



**International Community of  
Breeders of Asexually  
Reproduced Ornamental and  
Fruit Plants**

**UPOV seminar on DUS Testing**

The view of breeders of asexually  
reproduced ornamental and fruit varieties

Geneva, 18 March 2010

## Agenda

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- Introduction
- The importance of DUS examination for an effective PBR protection
  - Clear Distinctness
  - Set of characteristics
  - Groundbreaking innovations
  - Costs
  - Other open questions
- Conclusion

## Introduction

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- CIOPORA supports the 1991 UPOV convention
- CIOPORA supports the US plant patent act.
- CIOPORA supports the breeders exemption.
- CIOPORA is very concerned about the effectiveness of the PBR and PP systems.
- CIOPORA questions the value of the current DUS examination

## The importance of DUS examination for an effective PBR protection

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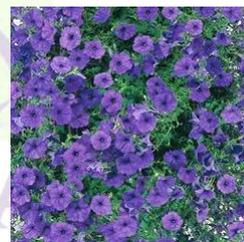
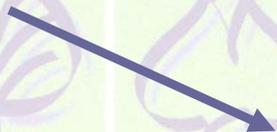
Effective PBR protection consists of three components:

- **A robust description of the protected variety (What is protected?)**
- A sufficiently broad scope of the right (Which acts are reserved for the breeder?)
- An effective set of enforcement tools (How can I get respect for my title?)

## Clear Distinctness

- Sufficiently broad **minimal distances** (“clear” distinctness) between varieties are essential for the effective protection of plant varieties. Otherwise the “exclusive right” of the PBR title holder to exploit his variety does not exist.
- Not only breeders suffer from too small minimal distances, also growers do so, because their sales is at risk if too many identical products are on the market

## Clear Distinctness



Different Petunias ?



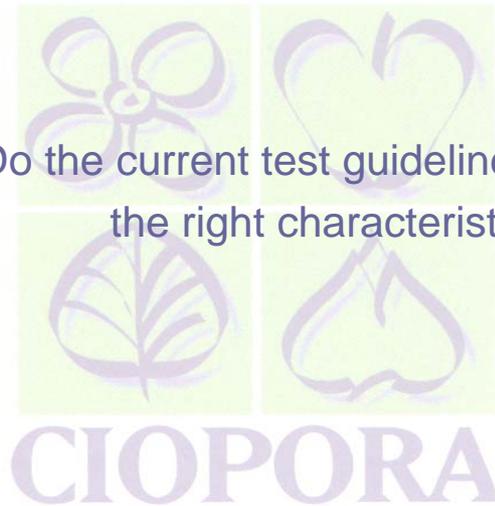
## Clear Distinctness

- The threat of small minimal distances does not emerge by coincidence
- It is a slow process, which is inherent in the current DUS system, as new (sometimes minor) characteristics are constantly discovered
- It is driven to a huge extent by breeders and not sufficiently blocked by the examination offices
- DUS examination is the key to the problem



## Set of characteristics

Do the current test guidelines contain the right characteristic?



## Set of characteristics

Important characteristics in cut-flowers are e.g.



- Vase life,
- productivity (stems per square-meter)
- stem length
- resistances

## Set of characteristics

Important characteristics in fruits are e.g. taste, resistances, tolerances





## Groundbreaking innovation

- Making a *groundbreaking* innovation is in general very expensive and very time-consuming and thus requires particular reward
- PBR currently does not sufficiently protect *groundbreaking* innovation against easy take-over, because
  - The breeders' exemption allows competitors to make use of the innovation for further breeding immediately after its introduction
  - Competitive varieties can be bred and introduced within a short time, the competitor spending much less time and money than the innovator



## Groundbreaking innovation



The innovation  
(double flowers)  
is the same



## Groundbreaking innovation

- If UPOV aims at providing a protection system for all kind of plant innovation it must provide a solution for groundbreaking innovations, too.
- Can the DUS examination assist in solving this issue?
- Would it help to give special attention to “groundbreaking characteristics” already in the DUS examination?



## Costs

- Costs for DUS examination is the most expensive part of PBR protection.
- Do the costs of DUS examinations block a higher acceptance of Plant Breeders' Rights?
- Would a significant reduction of the (examination) costs lead to a significant increase of the number of PBR applications?
- How can the examination costs be reduced without a decrease in quality?



## Costs

- Practical examples in ornamentals
  - Examination costs in the EU for most bedding plants are currently at € 1,160. Lavenders (stoechas) require 2 years testing despite it is a fast growing crop. Thus it costs a total of € 2.860 for the testing
  - An extreme one year crop is Poinsettias with a € 2,140 testing fee for one year.
  - Because of the small minimal distances, which result in many similar varieties on the market, and because of fast changing fashion and demand some varieties do not earn the protection costs.
  - The result is that breeders do not protect all varieties, which they bring on the market.



## Costs

- Practical examples in fruit
  - Examination costs in the EU for stone-fruit (peach-apricot-cherry-plum) are currently at € 1,700.
  - For these species 4 years testing is the minimum (but more generally 5 or 6).
  - Thus, the entire DUS examination costs amount between € 8.500 and € 10.000.
  - For these stone fruit, being limited in their geographic development, it makes no sense to apply for a Community Plant Variety Right.

## Other open questions

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- **One DUS examination** for a variety in the world – enough, desirable and realistic?
- **Take over of DUS reports** – why must breeders pay each time CHF 300?
- The necessity, extend and proper management of **reference collections** in horticultural crops

## Other open questions

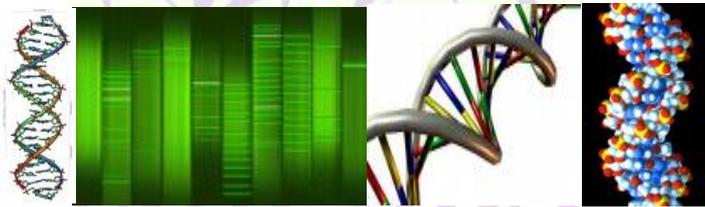
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- **The informative value of the variety description**
- **The importance of variety descriptions** for
  - the verification of the continuing existence unaltered of the protected varieties
  - the enforcement of PBR
- **The modification of DUS test guidelines** and its meaning for existing varieties

## Other open questions

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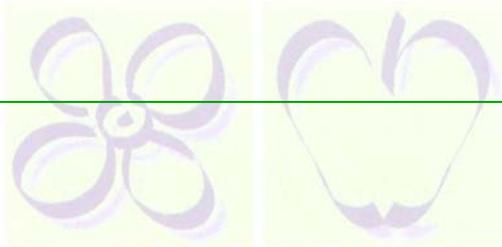
- **Molecular techniques** can be very supportive in the enforcement of Plant Breeders' Rights and in the determination of EDV.
- They may also assist in the DUS examination, but must not make the distances smaller



## Conclusion

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- There are several points where DUS examination can assist in strengthening the Plant Breeders' Right.
- UPOV, the national PBR offices and the examination offices should focus on these points.
- CIOPORA recently has established a working group on DUS and shall provide detailed positions to important points soon.



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# Thank you

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