Collaboration between vegetable Examination Offices : *Experience of GEVES*

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CPVO Vegetable Open Day
Edinburgh, Scotland

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Expertise & Performance

INTERNATIONAL COOPERATION

BETWEEN EXAMINATION OFFICES

Article 12 of the 1991 Act of the UPOV Convention

Cooperation between EOs can involve:

-**purchase of DUS Test Reports** from other EOs

-**bilateral arrangements** to remove the need for duplication of DUS Tests

-**centralized DUS testing** at regional or global level

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PURCHASE/ SALE OF DUS TEST REPORTS FROM OTHER EOS

- France provides existing DUS reports to any UPOV members for any taxa, for which it has experience in DUS testing.

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TGP/5: Section 6/2

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
   .....
10. Variety denomination
   .....

BILATERAL ARRANGEMENTS FOR THE **DUS TEST**

- Other EOs may carry out the **DUS Examination** for vegetable taxa on Behalf of France, according to **bilateral agreements**

  eg.: Strawberries tested by Germany on behalf of France

- France may carry out the **DUS Examination** for vegetable taxa on Behalf of other EOs, according to **bilateral agreements**

  *eg.: S*quash varieties, carrots tested by France on behalf of Germany

Advantages of Cooperation between Authorities :

- *minimizing* the **duration** and the **cost** of DUS examination,
- *optimizing* of **reference collections**, of the examination of **Distinctness in growing trials**,
- *offering* **protection for all** plant genera and species

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BILATERAL ARRANGEMENTS FOR **IDENTITY CONTROLS** AFTER THE DUS TEST

- France may carry out identity controls for vegetable taxa on behalf of other EOs

  eg.: Corn salad, Tomato seed samples, tested by France on behalf of Germany

Advantages :

- *reduction of* costs for minor species,
- *centralization* of tests for a better harmonization / expertise

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BILATERAL ARRANGEMENTS FOR

DISEASE RESISTANCE TESTS, IN THE FRAMEWORK OF DUS TESTS FOR *MINOR** SPECIES

- *eg.* Tests performed by Naktuinbouw on behalf of GEVES

Cucumis sativus	Resistance to Cladosporium cucumerinum (Ccu)
Cucumis sativus	Resistance to Cucumber mosaic virus (CMV)
Cucumis sativus	Resistance to Powdery mildew (Podosphaera xanthii) (Px)
Cucumis sativus	Resistance to Corynespora blight and target leaf spot (Corynespora cassiicola) (Cca)
Cucumis sativus	Resistance to Cucumber vein yellowing virus (CVYV)
Spinacia oleracea	Resistance to Peronospora farinosa f. sp. spinaciae (races 5, 6, 7)

- *eg.* Tests performed by GEVES on behalf of Naktuinbouw

Pisum sativum	Resistance to Erysiphe pisi
Pisum sativum	Resistance to Aschochyta
Daucus carotta	Resistance to Alternaria dauci
Valerianella locusta	Resistance to downy mildew ...etc

Advantages :

- reduce costs for *minor** species
- centralisation of tests for better harmonization / expertise

*= with regularly a reduce number of DUS cycles

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R&D PROJECTS

TO **IMPROVE THE QUALITY OF THE TESTS**

eg.: 3 R&D CPVO projects **HARMORES**

- 3 years projects
- Managed by GEVES – SNES Ppathology department
- With european EOs and ESA members
- Co -founded by CPVO

Goal: **Harmonize DUS disease resistance protocols** for :

- ✓better **definition** and **exchange** of **reference material**
- ✓better **coherence of results between EOs**
- ✓better **coherence** between **declarations of applicants** and **official tests**, to reduce discrepancies, *which allow the diffusion of an « improved information »* ***whatever the purpose of the DUS test (PBR and/or NLI)***

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R&D PROJECTS

TO **IMPROVE THE QUALITY OF THE TESTS**

eg.: 3 R&D CPVO projects **HARMORES**

- **Requirements for Disease resistance tests**

  validated, available, healthy

  - **Controls** (S, IR, R)
  - **Differentials**
  - **Reference isolates**, which have to be also stable, representative of natural conditions

  [250 pathogens and pests in GEVES collection (vegetables and field crops)]

- **Harmonization of the test protocols**

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R&D PROJECT

TO **IMPROVE THE QUALITY OF THE TESTS**

On the Base of the French experience of the **MATREF netwotk**

- *Draft R&D CPVO project* **EU HARMORESColl:** to develop into an "collective" European system :

Healthy and validated seed samples

One single database indicating material and who can provide it: easy to access information

Reference material performing as expected

Easy access to reference material to allow easier performing of resistance tests

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COLLABORATION ON *METHODOLOGICAL ISSUES* TO IMPROVE THE QUALITY OF THE TESTS AND PROTOCOLS

- **<u>Improvment of the testing of shallots</u>**

Collaboration between CPVO, GEVES, NAKT

- **<u>Ring tests</u>**
  - The aberrant caulifower trial (…, CPVO VEM 2015, 2016)
  - Umbrella varieties (1980', 1990's)

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SHARED DATABASES BETWEEN OEs

- Experience on **Maize** (DE FR ES)
- Experience on **Peach** (FR HU ES IT)
- Ongoing development for **Lettuce** (FR NL)

http://gem.geves.info

Many questions to be tackled in advance

- Commitment of the participating EOs
- Calibration book and ring test -> *sharing only reliable data?*
- Sharing PHENOTYPE + PICTURES + [MOLECULAR DATA + DNA]

a Common tool, with:

- Common agreement to feed the database
- Common agreement to use the database
- Common decision rules
- …

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SHARED INFORMATION

- **Public access** to part of the official description files on our website www.geves.fr *(currently being upgraded)*

- **Sharing technical or administrative information** with **other EOs** via e-mail

- **Visits / welcome visitors** from different EOs

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Comments? Questions?

Thank you for your attention

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