guidance and Cooperation
UPOV Principal Botanical Name: Triticum aestivum L.
Other Botanical Names: Triticum aestivum L. emend. Fiori et Paol.
English Common Names: Wheat
French Common Names: Blé
German Common Names: Weizen
Spanish Common Names: Trigo
UPOV Code: TRITI_AES
UPOV Variety Denomination Class: CLASS 201
List of Classes (UPOV/INF/12/1 Annex)
Family: Poaceae


GENIE Database
List of Crop / Species
List of Authorities
Standard Reports
Spreadsheets
UPOV-ROM Plant Variety Database
Triticum aestivum L. (TRITI_AES)
DUS Guidance and Cooperation
Names & Denomination Class
Protection
DUS Guidance and Cooperation
UPOV Principal Botanical Name: Triticum aestivum L.
UPOV Code: TRITI_AES
Other Botanical Names: Triticum aestivum L. emend. Fiori et Paol.
UPOV Test Guidelines
Wheat (TG/3/11 + Corr.)
Drafting authority
None
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).
Authority
Notes
Albania
(Argentina)
Austria
Azerbaijan
Agreements for Cooperation in DUS Examination
o: Where the entry in the "offering" column is preceded by "o", this indicates an examination office which has been designated in the territory concerned by the receiving authority in the second column
<>: 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
Authority Receiving Examination Reports
Notes
oAustria
European Community


GENIE Database
List of Crop / Species
List of Authorities
Standard Reports
Spreadsheets
UPOV-ROM Plant Variety Database
Triticum aestivum L. (TRITI_AES)
DUS Guidance and Cooperation
Names & Denomination Class
Protection
DUS Guidance and Cooperation
UPOV Principal Botanical Name: Triticum aestivum L.
UPOV Code: TRITI_AES
Other Botanical Names: Triticum aestivum L. emend. Fiori et Paol.
English Common Names: Wheat
UPOV Test Guidelines
Wheat (TG/3/11 + Corr.)
Drafting authority
None
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
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Authority
Notes
Albania
(Argentina)
Austria
Azerbaijan
Agreements for Cooperation in DUS Examination
o: Where the entry in the "offering" column is preceded by "o", this indicates an examination office which has been designated in the territory concerned by the receiving authority in the second column
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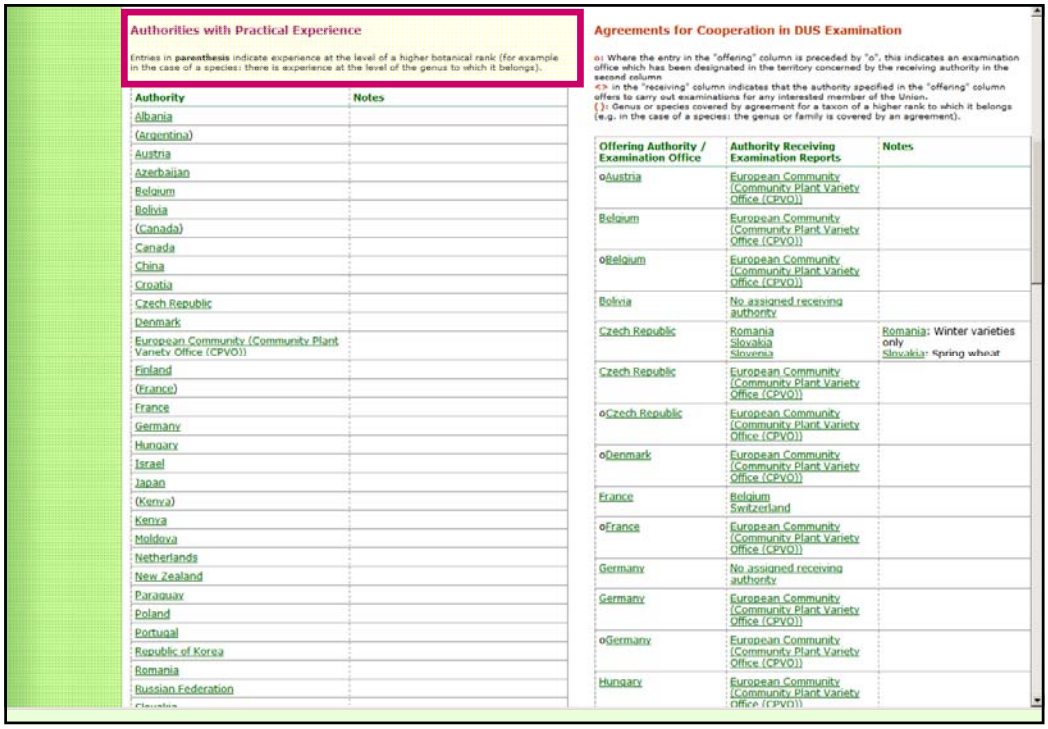
Offering Authority / Examination Office
Authority Receiving Examination Reports
Notes
oAustria
European Community



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).

Authority	Notes
Albania	
(Argentina)	
Austria	
Azerbaijan	
Belgium	
Bolivia	
(Canada)	
Canada	
China	
Croatia	
Czech Republic	
Denmark	
European Community (Community Plant Variety Office (CPVO))	
Finland	
(France)	
France	
Germany	
Hungary	
Israel	
Japan	
(Kenya)	
Kenya	
Moldova	
Netherlands	
New Zealand	
Paraguay	
Poland	
Portugal	
Republic of Korea	
Romania	
Russian Federation	

Agreements for Cooperation in DUS Examination

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Offering Authority / Examination Office	Authority Receiving Examination Reports	Notes
oAustria	European Community (Community Plant Variety Office (CPVO))	
Belgium	European Community (Community Plant Variety Office (CPVO))	
oBelgium	European Community (Community Plant Variety Office (CPVO))	
Bolivia	No assigned receiving authority	
Czech Republic	Romania Slovakia Slovenia	Romania: Winter varieties only Slovakia: Spring wheat
Czech Republic	European Community (Community Plant Variety Office (CPVO))	
oCzech Republic	European Community (Community Plant Variety Office (CPVO))	
oDenmark	European Community (Community Plant Variety Office (CPVO))	
France	Belgium Switzerland	
oFrance	European Community (Community Plant Variety Office (CPVO))	
Germany	No assigned receiving authority	
Germany	European Community (Community Plant Variety Office (CPVO))	
oGermany	European Community (Community Plant Variety Office (CPVO))	
Hungary	European Community (Community Plant Variety Office (CPVO))	

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).

Authority	Notes
Albania	
(Argentina)	
Austria	
Azerbaijan	
Belgium	
Bolivia	
(Canada)	
Canada	
China	
Croatia	
Czech Republic	
Denmark	
European Community (Community Plant Variety Office (CPVO))	
Finland	
(France)	
France	
Germany	
Hungary	
Israel	
Japan	
(Kenya)	
Kenya	
Moldova	
Netherlands	
New Zealand	
Paraguay	
Poland	
Portugal	
Republic of Korea	
Romania	
Russian Federation	

Agreements for Cooperation in DUS Examination

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Offering Authority / Examination Office	Authority Receiving Examination Reports	Notes
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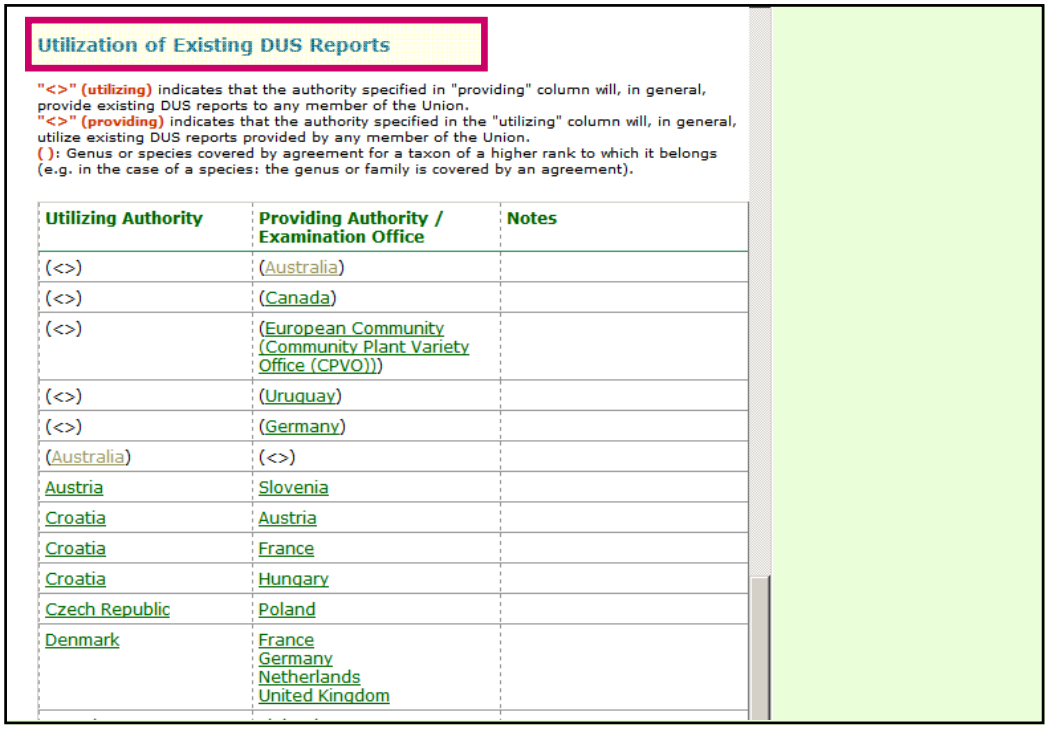
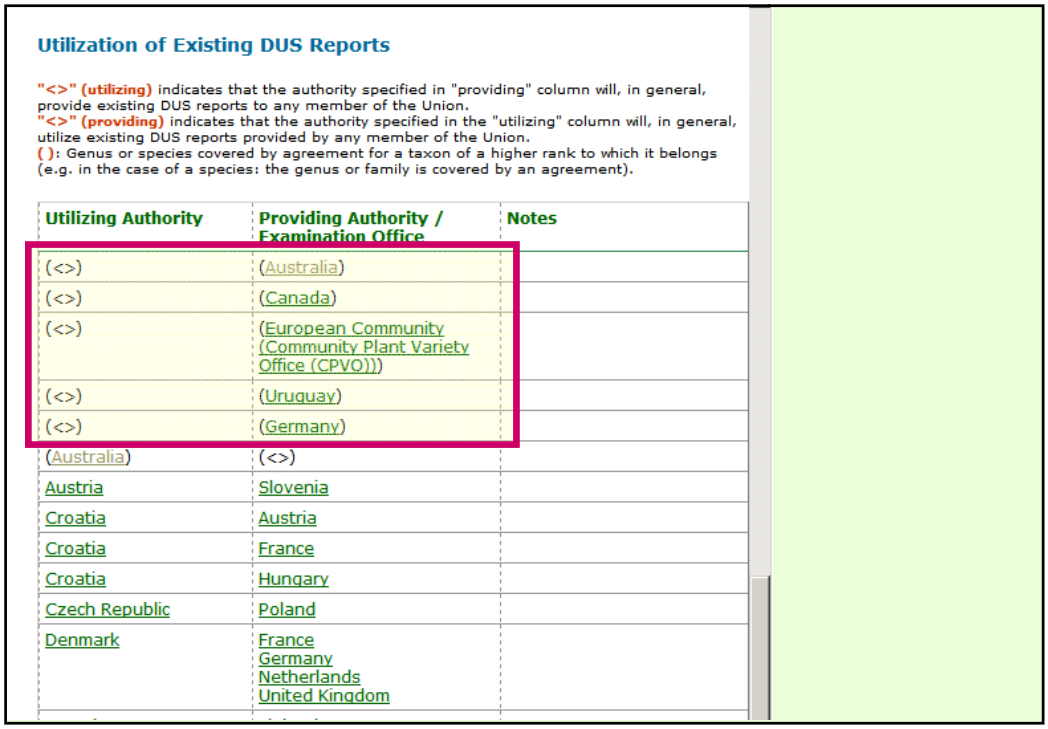
oCzech Republic	European Community (Community Plant Variety Office (CPVO))	
oDenmark	European Community (Community Plant Variety Office (CPVO))	
France	Belgium Switzerland	
oFrance	European Community (Community Plant Variety Office (CPVO))	
Germany	No assigned receiving authority	
Germany	European Community (Community Plant Variety Office (CPVO))	
oGermany	European Community (Community Plant Variety Office (CPVO))	
Hungary	European Community (Community Plant Variety Office (CPVO))	



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)	
(<>)	(Canada)	
(<>)	(European Community (Community Plant Variety Office (CPVO)))	
(<>)	(Uruguay)	
(<>)	(Germany)	
(Australia)	(<>)	
Austria	Slovenia	
Croatia	Austria	
Croatia	France	
Croatia	Hungary	
Czech Republic	Poland	
Denmark	France Germany Netherlands United Kingdom	



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Utilizing Authority	Providing Authority / Examination Office	Notes
(<>)	(Australia)	
(<>)	(Canada)	
(<>)	(European Community (Community Plant Variety Office (CPVO)))	
(<>)	(Uruguay)	
(<>)	(Germany)	
(Australia)	(<>)	
Austria	Slovenia	
Croatia	Austria	
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(<>)	(Germany)	
(Australia)	(<>)	
Austria	Slovenia	
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(<>)	(Uruguay)	
(<>)	(Germany)	
(Australia)	(<>)	
Austria	Slovenia	
Croatia	Austria	
Croatia	France	
Croatia	Hungary	
Czech Republic	Poland	
Denmark	France Germany Netherlands United Kingdom	

UPOV

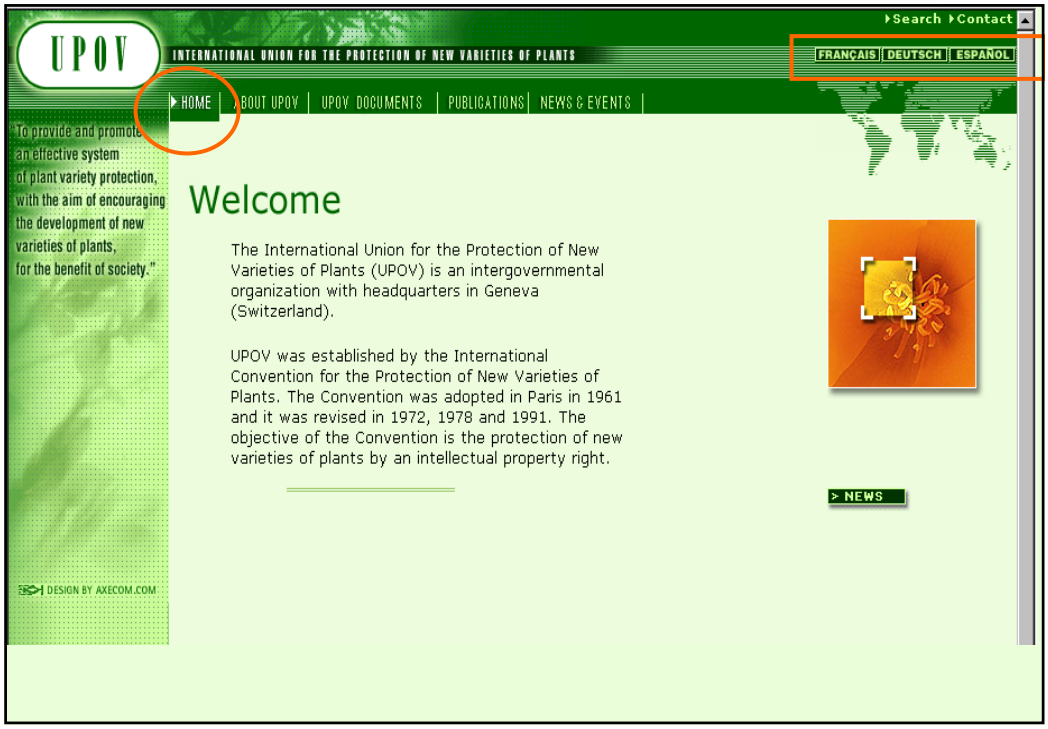
6. THE UPOV WEBSITE

UPOV

UPOV Website

http://www.upov.int

(e-mail: upov.mail@upov.int)


UPOV
INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS
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DEUTSCH
ESPAÑOL
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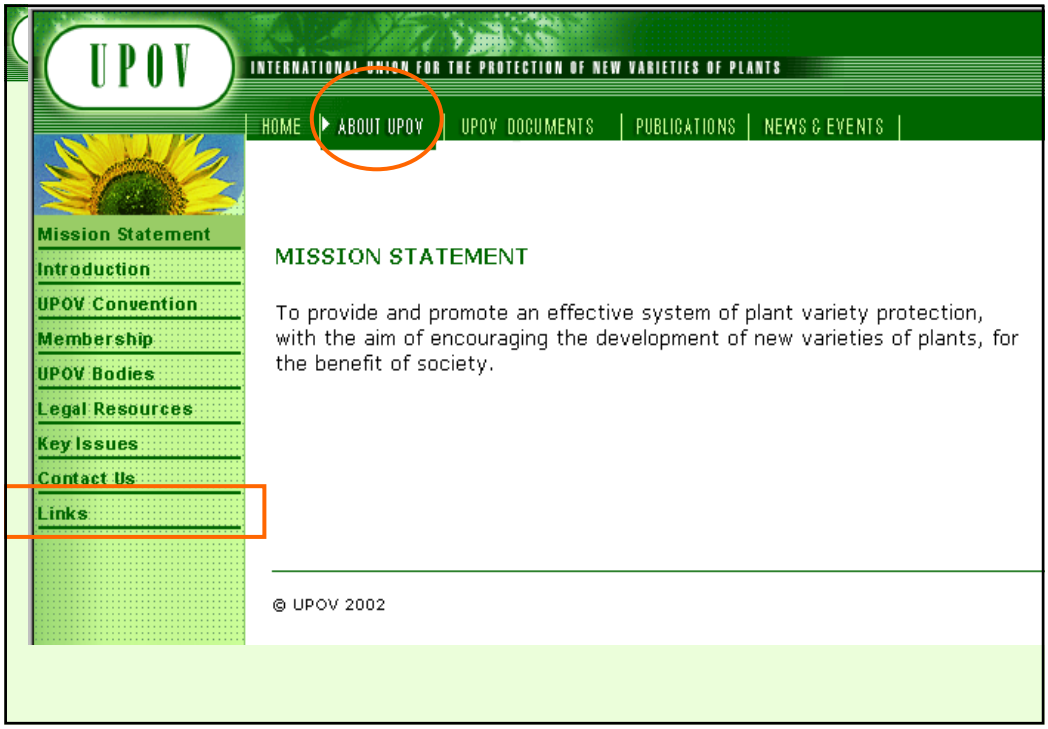
ABOUT UPOV
UPOV DOCUMENTS
PUBLICATIONS
NEWS & EVENTS
"To provide and promote an effective system of plant variety protection, with the aim of encouraging the development of new varieties of plants, for the benefit of society."
Welcome
The International Union for the Protection of New Varieties of Plants (UPOV) is an intergovernmental organization with headquarters in Geneva (Switzerland).
UPOV was established by the International Convention for the Protection of New Varieties of Plants. The Convention was adopted in Paris in 1961 and it was revised in 1972, 1978 and 1991. The objective of the Convention is the protection of new varieties of plants by an intellectual property right.
> NEWS
DESIGN BY AXECOM.COM


UPOV
INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS
HOME
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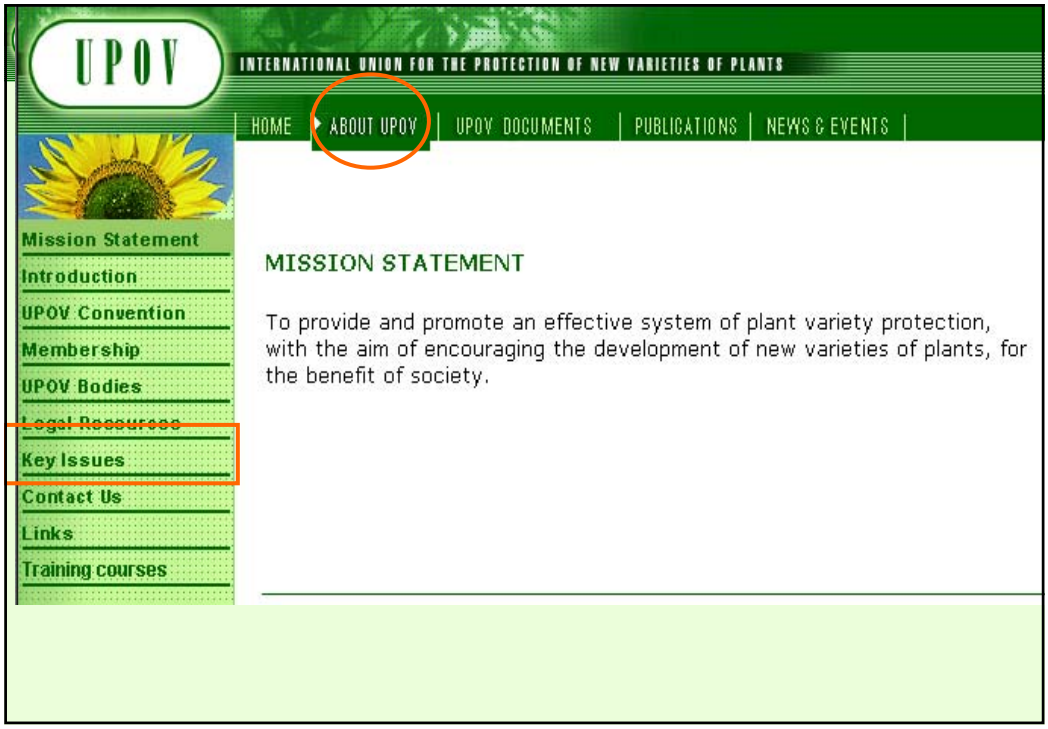
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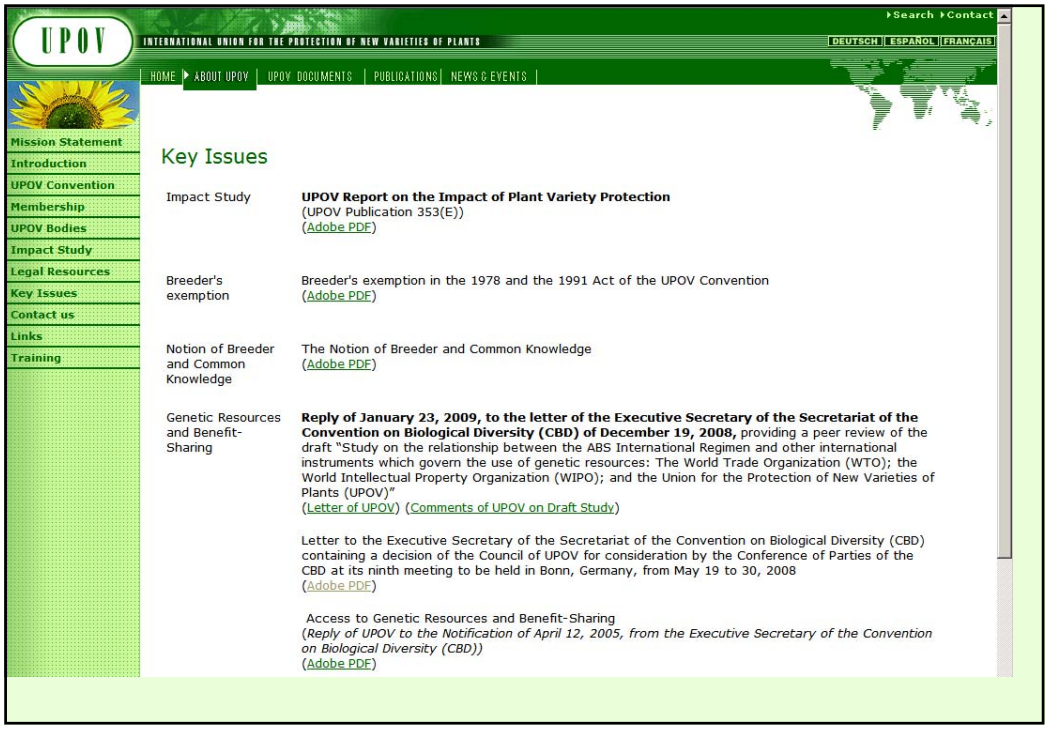
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(Letter of UPOV) (Comments of UPOV on Draft Study)
Letter to the Executive Secretary of the Secretariat of the Convention on Biological Diversity (CBD) containing a decision of the Council of UPOV for consideration by the Conference of Parties of the CBD at its ninth meeting to be held in Bonn, Germany, from May 19 to 30, 2008
(Adobe PDF)
Access to Genetic Resources and Benefit-Sharing
(Reply of UPOV to the Notification of April 12, 2005, from the Executive Secretary of the Convention on Biological Diversity (CBD))
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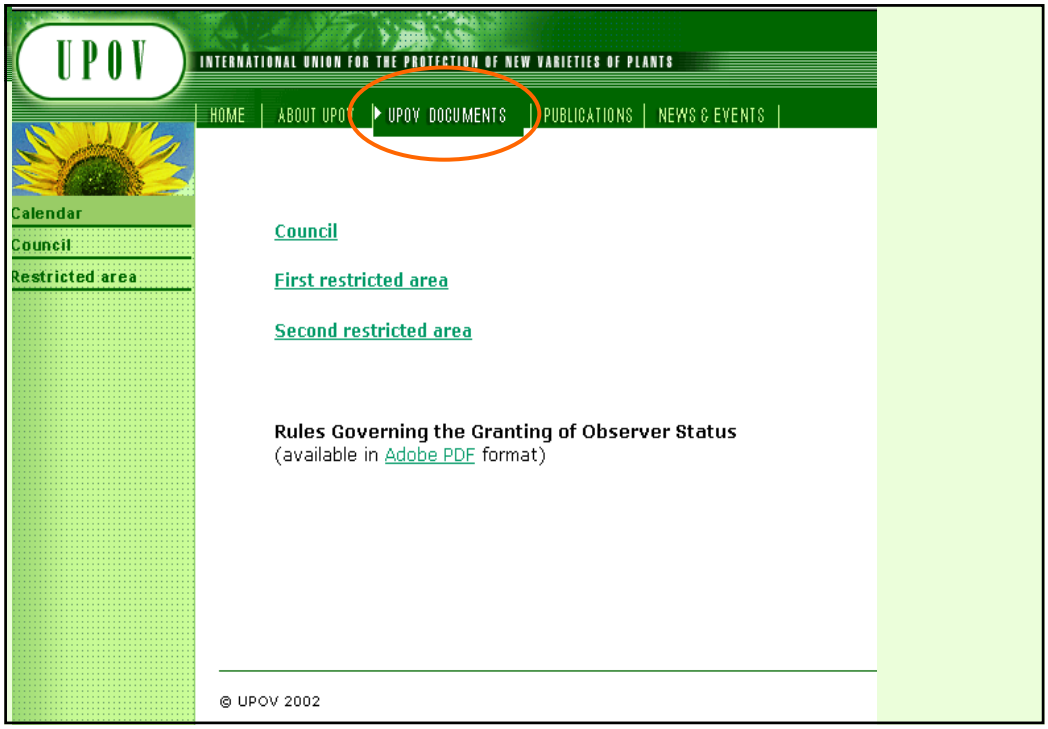
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Abbreviations:
A = Arabic, C = Chinese, D = Dutch, E = English, F = French, FEG = French/English/German,
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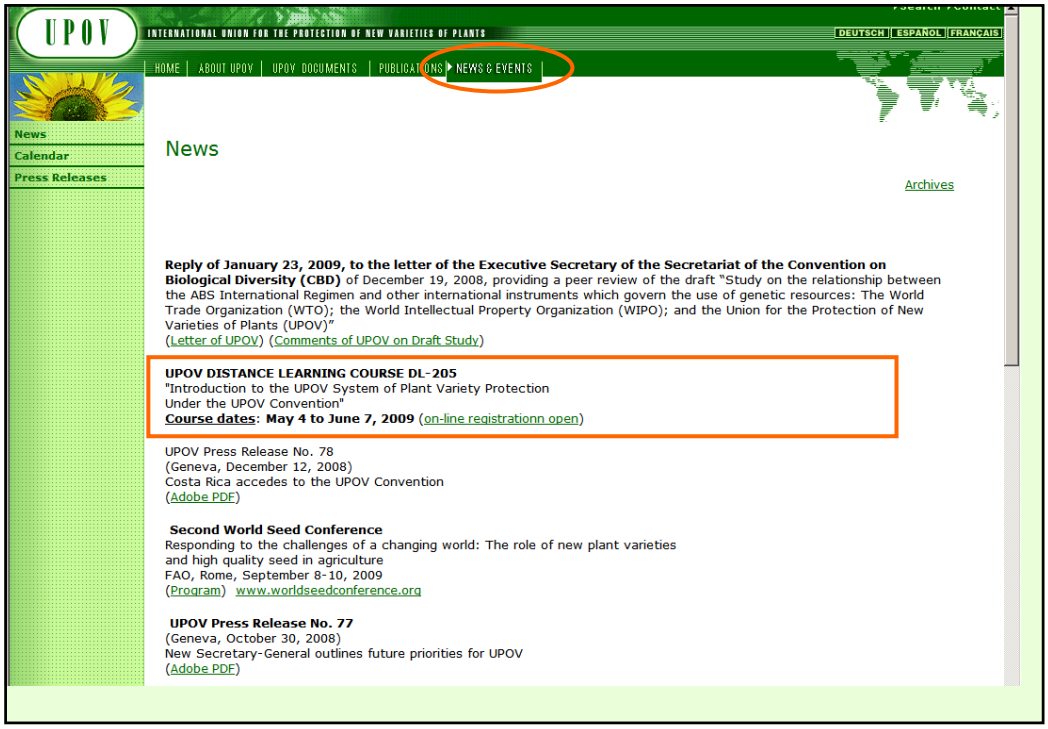
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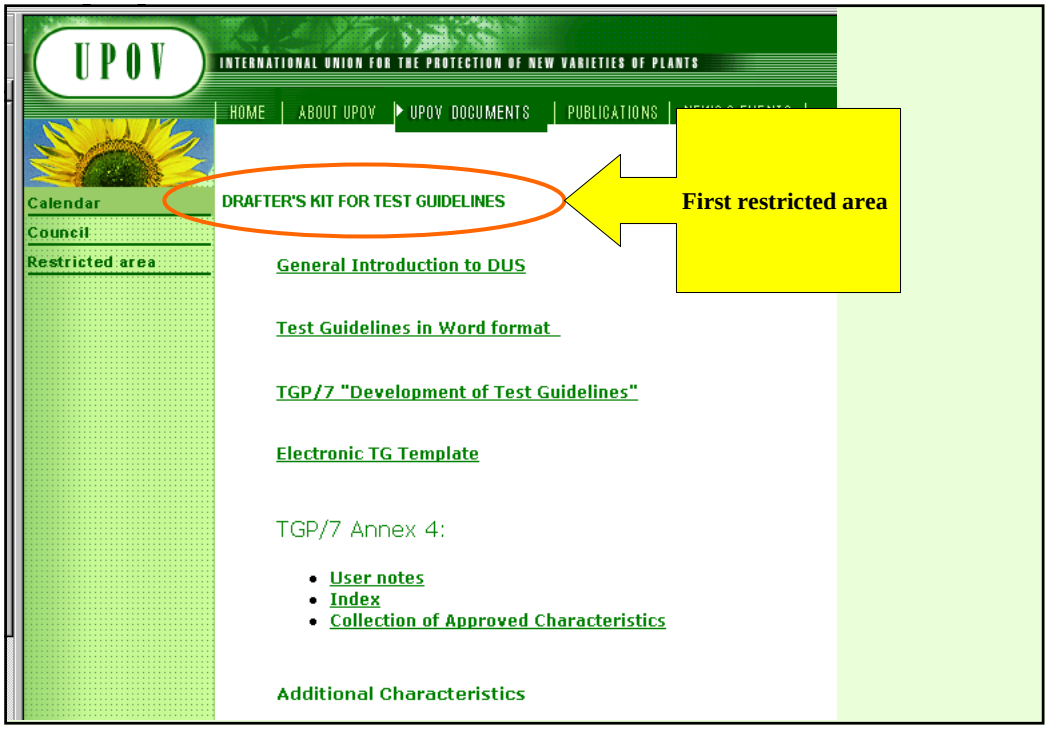
(Letter of UPOV) (Comments of UPOV on Draft Study)
UPOV DISTANCE LEARNING COURSE DL-205
"Introduction to the UPOV System of Plant Variety Protection
Under the UPOV Convention"
Course dates: May 4 to June 7, 2009 (on-line registrationn open)
UPOV Press Release No. 78
(Geneva, December 12, 2008)
Costa Rica accedes to the UPOV Convention
(Adobe PDF)
Second World Seed Conference
Responding to the challenges of a changing world: The role of new plant varieties and high quality seed in agriculture
FAO, Rome, September 8-10, 2009
(Program) www.worldseedconference.org
UPOV Press Release No. 77
(Geneva, October 30, 2008)
New Secretary-General outlines future priorities for UPOV
(Adobe PDF)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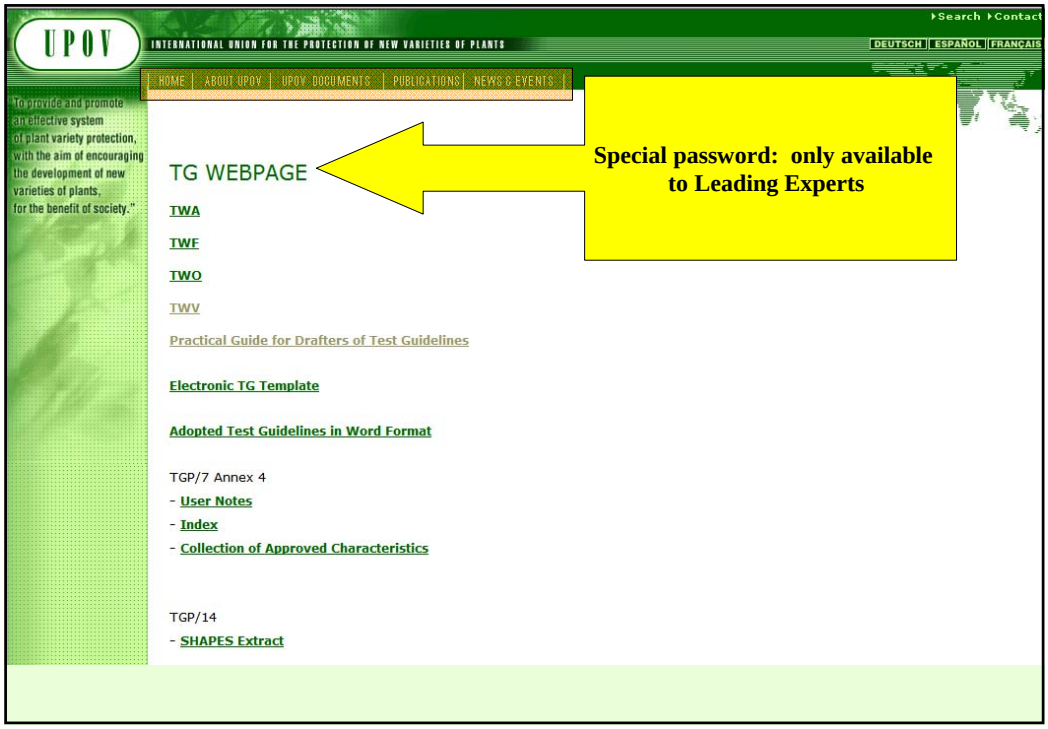
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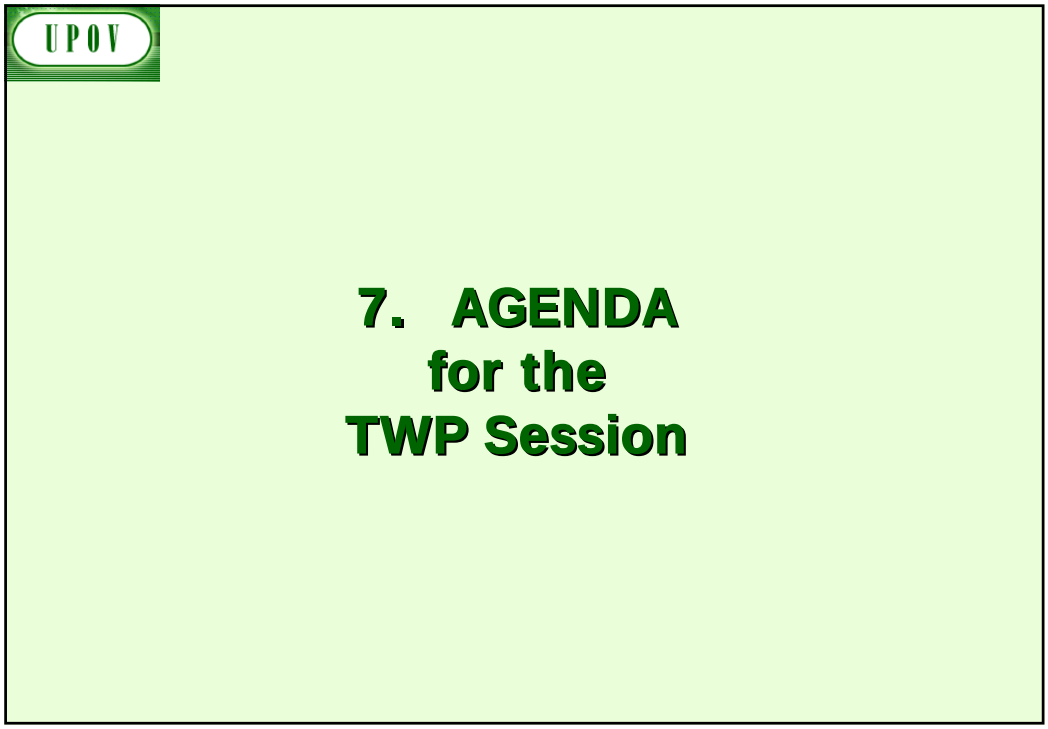
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7. AGENDA
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8. FEEDBACK

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THANK YOU