

## UPOV TRAIN-THE-TRAINER COURSE

### PLANT VARIETY PROTECTION UNDER THE UPOV CONVENTION

#### Day 3

Implementing the 1991 Act of the UPOV Convention

**Exercising and enforcing the breeders' rights**

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## Germplasm Security Process

### Protection

Obtain  
Plant Variety  
Protection

### Surveillance

Execute program  
& protocols  
for surveillance

### Enforcement

Conditions  
& decisions  
for enforcement



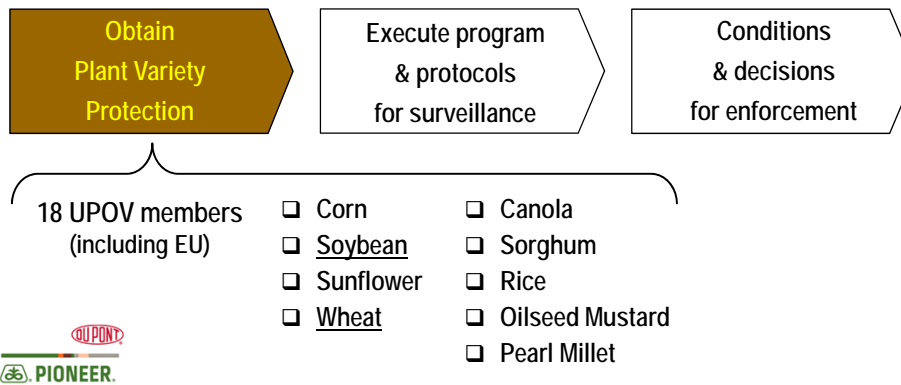
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## Germplasm Security Process

### Protection

### Surveillance

### Enforcement



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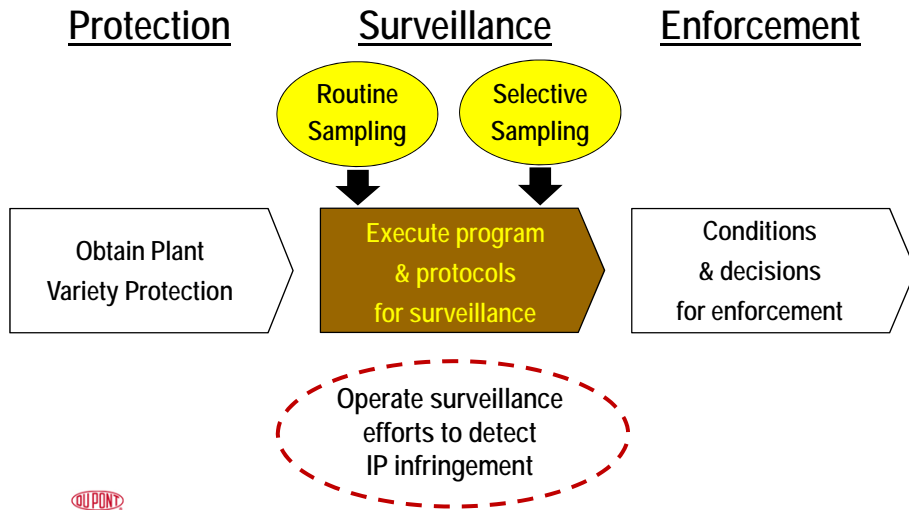
## Primary Forms of PBR Infringement

- Retail seed businesses package PBR-protected varietal grain for resale (e.g., brown/white bagging).
- Seed companies sell another company's PBR-protected varieties as their own.
- Unprotected inbred lines used to produce PBR-protected hybrids for sale.
- PBR-protected inbred lines used to produce protected or unprotected hybrids for sale.



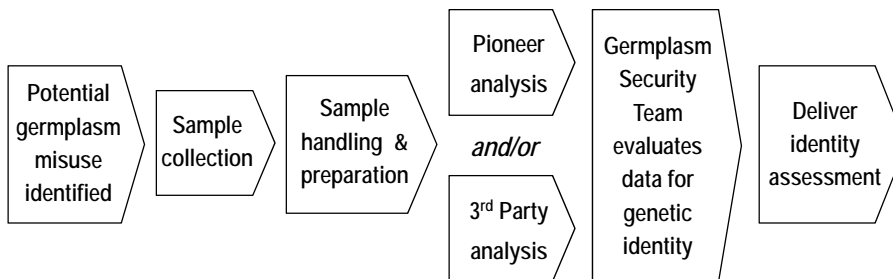
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## Germplasm Security Process



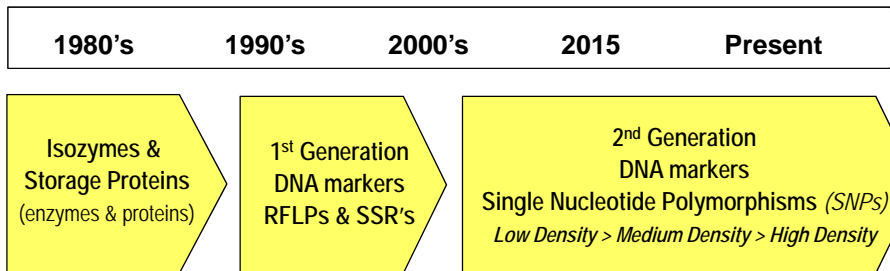
## Germplasm Security Surveillance Process

### Steps in the Surveillance Process



## Germplasm Security Surveillance

### History of Molecular Marker Use for Crop Germplasm Surveillance & Enforcement



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## Germplasm Security Process

### Protection

Obtain Plant  
Variety Protection

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Execute program  
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Conditions  
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for enforcement

- Work through PVP agencies as required or allowed.
- Approach parties to stop germplasm misappropriation.
- Legal actions to enforce as warranted and able.



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## Impacts of Insufficient PBR Enforcement

- ❑ Commitment to breeding investment reduced.
- ❑ Formal seed sector and best products undermined.
- ❑ Introduction of improved genetics delayed.
- ❑ Livelihood of farmers and rural economies put at risk.
- ❑ Country's agricultural productivity endangered.



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## Stakeholders to Improve PBR Enforcement

- ❑ Government ministries, agencies and institutions
  - Central / national / federal
  - Provincial / state
- ❑ Judicial system
- ❑ PBR holder
- ❑ Seed Industry Organizations



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## Opportunities to Improve PBR Enforcement

- ❑ Varietal registration agencies inform PBR holder when similar varieties appear in official trials.
- ❑ DNA profiles accepted in courts and by PVP agencies.
- ❑ Seed industry pursues infringers to set enforcement precedents at the agency and judicial levels.
- ❑ Courts imposes destruction of goods and significant damages to deter future infringement.
- ❑ Seed industry forms education & enforcement groups.



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## Importance of PBR Enforcement

- ❑ Seed security = top quality seed reliably accessible.
- ❑ PBR is a critical foundation for seed security.
- ❑ Many opportunities to strengthen PBR enforcement.
- ❑ Enforcement crucial to realize the full value of PBR.
- ❑ Multiple stakeholders have key roles & opportunities to improve PBR enforcement for global food security.



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Thank you for your attention!

Questions?



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Supplemental Slides



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## Opportunities to Improve PBR Enforcement

Government ministries, agencies and institutions

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- Communicate the importance & value of PBR.
- Issue PBR only to varieties or inbreds sufficiently distinct from PBR-protected lines.
- Varietal registration agencies may inform PBR holder when similar varieties appear in official trials.
- PVP offices should accept DNA marker profiles for opposition and invalidation proceedings.



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## Opportunities to Improve PBR Enforcement

Government ministries, agencies and institutions

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- Specify and certify DNA marker sets and protocols for profiling most important crops.
- Provide side-by-side morphological comparisons and DNA marker profiles upon request.
- Impose burden of proof on alleged infringer once PBR holder presents sufficient evidence for infringement.
- Ensure national PBR laws and regulations are consistent with UPOV obligations and conditions.



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## Opportunities to Improve PBR Enforcement

### Judicial System

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- Earlier opportunity for discovery by PBR holder.
- Additional discovery during trial phase.
- DNA profiles accepted routinely as evidence in court.
- Dedicated tribunal with experience and knowledge.
- Destruction of goods and impose significant damages to deter future infringement.



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## Opportunities to Improve PBR Enforcement

### PBR Holder

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- Operate surveillance efforts to detect infringement.
- Internal system to report potential PBR infringement.
- Pursue infringers to set enforcement precedents at the agency and judicial levels.



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## Opportunities to Improve PBR Enforcement

### Seed Industry Organizations

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- ❑ Develop appropriate PBR dispute resolution conditions.
- ❑ Work with PBR office to establish
  - DNA markers to profile PBR protected germplasm.
  - thresholds for essentially derived varieties (EDV's)
- ❑ Form industry PBR education & enforcement groups.



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## Opportunities to Improve PBR Enforcement

### Seed Industry PBR Education & Enforcement Groups

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- ❑ **Breeders Trust (Europe)** – 9 years  
16 companies - 6 potato seed and 10 grass breeding
- ❑ **Canadian Plant Technology Agency (Canada)** – 8 years  
25 seed company members
- ❑ **Anti-Infringement Bureau (Europe)** – 5 years  
14 seed company members
- ❑ **Seed Innovation and Protection Alliance (USA)** – 2 years
  - Field Crops Division – 8 companies + Cotton Inc. & ASTA
  - Flower & Vegetable Division – 9 companies + ASTA



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