

CIOPORA view on Essentially Derived Varieties (EDV)

UPOV CAJ

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Geneva



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UNITING BREEDERS, PROTECTING INNOVATION

The purpose of EDV concept

- The EDV Concept is a very important component of the UPOV 1991 Act
- “The basic purpose of the EDV concept is to strengthen the right of the breeder (IOM/IV/2, page 2, no. B. 5. (i), of October 1989). The very objective of dependence is to give a breeder of an original genotype an additional source of remuneration (IOM/IV/2, page 12, no. 6. (iv)).”
- EDV shall ensure a fair return on investment to the breeder of the Initial Variety



The purpose of EDV concept

- Strengthening the right of the breeder of an original genotype by way of
 - 1) creating a level playing field between traditional breeders and biotech inventors (developers of GMO)
 - 2) maintaining breeders control over mutations
- GMO and mutations have been raised as examples during the Diplomatic Conference and are explicitly mentioned in the UPOV 1991 Act



CIOPORA's understanding of the EDV provision in the UPOV 1991 Act

Main requirements for EDV of vegetatively reproduced ornamental and fruit varieties:

- Distinctness: An EDV must be clearly distinguishable from its Initial Variety
- Predominant derivation: Predominant use of plant material of the Initial Variety. Mutants and GMO are exclusively / solely derived from their Initial Variety and, in principle, retain almost the entire genome of the Initial Variety.



cont.: CIOPORA's understanding ...

- Except for differences that result from the act of derivation, the EDV conforms to the Initial Variety in the expression of the essential characteristics.
- For mutants and GMO, all differences to their Initial Variety result from the act of derivation
- Thus: EDV does not need to retain all (essential) characteristics of the Initial Variety but in practice very often retains many (essential) characteristics.



CIOPORA's understanding of the UPOV EXN on EDV

9. The differences must not be such that the variety fails “to retain the expression of the essential characteristics that result from the genotype or combination of genotypes of the initial variety”.

- Text of current UPOV EXN on EDV suggests a very narrow scope of EDV
- Varieties, which do not retain all essential characteristics, are not considered to be EDV



CIOPORA's questions

- Can one EDV rule fit all cases, when ...
- the genome of a mutant or GMO is almost identical to its Initial Variety, while the phenotype (including “internal” traits like resistances) can be significantly different
- in the case of repeated backcrossing the genetic conformity between the recurrent parent and the new variety depends on the number of backcrosses, while usually the phenotypic difference is one or very few.

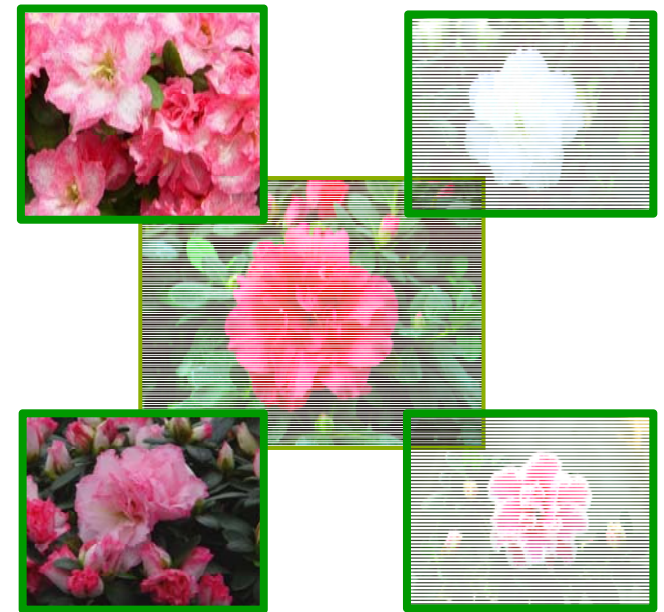
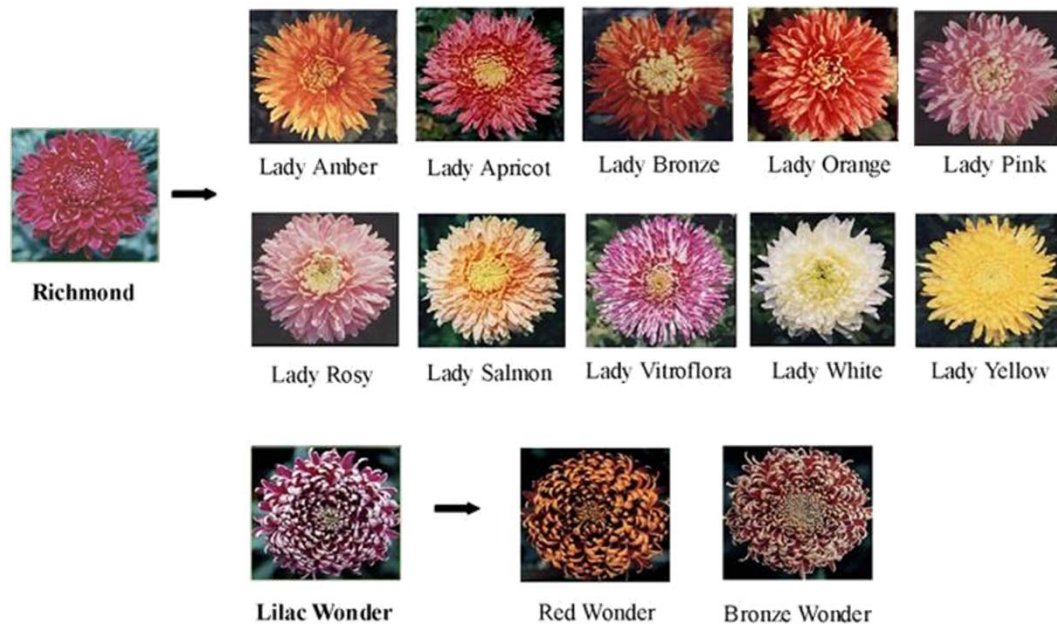


CIOPORA's questions

- Does the current EXN on EDV only target plagiaristic predominantly derived varieties?
- What about non-plagiaristic mutations and GMO?
- What will be the future status of
 - Color mutations of protected varieties?
 - Disease resistant or tolerant NBT or GMO varieties?
 - Mutations with earlier ripening time?
 - Non-browning apple NBT or GMO varieties?



Mutations do not necessarily lead to plagiaristic varieties



GMO and New Breeding Techniques do not aim at creating plagiaristic varieties

Schurft-resistente cisgene appels

Vier cisgene en één intragene genetisch gemodificeerde appellijnen van de cultivar 'Gala' worden in dit project in een boomgaard gedurende enkele jaren gevolgd.



**Conventional
Apple Variety**



**Arctic®
Apple Variety**

Apple:

- reduction of long juvenile phase
- Scab resistance
- Red fruit flesh
- Browning

Some considerations

- CIOPORA's position strengthens the position of breeders of protected Initial Varieties, giving them control over commercialization of mutants and GMO
- Mutants (particularly induced or NBT mutants) and GMO can be a significant improvement over their Initial Varieties, and their commercialization might be beneficial
- However, a deliberate choice was made by the developer of the mutant or GMO to predominantly / solely use the protected Initial Variety



Some considerations

- If a developer of an EDV chooses a protected variety as sole basis for his new creation, he is aware that he needs to seek authorization of the title holder to commercialize the EDV
- Any solution which would exclude most mutants and GMO from the EDV concept by way of a very narrow definition of EDV would be harmful to breeders of protected Initial Varieties
- A fair and balanced solution is needed



Some considerations

- EDV is a question of the scope of protection. Therefore, the existence of a relationship of essential derivation between protected varieties should be a matter for the holders of plant breeders' rights in the varieties concerned.



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CIOPORA's concerns

- The wording of the EDV provision in the UPOV 1991 Act gives room for interpretation.
- A too narrow EDV approach does not take into consideration new developments in breeding. It does not sufficiently support traditional breeding of Initial Varieties (crossing and selection), undermining the protection of its results.
- An unclear and too narrow EDV approach creates a disadvantage to small and medium-sized breeders in particular, because they solely rely on clear and effective laws.



CIOPORA's concerns

- UPOV and its members should apply a fair EDV approach, which takes into consideration the interests of both the traditional ornamental and fruit breeders and the developers of innovative EDV
- The current EXN on EDV has shifted the balance to the side of the developers of EDV and has the potential to significantly harm traditional breeders of Initial Varieties.



CIOPORA's concerns

CIOPORA asks UPOV to consider re-opening the current EXN on EDV and declare it not applicable for vegetatively reproduced ornamental and fruit varieties until a more balanced EXN is agreed upon.

If no joint approach for vegetatively reproduced ornamentals and fruits and seed crops can be developed,

“Different rules for Different Crops”
might be considered.



Thank you for listening!



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