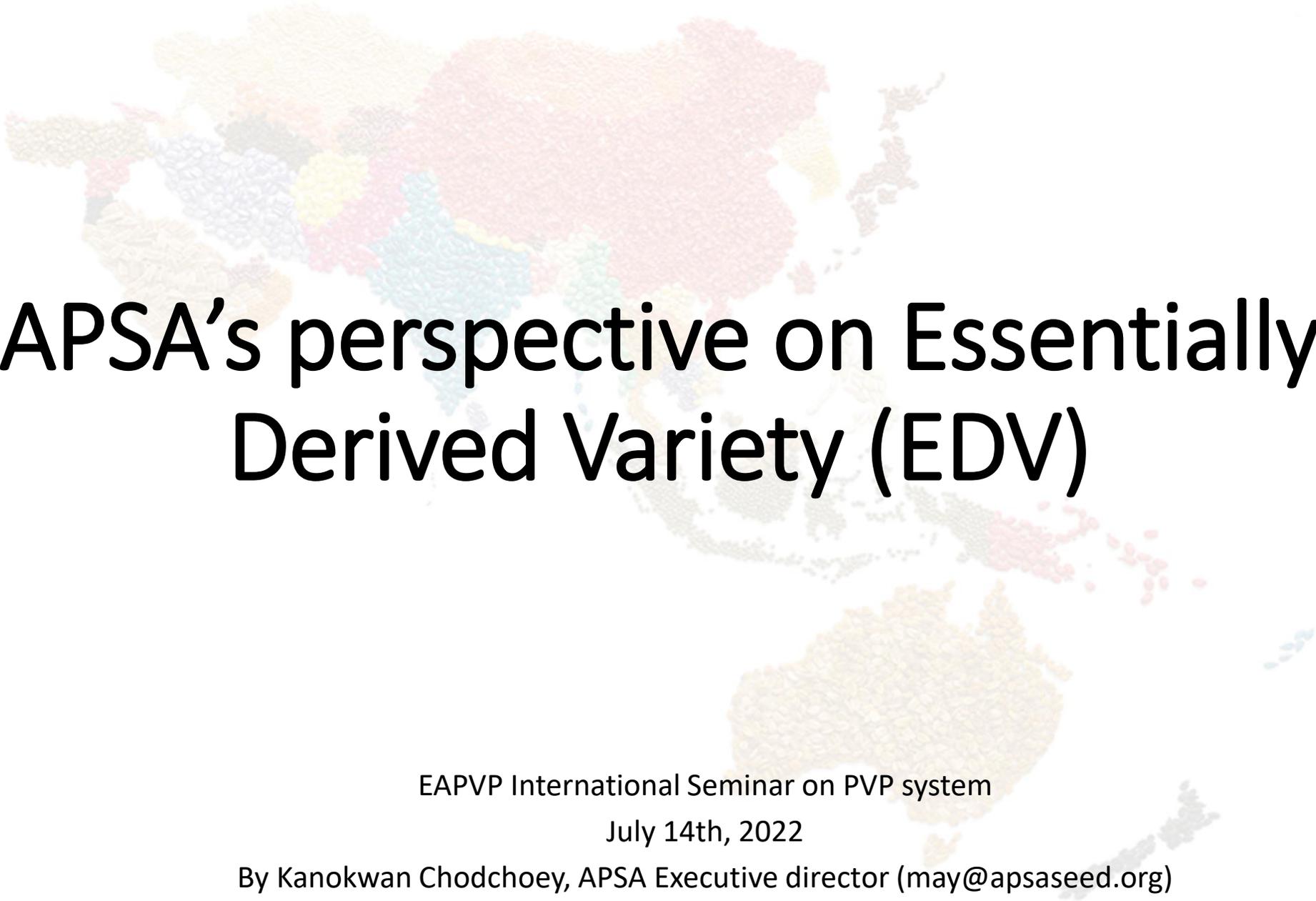




APSA

Quality seed, Quality life



# APSA's perspective on Essentially Derived Variety (EDV)

EAPVP International Seminar on PVP system

July 14th, 2022

By Kanokwan Chodchoey, APSA Executive director ([may@apsaseed.org](mailto:may@apsaseed.org))

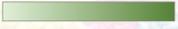
# Asia and Pacific Seed Association

Our mission

“**Sustainable agriculture** through the  
production and trade of **quality seeds**  
for the **world**”

# Asia and Pacific Seed Association

APSA members (data from 2019)

Total members  0.00 112.00

29 countries inside APAC from total 39 countries

24 countries outside APAC

>400 companies in APAC 71% of total members (+100 outside)

24 seed association + non-profit organization in AG

10 Govt seed agencies

50% of members : R&D and seed producer

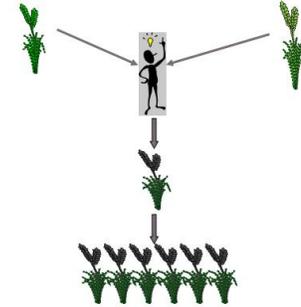
"We are representing breeding companies in APAC"

# 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



# Essentially Derived Varieties

## Article 14

### Scope of the Breeder's Right

(5)[*Essentially derived and certain other varieties*]

(a) [...]

(b) For the purposes of subparagraph (a)(i), 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

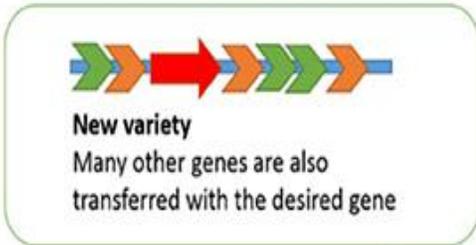
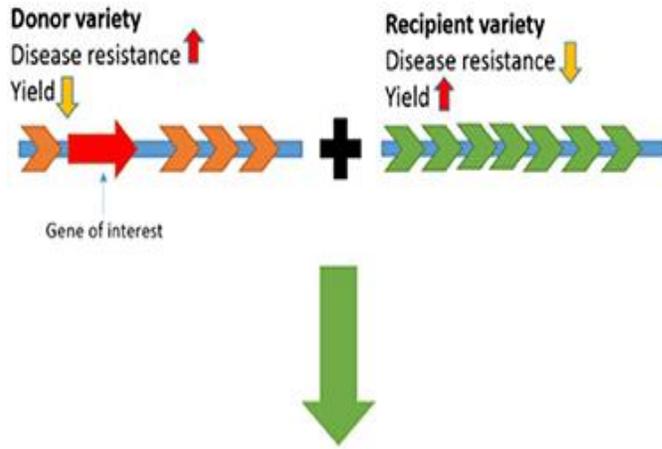
(iii) **except for the differences which result from the act of derivation, it conforms to the initial variety in the expression of the essential characteristics** that result from the genotype or combination of genotypes of the initial variety.

## Essentially Derived Varieties – Art. 14(5)(c) of the 1991 Act

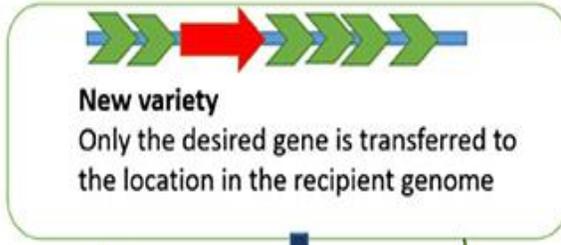
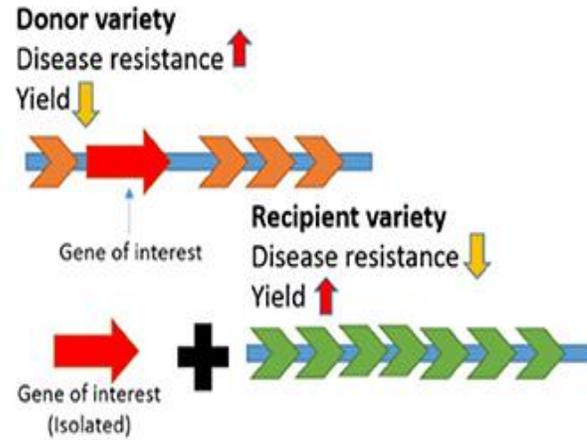
*May be obtained for example by:*

- **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**

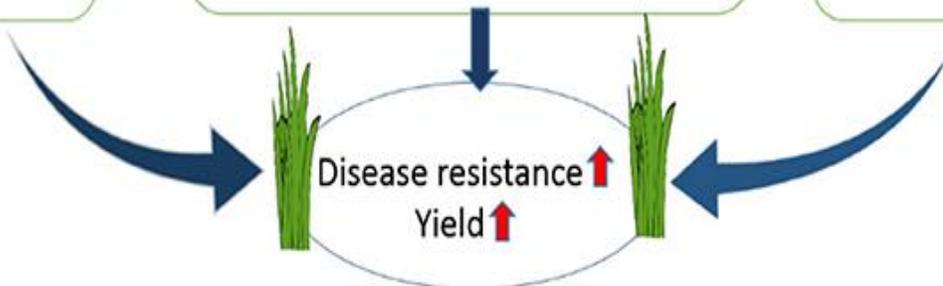
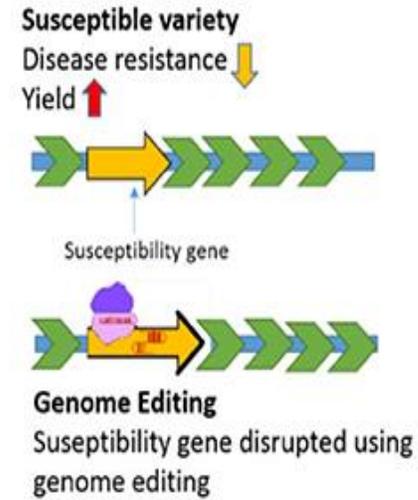
**A Conventional Breeding**



**B Genetic Engineering**

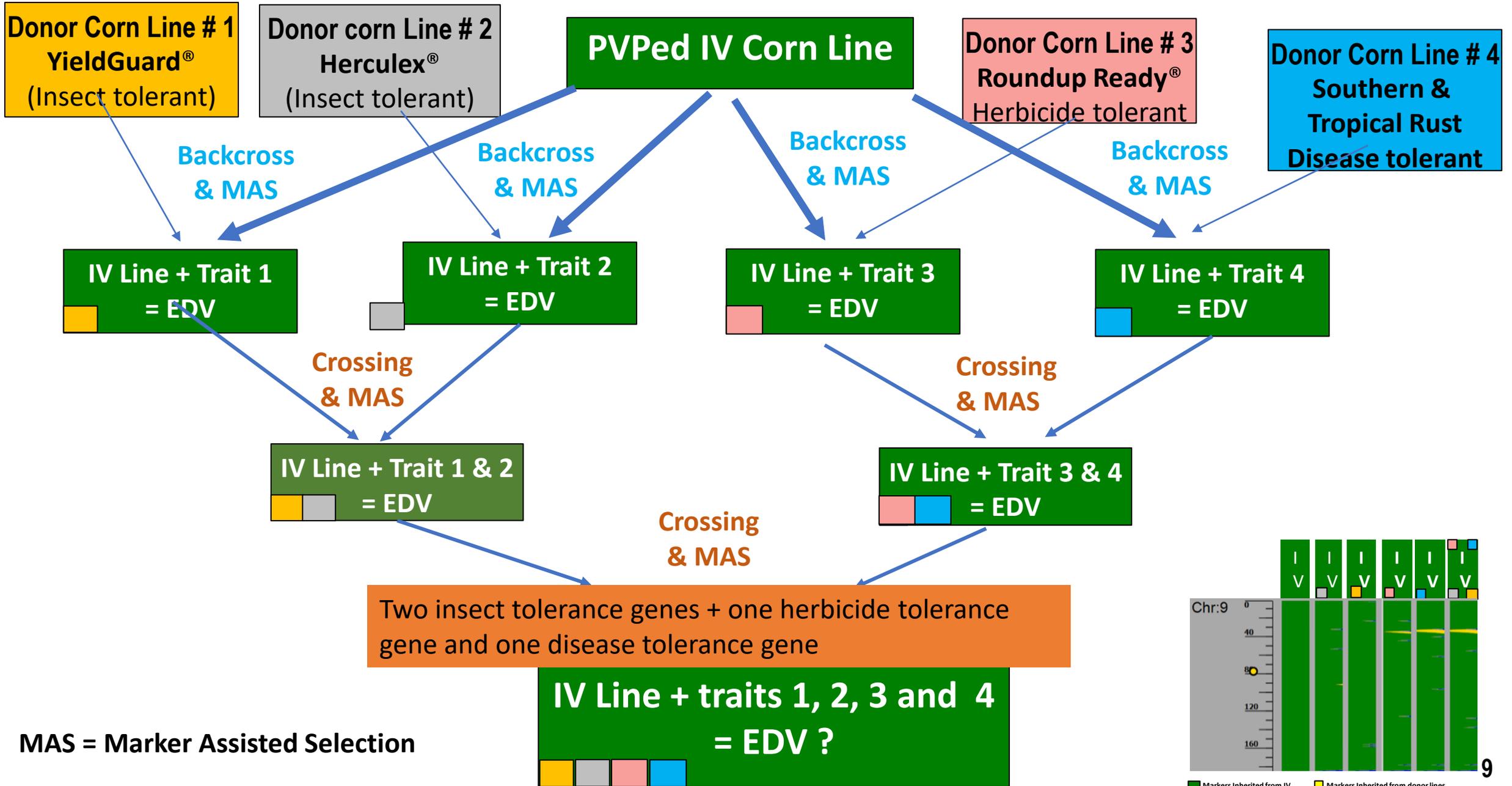


**C Genome Editing**



New plant breeding tool allows faster and more specific of the new plant variety development

# Multi-parental EDV Example



# APSA's perspective on EDV (APSA IPR position paper)

- APSA recognizes the concept of EDV as prescribed in the 1991 Act of the UPOV Convention.
- A variety is considered as essentially derived, if it is a predominantly derived from the initial variety. The variety should be *clearly distinct from the initial variety (IV)* and conform to the initial variety (IV) in the expression of the essential characteristics that result from the genotype of the initial variety.

Essentially derived varieties may be obtained by the selection of a natural or induced mutant, or of a soma-clonal variant, the selection of a variant individual from plants of the initial variety, backcrossing, or transformation by genetic engineering. The above mention techniques and methodologies used to obtain EDV are not exhaustive.

Ref :

[https://www.apsaseed.org/storage/2020/09/Position%20Paper%20on%20Intellectual%20Property%20Rights\\_83682.pdf](https://www.apsaseed.org/storage/2020/09/Position%20Paper%20on%20Intellectual%20Property%20Rights_83682.pdf)

# “A variety shall be deemed to be essentially derived from another variety (‘the initial variety’)”

- 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** and is **clearly distinguishable from the initial variety**.
- Except for the difference 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.

# EDV in practice (Marc Cool, ASC2019)

In case of a dispute;

- - Breeder of variety A has suspicions that variety X is an edv
  - Using agreed on standard methodology, MM's used to determine genetic conformity
  - Based on threshold.....Yes is edv, Maybe is edv or No is not edv
  - If Maybe...reversal of burden of proof... variety X breeder must prove is not
  - If proven is an edv and agreed...breeder of variety X can obtain license from breeder A
- If the dispute continues...both breeders can use ISF arbiters to decide the case
- if still disagreement...can always go to judicial system

# The breeders' associations have shared our views and proposed the amendment to the explanatory note of EDV to UPOV



Joint Presentation of breeders on issues related to EDV

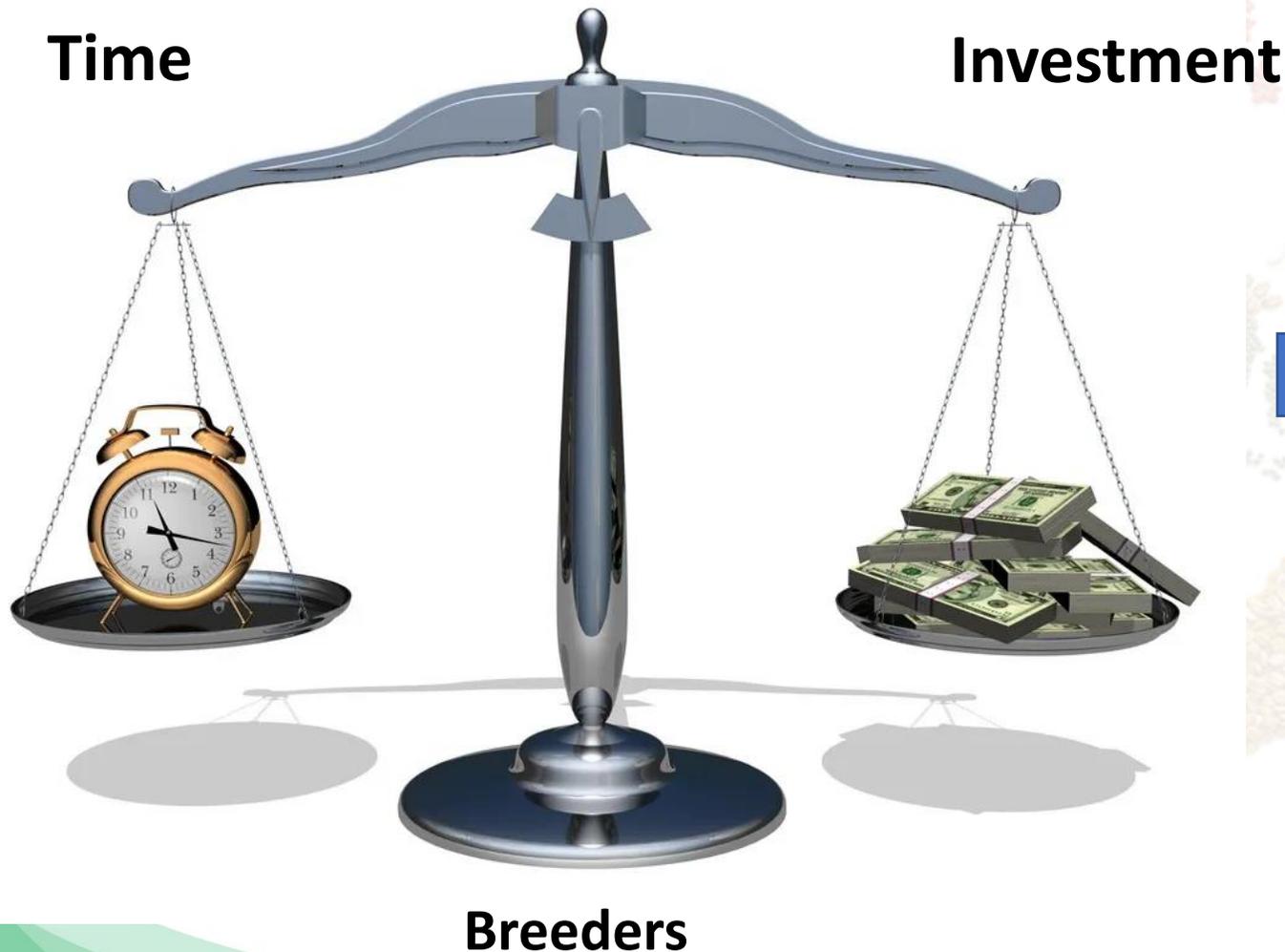
- To the UPOV Working Group EDV -

- February 4, 2021 -

- New Breeding Technologies, such as Oligonucleotide Directed Mutagenesis (ODM) or Site-directed nucleases (SDN) such as CRISPR now enable both single and multiple modifications of an Initial Variety in one act of derivation, in a short period of time, and thus have the potential to undermine the protection of the Initial Variety, unless a sufficiently broad interpretation of the EDV principle is agreed upon between UPOV members.

It is essential for breeders to understand the roles, accountabilities and conditions relating to EDV, in order to make EDV determinations and to assert their rights against a putative EDV. – from the statement presented by the taskforce

# Why do we need an effective EDV system ?



Innovation and value creation to farmers and consumers  
*(incentives to breed more varieties)*

An effective EDV system is a key principle to achieve effective PVP system



**THANK YOU**

# Follow us....

[www.facebook.com/seedapsa/](http://www.facebook.com/seedapsa/)

[linkedin.com/company/the-asia-and-pacific-seed-association/](https://www.linkedin.com/company/the-asia-and-pacific-seed-association/)

[twitter.com/apsaseed](https://twitter.com/apsaseed) (apsaseed)



APSA LinkedIn



APSA Facebook



APSA Twitter