

## The denomination similarity search tool in the examination of proposed denominations in the European Union

**UPOV CAJ**

Geneva, 21 March 2013

Jean Maisson, CPVO

## The Variety Finder denomination similarity search tool

- The legal basis
- The Variety Finder database
- The denomination search tool
- A step for a greater harmonization of decisions in the EU

## The Variety Finder denomination similarity search tool

- The legal basis

Article 20.2 of the UPOV 1991 Convention:

*[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.



## The Variety Finder denomination similarity search tool

- The legal basis

Article 63.3 (c) of EU Council Regulation 2100/94:

There is an impediment for the designation of a variety denomination where :

...

(c) it is identical or may be confused with a variety denomination under which another variety of the same or of a closely related species is entered in an official register of plant varieties ...



## The Variety Finder denomination similarity search tool

- The legal basis
  - ✓ Article 63 of Regulation has been interpreted in guidelines as to the suitability of denominations, with explanatory notes
    - ▶ Basic principle: there should be 2 letters difference between 2 denominations
    - ▶ There are some exceptions



## The Variety Finder denomination similarity search tool

- In order to test denomination proposals for similarity, need for
  - a database
  - a search tool
- ▶ The CPVO Variety Finder Project



## The Variety Finder denomination similarity search tool

➤ Why is a search tool necessary?

- Proposal: 'Marine'
- '\*arine', 'M\*rine', 'Ma\*ine', 'Mar\*ne', 'Mari\*e', 'Marin\*'
- 'Marinne', 'Marrine'
- 'Marien'

▶ Automation necessary to save time



## The Variety Finder denomination similarity search tool

- The CPVO developed in 2005 its web based Variety Finder project
  - ✓ Freely available on the internet (National authorities, breeders)
  - ✓ Identification required
  - ✓ Cooperation with UPOV for data collection



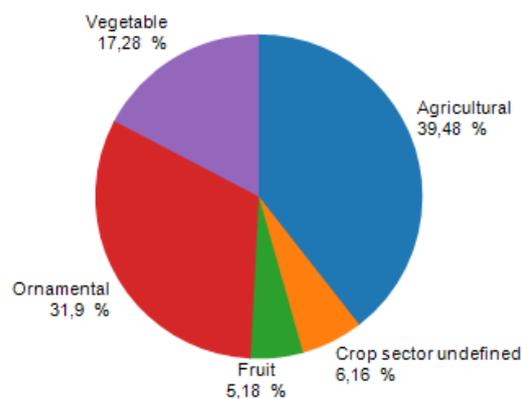
## The Variety Finder denomination similarity search tool

- The CPVO developed in 2005 its web based Variety Finder project
  - ✓ The database:
    - ▶ Regularly updated with official and commercial registers but also prior rights
    - ▶ Compliance of the data with the official publication, quality checks
    - ▶ Status of varieties should be up to date
  - ✓ Similarity search tool available
    - ▶ the Variety Finder is used to take decisions about the suitability of variety denominations in the EU



## The Variety Finder denomination similarity search tool

- The database

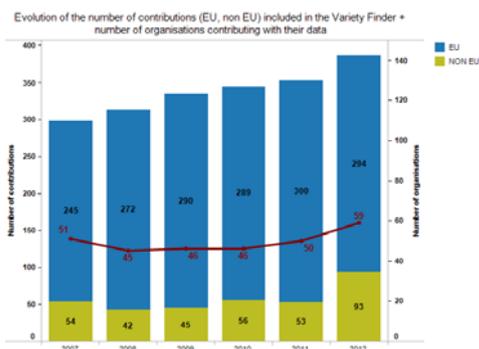


Content of the database in the beginning of March 2013  
Nearly 800.000 denominations



## The Variety Finder denomination similarity search tool

- The database
  - ▶ The CPVO puts great efforts in maintaining the database as up to date as possible



Nearly 400 contributions included in 2012



The similarity search tool, CAJ 2013

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## The Variety Finder denomination similarity search tool

- The similarity search tool:
  - ✓ Developed on the basis of the French GEVES tool
  - ✓ Looking for similarity
    - ▶ The 2 letters difference rule
  - ✓ Works on the basis of simple statistical tests and calculations
    - ▶ Chi-2, percentage of common letters and difference of length ....
    - No phonetics



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## The Variety Finder denomination similarity search tool

- The similarity search tool:
  - ✓ Calculation of a similarity index.
    - ▶ Full information available on the CPVO Variety Finder web site
  - ✓ Efficiency assessed in a ring test in the EU
    - ▶ Objective to assist the denomination examiner
    - ▶ No computer decision
  - ▶ The denomination examiner assesses the suitability



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## The Variety Finder denomination similarity search tool



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Welcome

**Search Varieties**

**DENOMINATIONS TESTS**

Single denomination  
List of denominations  
Extended test

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### Test a single denomination

Denomination tested	MARINE
Species Latin name	ZEAL
Breeder reference*	Kunzea baxteri (Klotzsch) Schauer Kunzea ericoides (A. Rich.) Joy Thoms. Kunzea pomifera F. Muell. Kunzea Reichb. Leuzea DC. Leuzea rhauponica (L.) Holub Tripsacum dactyloides x Zea diploperennis Tripsacum x Zea
Breeder Name*	
Remark *	Zea diploperennis H. H. Iltis et al. <b>Zea L.</b> Zea mays L. Zea mays L. convar. microsperma Koern. Zea mays L. saccherata Koern. Zea mays L. subsp. mexicana (Schrad.) H. H. Iltis Zea mays L. var. everta (Præcox) Sturt.

\* These fields are optional but they do not affect the search results

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 Save result in database

## The Variety Finder denomination similarity search tool

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### Test results

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Denomination tested	MARINE		
Species	Zea L.		
Class	ZEAAA		
Breeder reference & name			
Remark			
Test number	759459	Number of denominations compared	145268
Date of test	07/03/2013	Number of denominations selected	760

### Denomination list returned by the test

Test status:

The similarity score is an index computed to sort the results of the variety denomination test according to similarity amongst the denominations returned in the "Results of the denomination test" list. It constitutes by no means a basis for the decision to accept, or reject a tested denomination proposal.

Sort by: [Score](#) | [Denomination](#) | [Publication](#) | Display: [top 20](#)

Score	Denomination Species	Breeder's reference	Application Number	Date	Publication Country	Publication Type
0,00	<a href="#">Marine</a> Zea mays L.	KX 0310	1005286		FR	NLI
0,27	<a href="#">Marina</a>	XCD 36	0057662		FR	NLI

## The Variety Finder denomination similarity search tool

### Denomination list returned by the test

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0,27	<a href="#">Marina</a> Zea mays L.	XCD 36	0057662		FR	NLI
0,27	<a href="#">MARINA</a> Zea mays L.	XCD 36	5313		FR	PBR
0,27	<a href="#">Marina</a> Zea mays L.		SK0000000428		QM	ZZZ
0,27	<a href="#">Marina</a> Zea mays L.		52069	14/05/2004	QZ	NLI
0,27	<a href="#">Marina</a> Zea mays L.	TA-20238	194R027		SK	NLI
0,32	<a href="#">Marian</a> Zea mays L.		US0000000426		QM	ZZZ
0,32	<a href="#">Marnea</a> Zea mays L.		010867_A 010867		IT	NLI
0,32	<a href="#">Marnea</a> Zea mays L.		009688_A 009688		IT	NLI
0,32	<a href="#">Marnea</a> Zea mays L.		SK0000049509		QM	ZZZ

**Variety data sheet** < Back

Field explanation **Test data**

Country	FR	Status of the variety	Withdrawn
Publication	NLI 0	National Lists	
Publication name	Bulletin Officiel du Comité de la Protection des Obtentions Végétales - Annexes		
Species	Zea mays L.		

<b>Application/filing</b>		<b>Grant/registration</b>	
Number	1005286	Number	
Date	14/02/2000	Date	
Published on		Published on	
		Renewal on	
		Expiration actual	13/02/2001
		Future calculated expiration date	

Breeder reference	IX 0310
Breeder name	KWS Saat AG (DE)
Applicant name	Societe des Mais Europeens Sarl (FR)
Maintainer	Societe des Mais Europeens Sarl (FR)
Title's holder	
Remarks	

**Denominations list**

Denomination	Marine	Denomination type	undefined
Proposed on	19/04/2000	Denomination status	rejected or withdrawn
Published on		End date	
Approved on			

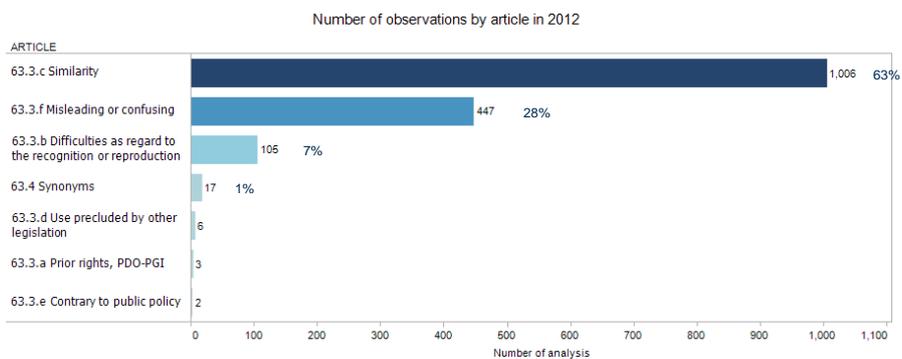
## The Variety Finder denomination similarity search tool

- In addition:
  - ✓ UPOV classes computed
  - ✓ Some words automatically removed from the search (e.g. colours). List available on the web site
  - ✓ Stressed characters replaced by basic Latin characters (e.g. á, â, ã, ä, å replaced by a). List available on the web site
- ▶ Objective to assist the denomination examiner



## The Variety Finder denomination similarity search tool

- The search tool in the denomination checking procedure
  - ✓ Similarity is only one aspect



- ▶ The tool and the test for similarity play a central role in the examination of denominations



## The Variety Finder denomination similarity search tool

- A step for a greater harmonization of decisions in the EU
  - One variety – One denomination in the EU
    - ✓ Harmonized rules
      - ▶ [EU Guidelines](#) on the suitability of variety denominations for EU PBR with detailed explanatory notes
      - ▶ For National Listing, almost identical rules

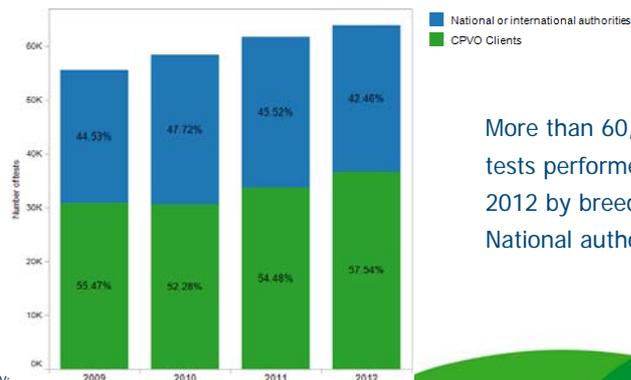


## The Variety Finder denomination similarity search tool

- A step for a greater harmonization of decisions in the EU

✓ Denomination tests run on the same set of data

- ▶ All EU Authorities use the CPVO Variety Finder



More than 60,000 tests performed in 2012 by breeders and National authorities



Vt

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## The Variety Finder denomination similarity search tool

- A step for a greater harmonization of decisions in the EU

One variety – One denomination in the EU

✓ Harmonized interpretation

- ▶ Harmonised rules and harmonised testing tool are not sufficient
- ▶ EU cooperation service, whereby EU National authorities ask for the opinion of the CPVO in the Variety Finder



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### Test a single denomination

Denomination tested	<input type="text" value="DODGER"/>
Species Latin name	<input type="text" value="Brassica napus L."/>
Breeder reference*	<input type="text" value="RG 40101"/>
Breeder Name*	<input type="text" value="RAPS GbR Saatzeit"/>
Remark *	<input type="text" value="Laker not suitable, new proposal Dodger"/>

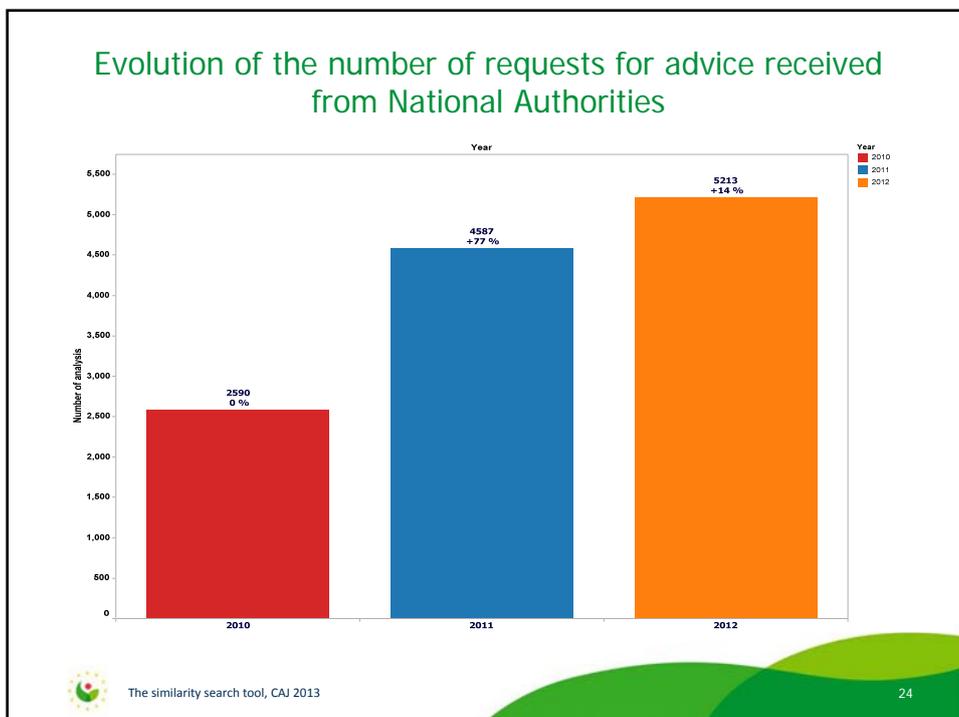
\* These fields are optional but they do provide an additional level of information, which will allow offering a more accurate expert advice.

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Request for CPVO expert advice  
*Only for formal proposals*

 Save result in database

Detailed information about the variety can be provided to CPVO



## The Variety Finder denomination similarity search tool

- A step for a greater harmonization of decisions in the EU
  - ✓ One denomination similarity search tool

UPOV proposes this similarity search tool in PLUTO, but also others
  - ▶ One single tool would offer better harmonization **on UPOV level**
  - ▶ An improvement of the GEVES/CPVO tool instead of several search tools?



Thank you for your attention.

