Activity 10 Seminar on Plant Variety Protection and UPOV 1991

Essentially Derived Varieties

UPOV and **CPVO**

December 4, 2023 (Jakarta, Indonesia)



Purpose and concept



Purpose - Essentially derived varieties

PURPOSE:

to ensure sustainable plant breeding development by:

- providing effective protection for the breeder and
- encouraging cooperation between breeders and developers of new technologies such as genetic modification

Protection of EDVs



Essentially derived varieties

Article 14(5):

- (a) The provisions of paragraphs (1) to (4) on the scope of protection shall also apply in relation to
- (i) varieties which are essentially derived from the protected variety, where the protected variety is not itself an essentially derived variety,

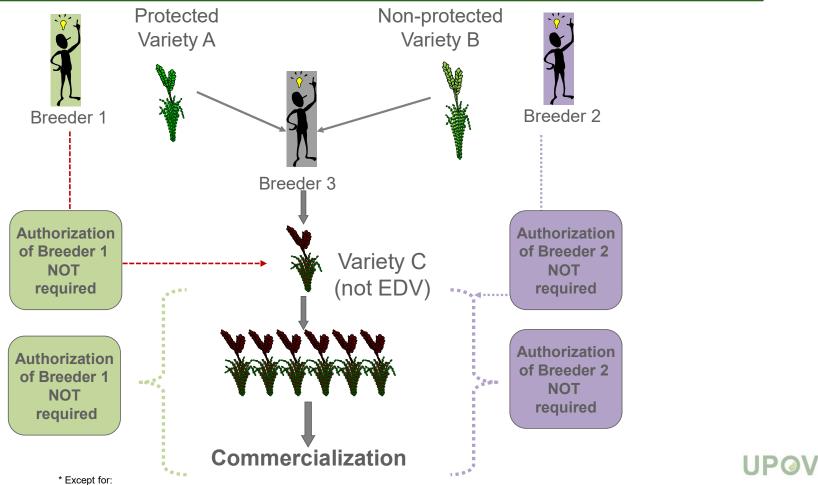
Essentially derived varieties

The Scope of the Breeder's Right provides that the authorization of breeder is required for the following acts in respect of the propagating material (Article 14(1)(a)):

- Production or reproduction (multiplication)
- Conditioning for the purpose of propagation
- Offering for sale
- Selling or marketing
- Exporting
- Importing
- Stocking for any of the above purposes

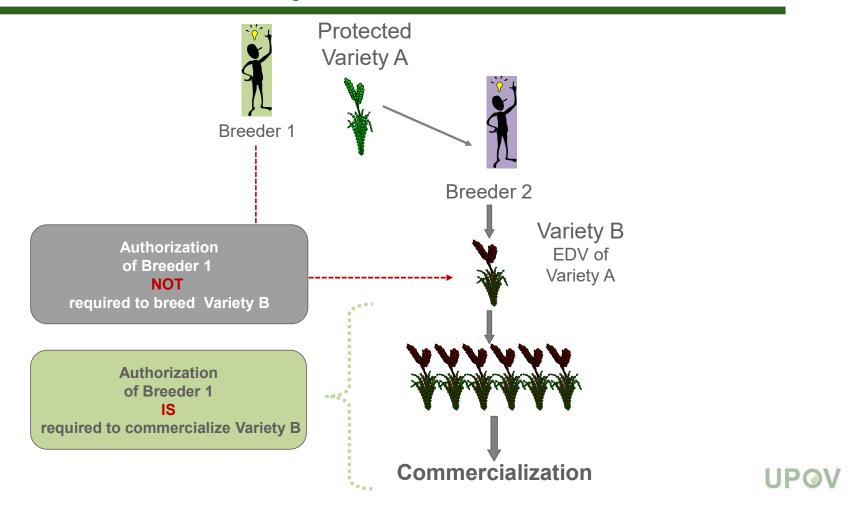
... for any protected variety

The Breeder's Exemption



- (i) varieties which are essentially derived from the protected variety, where the protected variety is not itself an essentially derived variety,
- (ii) varieties which are not clearly distinguishable in accordance with Article 7 from the protected variety and
- (iii) varieties whose production requires the repeated use of the protected variety.

The Breeder's Exemption and EDVs



Essentially derived varieties

Can EDVs be protected in their own right?





Can EDVs be commercially exploited?



It requires the authorization of the PBR holder of the INITIAL VARIETY and the PBR holder of the EDV

Essentially derived varieties

...a variety shall be deemed to be essentially derived from another variety ("the initial variety")

The initial variety is **not** restricted to protected variety.

However, if the initial variety is not protected, the holder of a protected EDV of that initial variety does not need the authorization to commercialize the EDV

UPOV guidance



Seminar on the Impact of Policy on Essentially Derived Varieties (EDVs) on Breeding Strategy



UPOV EDV Seminar 2019- Summary



- Evidence that the current UPOV guidance does not reflect the practice amongst breeders in the understanding of essentially derived varieties (EDV).
- Evolution of breeding techniques has created new opportunities/incentives for predominately deriving varieties from initial varieties, more rapidly and at a lower cost.
- Clear indication from presentations and discussions that the
 understanding and implementation of the EDV concept influences
 breeding strategy therefore, it is important that UPOV guidance is
 tuned to maximize benefits to society in terms of maximizing
 progress in breeding.



Guidance

 On 30 October 2019 the CAJ decided to open up the explanatory notes for essentially derived varieties (EXN/EDV/2) for revision.

 On 27 October 2023 the UPOV Council adopted new explanatory notes, EXN/EDV/3

Available at https://www.upov.int/explanatory_notes/en/

Essentially derived varieties

A variety shall be deemed to be essentially derived from another variety ("the initial variety") when

- (i) it is **predominantly derived** from the initial variety, or from a variety that is itself predominantly derived from the initial variety, while retaining the expression of the essential characteristics that result from the genotype or combination of genotypes of the initial variety,
 - (ii) it is **clearly distinguishable** from the initial variety and
- (iii) except for the differences which result from the act of derivation, it conforms to the initial variety in the expression of the essential characteristics that result from the genotype or combination of genotypes of the initial variety.

Essentially derived varieties

May be obtained for example by (Article 14(5)(c):

- selection of a natural or induced mutant
- selection of a somaclonal variant
- selection of a variant individual from plants of the initial variety
- back-crossing
- transformation by genetic engineering

Predominantly derived

- "Predominant" derivation means that more of the genome of the initial variety is retained than would be retained by normal crossing and selection with different parents.
- A variety should only be considered predominantly derived from the initial variety if it retains almost the whole genome of its initial variety.
- However, a high degree of similarity alone does not automatically mean that a variety has been predominantly derived.

Predominantly derived

(a) Varieties with a single parent ("mono-parental" varieties) resulting, for example, from mutations, genetic modification or genome editing are per se predominantly derived from their initial variety.

Predominantly derived

(b) Varieties involving the use of two or more parents ("multi-parental" varieties) may be predominantly derived from one parent (the initial variety) by selectively retaining the genome of the initial variety, for example through repeated backcrossing.

In this case, crop-specific genetic similarity thresholds might be defined in order to determine predominant derivation.

Predominantly derived from the initial variety, or from a variety that is itself predominantly derived from the initial variety

Essentially derived varieties can be predominantly derived from a variety that is itself predominantly derived from the initial variety

Accordingly, essentially derived varieties can be obtained, either directly or indirectly, from the "initial variety"



It is required that the expression of the essential characteristics that result from the genotype or combination of genotypes of the initial variety is retained.

Examples of essential characteristics:

- Morphological
- Physiological
- Agronomic
- Industrial (e.g. oil characteristics) and/or
- Biochemical characteristics.



"Essential characteristics"

- are characteristics that are fundamental for a variety as a whole.
- contribute to the principal features, performance or value for use of a variety and be relevant for one of the following:
 - the producer, seller, supplier, buyer, recipient, user of the propagating material and/or of the harvested material and/or of the directly obtained products and/or the value chain.



Essential characteristics may or may not be characteristics used for

- the examination of distinctness, uniformity or stability (DUS) and/or
- used for the examination of value for cultivation and use (VCU).



It is clearly distinguishable from the initial variety

 The phrase "it is clearly distinguishable from the initial variety" establishes that the variety concerned is required to be distinct from the initial variety.

• The same requirement as any variety (Article 7).

Except for the differences which result from the act of derivation, it conforms to the initial variety in the expression of the essential characteristics that result from the genotype or combination of genotypes of the initial variety

- There is no upper limit as to the number of differences between an EDV and the initial variety which may result from the act of derivation.
- The number of differences may vary taking into account different methods of derivation.
- The differences which result from the act of derivation may also include essential characteristics.

The relationship between the initial variety (variety A) and an essentially derived variety (varieties B, C, etc.) is irrespective of whether a plant breeder's right has been granted to those varieties.

However, only if the initial variety is protected, will the essentially derived varieties B, C, etc., fall within the scope of protection of the initial variety.

Follow up in UPOV's Administrative and Legal Committee (CAJ)

On 27 October 2023 the Council agreed to add, as a standing item on the CAJ agenda,

"Updates from UPOV members and observers relating to the implementation of the concept of essentially derived varieties"

Based on relevant updates, the Council noted that the CAJ would advise on whether it would be appropriate to develop further guidance on essentially derived varieties.



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Register of EDVs in the Register of Community PVRs in the European Union

The Register of CPVRs shall contain the following particulars:

- Identification of the varieties as initial and essentially derived
- variety denominations
- names of the parties concerned
 [Art. 87(2)(h) BR]







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Preliminary remarks

- The CPVO does not conduct an examination concerning the information entered into the Register of CPVRs supporting the claim that a variety is an EDV from an already protected variety.
- An EDV need not to be protected and may elude the attention of a granting authority.





Information to be provided

- Identification of the varieties as initial and essentially derived (act of derivation);
- A proposal for a suitable denomination pursuant to Article 63 BR, and
- The characteristics in which the EDV is distinct from the initial variety.
- A declaration that the EDV is a variety within the meaning of Article 5 BR;
- If it exists, an official description of the variety





Request

- In case the request is made by the titleholder of the IV and the breeder of the EDV, such request shall show signatures of both parties (request by 2 different parties);
- In case the request was made by only one person, the acknowledgement signed by the other party or the final decision or judgment (ex: declaratory judgment from a national court) with an identification of the varieties concerned.

[Articles 87 and 99 BR]





Decision not to register EDV

 Where the holder of the initial variety and the breeder of the EDV are the same (natural or legal) person, the EDV will not be registered



• Decisions not to register particulars of an EDV into the Register of CPVRs can be subject to appeal pursuant to Art. 67 BR.





Assessment of essentially derived varieties

- With regard to establishing whether a variety is an EDV, the
 existence of a relationship of essential derivation between
 varieties is a matter for the titleholder of the breeder's right
 in the initial variety concerned.
- The titleholder of the initial variety may consider predominant derivation or conformity of the essential characteristics
- These are both possible starting points in providing an indication that a variety might be essentially derived from the initial variety