



**UPOV DUS Seminar  
Management of Reference Collection**

**UPOV DUS Seminar  
Management of  
Reference Collection in  
France**

Geneva, March, 18-20, 2010

Joël GUIARD GEVES France



**UPOV DUS Seminar  
Management of Reference Collection in France**

**General policy**

- Constitution of reference collection as large as possible
- Development of tools for efficient screening of varieties included in DUS test
- Basis for a good quality of plant breeder's protection

Geneva, March, 18-20, 2010

Joël GUIARD GEVES France





## UPOV DUS Seminar Management of Reference Collection in France

### Case of Seed propagated species (1)

- In total about 50000 varieties (field crops and vegetable species)
- Maintenance in cold chambers in 3 different sites
- Constitution:
  - Screening among varieties of common knowledge
- Based on
  - Geographical origin
  - Physiological traits
  - Type of varieties
  - Short description
- Priority given to EU catalogue
  - Varieties with French and EU PBR
  - Varieties from countries having exchange with FR
  - Candidate varieties as far as possible

Geneva, March, 18-20, 2010

Joël GUIARD GEVES France



## UPOV DUS Seminar Management of Reference Collection in France

### Case of Seed propagated species (2)

- Origin of plant material
  - Examination offices plus breeders or maintainers
  - More and more breeders and maintainers
- Management "per se"
  - Small bags
  - Control of quality
  - Renewal before end of stock or lost of quality
  - Identity and purity control of new samples

Geneva, March, 18-20, 2010

Joël GUIARD GEVES France





## UPOV DUS Seminar

### Management of Reference Collection in France

#### Case of fruit trees and ornamental shrubs

- Collection in situ for many species
- Use of of genetic resources collections  
INRA fruit tree collections
- Renewal by grafting

Geneva, March, 18-20, 2010

Joël GUIARD GEVES France



## UPOV DUS Seminar

### Management of Reference Collection in France

#### Description of varieties in reference collection

- Various situations depending on species
  - Systematic description of new introductions done by GEVES  
Mainly when strong interaction with environment
  - Description by GEVES when a new introduction in comparison with a candidate
  - Use of description of grouping characteristics done by other examination offices

Geneva, March, 18-20, 2010

Joël GUIARD GEVES France





## UPOV DUS Seminar

### Management of Reference Collection in France

#### Specific tools to manage reference collections

- **GAÏA software** (see TGP/8/1 under preparation)
  - A tool to combine differences between varieties
  - Consideration of susceptibility of characteristics to environment
  - Consideration of size of differences
- ⇒ **Determination of "Distinct Plus" varieties**
- ⇒ **Reduction of number of varieties in the DUS test**
  
- **Calibration in relation to intraspecific variability and agroclimatic conditions**

Geneva, March, 18-20, 2010

Joël GUIARD GEVES France



## UPOV DUS Seminar

### Management of Reference Collection in France

#### ➤ Development of a new approach

- **System for combining phenotypic and molecular distances in the management of variety collections** (see the document BMT-RG/Api 09/2)
- **Development done by GEVES on Maize** ■
- 
- **Validation by UPOV bodies:**
  - In conformity with UPOV convention
  - No negative impact on the effectiveness of the protection under the UPOV systems
  - Model that might be used for other crops with a case by case study

Geneva, March, 18-20, 2010

Joël GUIARD GEVES France



# UPOV DUS Seminar

## Management of Reference Collection in France

Thank you for your attention

Geneva, March, 18-20, 2010

Joël GUIARD GEVES France



## PROPOSED USE OF MOLECULAR AND MORPHOLOGICAL DATA

