

The contribution of the CPVR system to the EU Economy and Environment

Seminar on Plant Variety Protection and UPOV 1991

IPKey South East Asia, 4 December 2023

Francesco Mattina, CPVO President

The CPVO, organisation and funding





CPVO

Community Plant Variety Office

The **CPVO** is an Agency of the EU operational since 1995 and currently based in Angers, France.

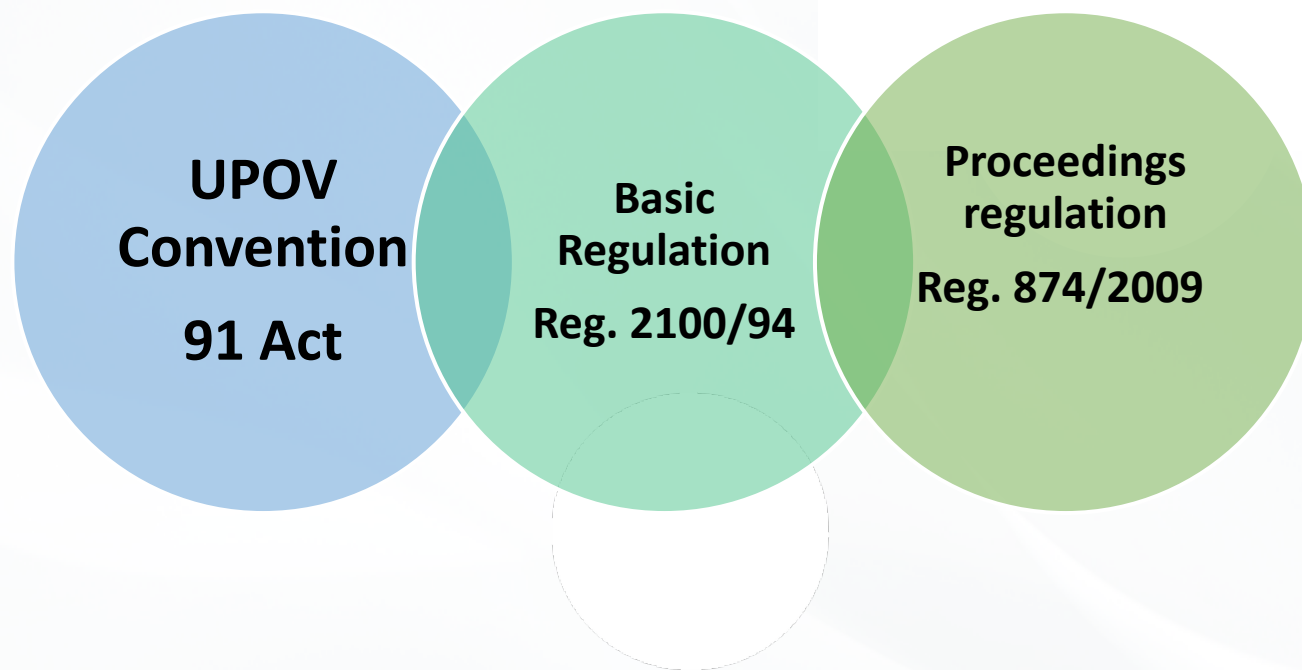
Mission

The CPVO operates, develops and promotes an efficient intellectual property rights system providing customer-centric services, thereby supporting innovation and the creation of new plant varieties for the benefit of society



Main features of the EU system for PVP

PVR system in the EU: legal framework



A world map with countries colored in four categories: dark green (North America, South America, Australia), light green (Europe, Russia), orange (Africa, parts of Asia), and red (Middle East, parts of Asia).

- Members of UPOV (78) (covering 97 States)
- Initiating States (19) and Organization (1)
- States (23) and Organization (1) in contact with the UPOV Office

The UPOV Convention

- The UPOV Convention is an international treaty that aims to provide intellectual property protection for plant breeders and encourage the development of new plant varieties.
- It was established to strike a balance between protecting the rights of plant breeders and promoting innovation in agriculture and horticulture.
- The UPOV Convention was adopted in 1961 and amended in 1972, 1878 and 1991
- The EU became UPOV member in 2005 + 23 EU Member States are UPOV members



Legal framework of the EU PVR system

- A sui generis system for the protection of plant varieties in the EU territory
- In line with the TRIPS Agreement requirements [Article 27(3)(b)]
- Legal basis: Council Regulation No 2100/94 on Community plant variety rights (“Basic Regulation” or “BR”)
- The Basic Regulation is modelled on and compliant with UPOV Convention

Structure of the EU System





CPVO

Community Plant Variety Office



DUS examination offices in the EU



The red dots represent the headquarters of entrusted Examination Offices carrying out DUS technical examinations on behalf of the CPVO



CPVO

Community Plant Variety Office



What's in a CPVR

- A CPVR is the IP Right by which breeders ensure themselves return on investment
- Exclusive rights of exploitation for 25 to 30 years over their new varieties
- No impact on existing, traditional, local and wild varieties



Limitations and exceptions

The system is designed as an open-source that guarantees breeding of new improved varieties.

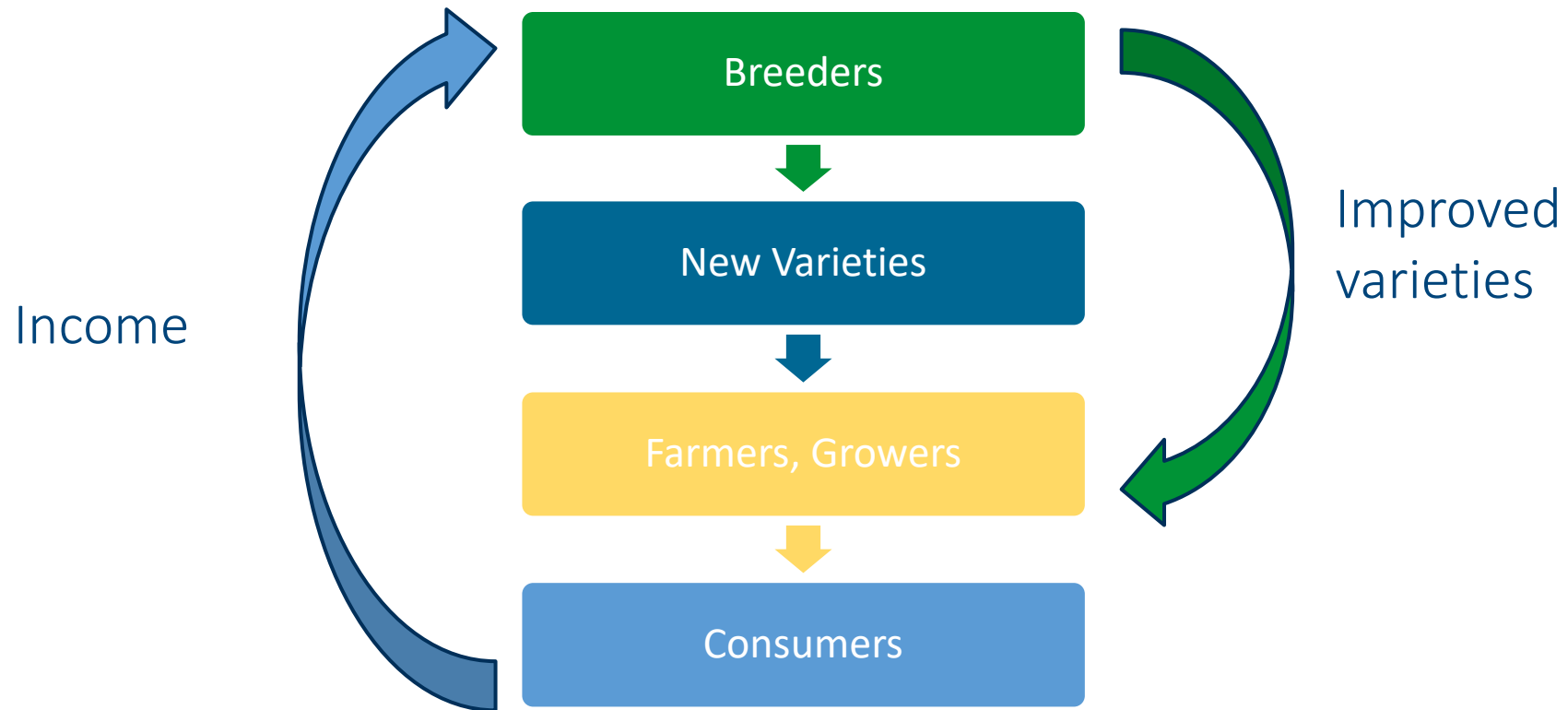
Acts done for:

- Private and non-commercial activities
- Experimental purposes
- Further breeding starting from a protected variety

Are not prohibited

The CPVR system impact on on the EU economy and environment

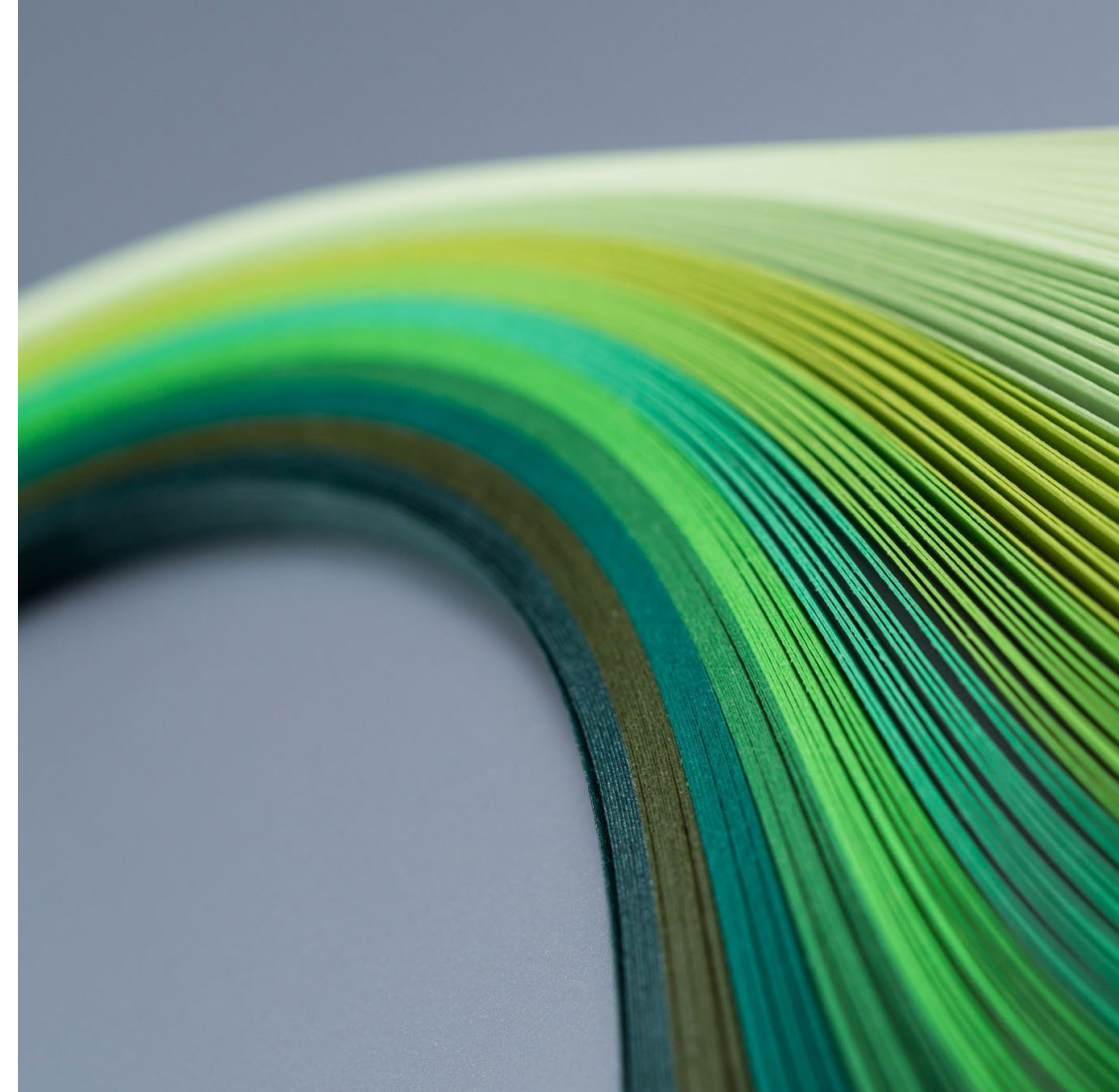
Benefits of a PVP System





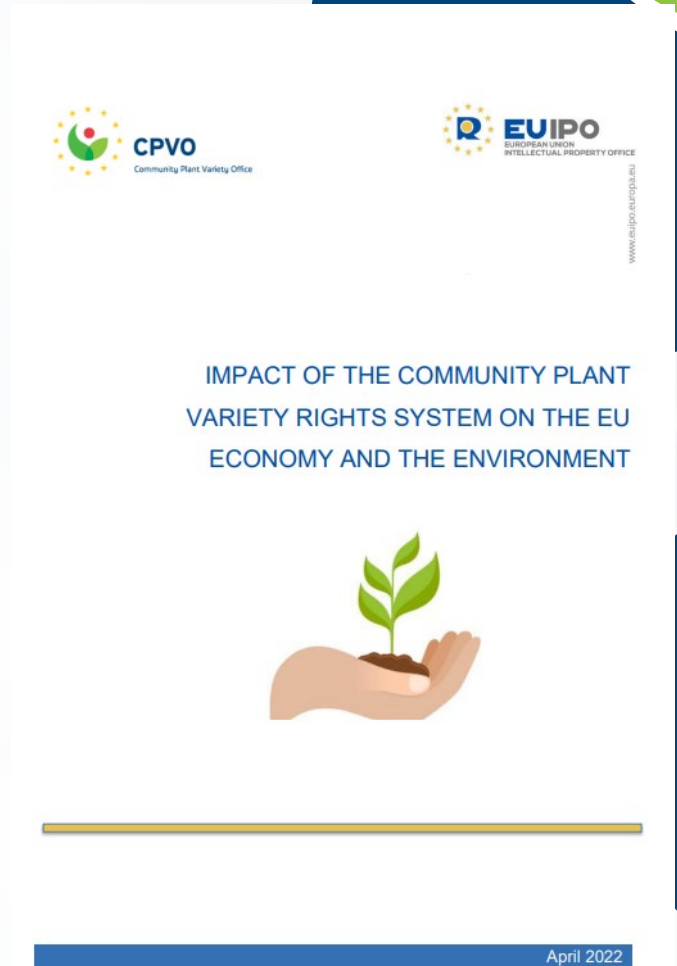
Supporting varietal innovation

- The CPVR system supports varietal innovation by remunerating years, decades of investment in research and innovation
- On average, breeders invest up to 20% of their annual turnover in further R&D, one of the highest rated among research-intensive businesses (CPVO-EUIPO, 2022)

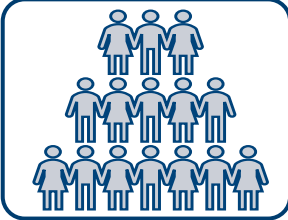


The study

- Study on the impact of CPVR on the EU economy and environment
- Developed by the European Observatory on Infringements of Intellectual Property Rights with the CPVO
- It considers specific aspects of agriculture and horticulture, such as the contribution of the PVR system to the global competitiveness of EU farmers and growers



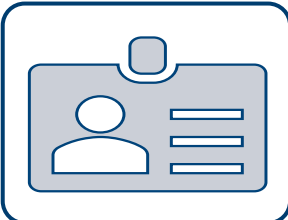
Key findings: economic contribution



The additional production brought about by plant variety innovations supported by the CPVR is sufficient to feed an additional 57 million people world-wide (arable crops), 38 million in the case of fruit, and 28 million for vegetables



The additional value added (that is, contribution to GDP) generated by CPVR-protected crops amounts to 13 billion EUR



Additional production resulted in higher employment in the EU agriculture, and better remunerated

Key findings: farmers, breeders, SMEs



The farmers/growers across the EU benefit from the innovations supported by the CPVR system



The breeders which carry out the R&D leading to those innovations also generate employment and economic activity



Many of the companies protecting their innovations with CPVRs are **small and medium-sized enterprises (SMEs)**. They account for more than **90%** of the **applicants** of CPVRs and **hold 60%** of all CPVRs currently in force (including physical single person)



Key findings: environmental objectives



The **annual greenhouse gas (GHG)** emissions from agriculture and horticulture are reduced by 62 million tons per year. This corresponds to the total GHG footprint of Hungary, **Ireland** or **Portugal**.



Water use in agriculture and horticulture is reduced by more than **14 billion m3**, an amount of water equivalent to 1/3 of the volume of **Lake Constance**



By reducing the environment impact, increasing farm incomes and keeping prices lower for consumers, the CPVR system also contributes to the **UN's Sustainable Development Goals**

Success stories in the EU



Success stories: Instituto Murciano de Investigación y Desarrollo Agrario y Medioambiental

- The Institute developed new grapevine varieties that possess improved agronomic and oenological qualities, thereby enhancing the production of quality wine and promoting sustainable viticulture
- New climate-resistant sustainable varieties better adapted to the negative climate change effects of high temperatures and water scarcity

See more here:

[Plant breeding Success Stories: Instituto Murciano de Investigación y Desarrollo Agrario y Medioambiental \(IMIDA\) | CPVO \(europa.eu\)](#)



Success stories: Instituto Murciano de Investigacion y Desarrollo Agrario y Medioambiental

Dr. Ruiz (from the Molecular Genetics Improvement Team) describes the Institute as *the pioneering national public center registering new varieties of both wine grapes and table grapes.*

- **Financing:** *in most cases by the European Regional Development Fund (80%-60%) and the Region of Murcia (20%-40%), will contribute to the development of sustainable and environmentally friendly viticulture.*
- **Time:** *The time that has taken from the starting of the breeding program (1997) to the acceptance of the use of these new varieties for the production of wine in the Region of Murcia (2022) has been 26 years.*



See more here:

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Success stories: Instituto Murciano de Investigacion y Desarrollo Agrario y Medioambiental

- Return on investment:

*The financial viability of this 27-year-long breeding program was fortified **through the protection of the new varieties at the European level, achieved via Community Plant Variety Rights.***

See more here:

[Plant breeding Success Stories: Instituto Murciano de Investigación y Desarrollo Agrario y Medioambiental \(IMIDA\) | CPVO \(europa.eu\)](#)





Success stories: Nova Siri Genetics (NSG)

- Nova Siri Genetics (NSG) is an Italian SME research and breeding company for new strawberry and small fruit varieties, founded in 2005 in Basilicata, a region in southern Italy
- Today we face a major challenge: to produce food while protecting the environment and the health of consumers. The introduction of resistant plants makes it possible to produce with low environmental impact cultivation techniques and with a considerable reduction in the use of pesticides. (NSG)

See more here:

[Plant Breeding Success Stories: Nova Siri Genetics | CPVO \(europa.eu\)](#)



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Success stories: Nova Siri Genetics (NSG)

- As a research company for innovative varieties, the use of the Plant Variety Protection System is crucial to prevent them from being used in a way that is not allowed in the countries where they are distributed
- NSG protects its varieties not only in the EU but also around the world, coherence of protection systems is crucial to be able to have an international outlook
- CPVO needs to be a focal point to stay abreast of evolution of the systems and to support breeders in coming closer to the CPVR system

italiafruit.net



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