



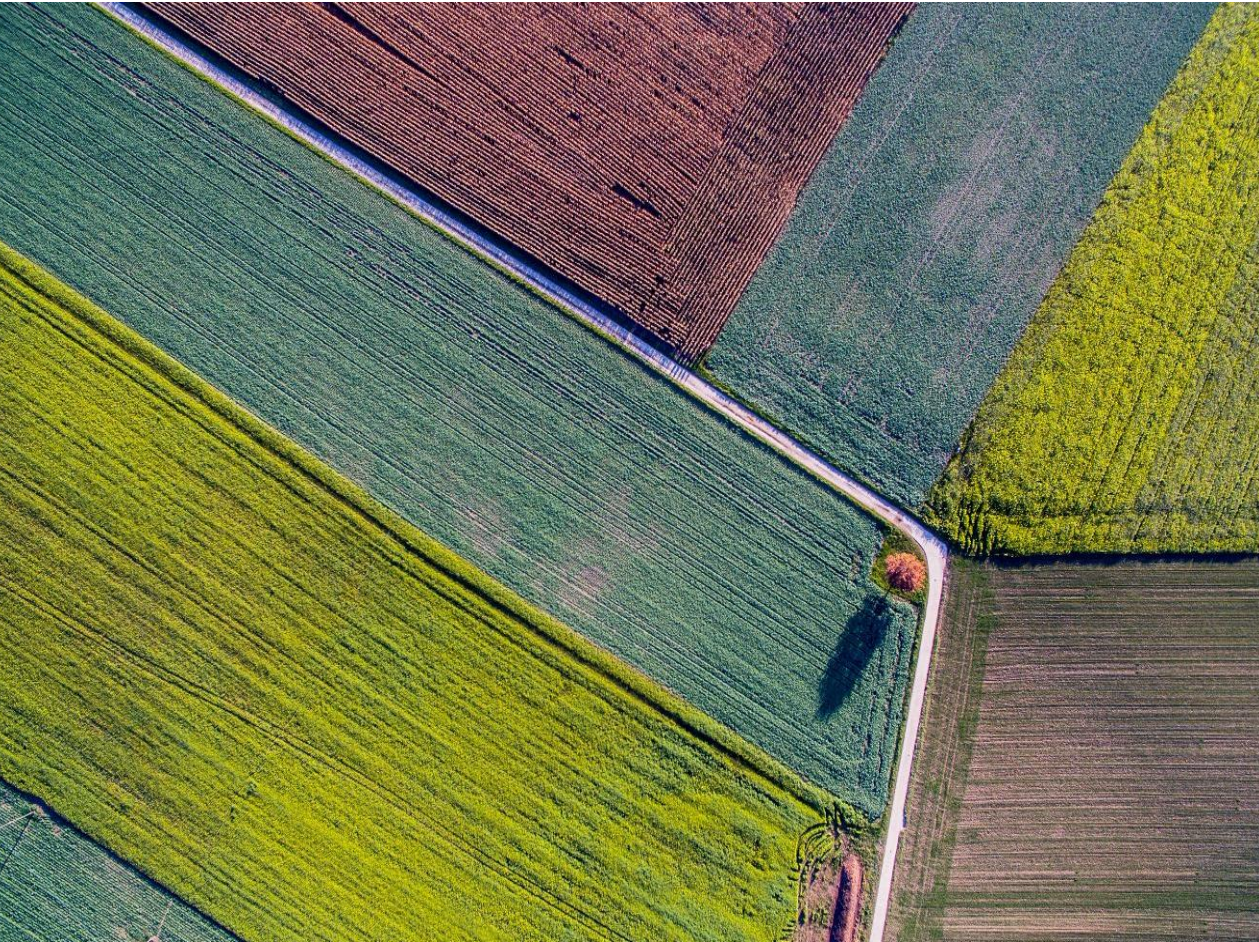
#GrowingTheFuture

Intellectual Property in Plant Research and Breeding

co-existence of different IP systems

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OUTLINE

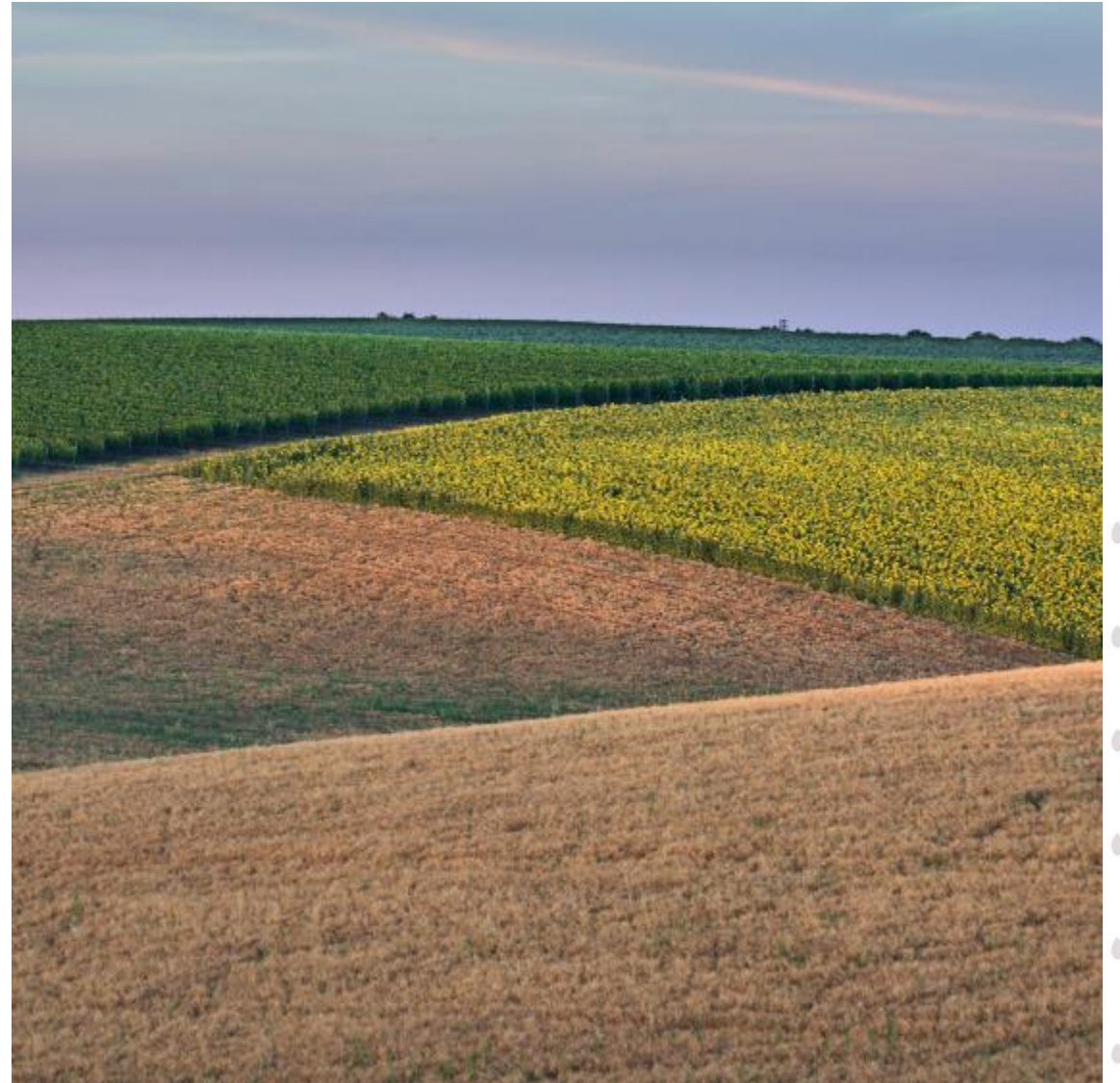
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About Euroseeds



SINGLE VOICE

of the entire **European seed sector**



Who we are

30+

National member associations from EU Member States and beyond, which in turn represent many thousand seed businesses across Europe.

70+

Direct company members from family businesses to multi-nationals, including seed related industries.

Euroseeds has members also in other parts of the world: e.g. **Morocco, South Africa, USA, Canada...**



Mission

Euroseeds' mission is to engage, on behalf of its members, with all relevant European decision makers in order to represent their interests and to contribute to a:

- **fair and proportionate regulation** of the European seed sector;
- **freedom of choice for customers (farmers, growers, industry, consumers)** in supplying seeds as a result of innovative, diverse technologies and production methods;
- **effective protection of intellectual property rights** relating to plants and seeds.

What we do




- **Inform – Represent - Advocate**
on **all seed related issues:**
 - Variety registration and seed marketing,
incl. new breeding methods and organic seed
 - IPRs; biodiversity; research
 - plant/seed health; seed treatment
 - land use and food production
- **Help resolving members' concerns
related to different crops**





Who we are working with

Euroseeds represents the European seed industry towards the **European institutions** and their representatives:

-  EU Commission
-  European Parliament
-  CPVO

Who we are working with

- International involvement and observer status in seed related organisations: UPOV, OECD, ISTA, IPPC, FAO, etc.
- Continuous contact with **stakeholders** involved in the **agri-business** sector:
 - International associations
 - Non-governmental organisations
 - Media and press
 - General public



Intellectual property (IP)



What is IP



"[..] Everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author".

Art. 27 UN Declaration of Human Rights

*"IP refers to creations of the mind,
everything from works of art to inventions,
computer programs to trademarks and other
commercial signs."*

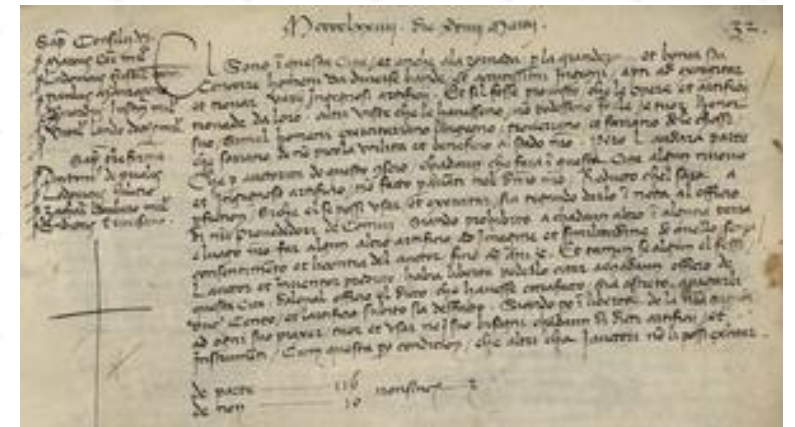
WIPO

Temporary exclusive
right to
commercialize the
protected subject
matter: the invention

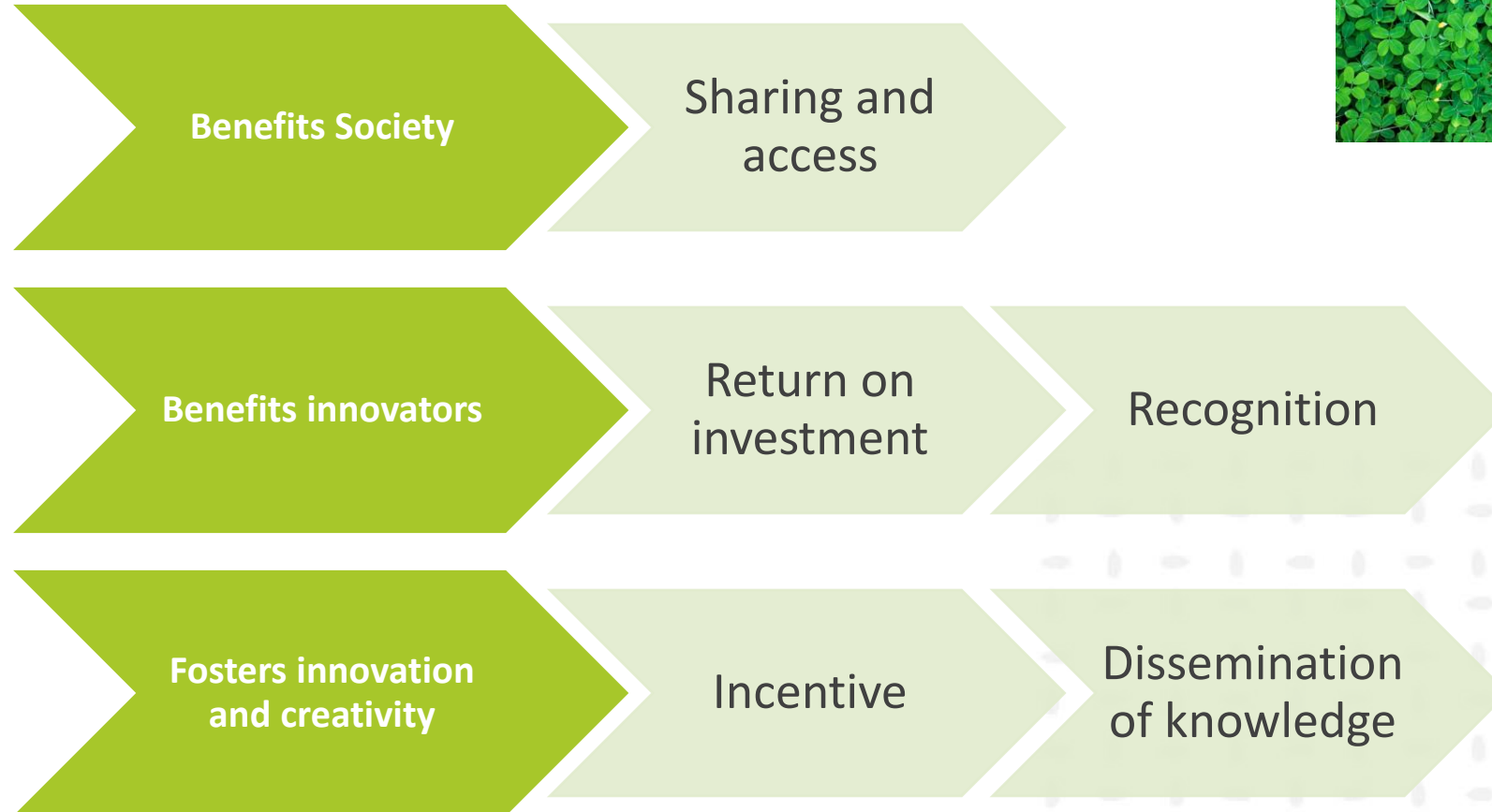
Prohibition to
exploit the
protected object
for commercial or
industrial
purposes

History, some examples

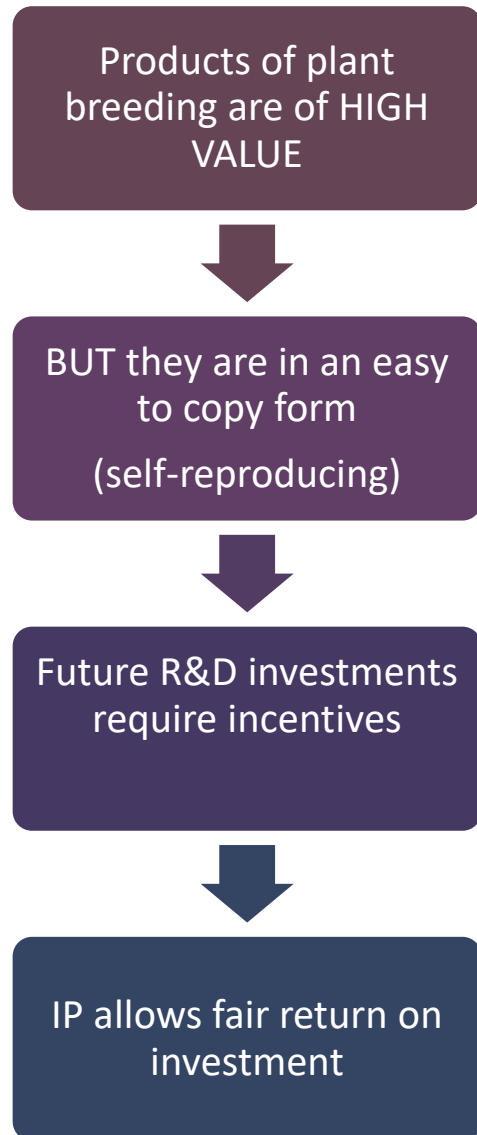
- Cicero: plagiarism
- Magna Graecia: 1 year monopoly for culinary recipes
- Renaissance: first patent to Brunelleschi
- Venetian Patent Statutes (1474): patents might be granted for "any new and ingenious device, not previously made", provided it was useful



Why IP is important



Why IP is important for plant research and breeding





What types of IP in plant research and breeding

- Plant breeder's rights
- Patents
- Trademarks (brand names, logos, company names etc.)
- Copyright (including computer programs)
- Contracts



What types of IP in plant research and breeding

Type of IP	PBRs	PATENTS	TRADEMARKS	COPYRIGHT	CONTRACTS
Scope of protection	New varieties of plants, all kinds of reproduction, essentially derived varieties	Product and processes, all kinds of plants, parts, cells, seeds, proteins, DNA, technical breeding methods	All types of signs (words, letters, numbers, symbols, colors, pictures, three-dimensional signs etc.)	<ul style="list-style-type: none"> Creative expression of ideas, original literary artistic and scientific works (economic and moral right) Databases 	Defined in the contract
Requirements	Novelty, distinctiveness, uniformity, stability	Novelty, inventive step, industrial applicability, disclosure	Distinctiveness	Originality	Defined in the contract
Duration	20-25y	20y	10y	70y after the author's death	Defined in the contract
Responsible bodies	UPOV, CPVO, national PVP offices	WIPO, EPO, national PTOs	WIPO, EUIPO, national TMOs	National	Defined in the contract
Legal basis	TRIPS, UPOV Convention, Community Plant Variety Rights System, <u>EU Regulation 2100/94</u>	TRIPS, Paris Convention European Patent Convention, EU Directive 98/44	TRIPS, Paris Convention, Madrid Agreement, EU Trademark Directive 2015/2436	TRIPS, Berne Convention and WIPO Copyright Treaty, Rome Convention, EU Directive 96/9/EC	Defined in the contract

Plant Breeder's Rights



- **International legal framework:**

TRIPS Agreement - Article 27(3)(b):

"[...] Members shall provide for the protection of plant varieties either by patents or by an effective sui generis system or by any combination thereof."

- **European legal framework:**

- Basis in international law: UPOV Convention - sui generis system
- In EU, possibility to have an EU-wide right with CPVR/CPVO: EU Regulation 2100/94
- National PVP laws providing for a national right

UPOV



[Home | CPVO \(europa.eu\)](http://europa.eu)

Plant breeder's rights

What can be protected, the requirements

- A plant variety = a specific **phenotype** that is:
 - New
 - **D**istinct
 - **U**niform
 - **S**table
- Has a suitable variety denomination



Plant Breeder's Rights - Scope of Protection

The following acts require the authorization of the right holder:

- production or reproduction (multiplication);
- conditioning for the purpose of propagation;
- offering for sale;
- selling or other marketing;
- exporting;
- importing;
- stocking for any of the purposes above



The exclusive right of the owner extends to the following organic material:

- The variety itself
- the seeds and other propagating material of the variety
- harvested material
- EDVs
- varieties which are not distinct from the protected variety
- varieties whose production requires the repeated use of the protected variety

Subject of protection = one concrete variety

Plant breeder's rights - The exceptions

- Private, non-commercial use;
- Use for research;
- Use for further breeding;
- Use as farm saved seed;

OPTIONAL



Plant breeder's rights - Process

- Submission of application at PVP office
- Formal examination of file
- Technical examination of candidate variety against closest reference varieties
- Once DUS test concluded → DUS report drawn up
- Based on DUS report, decision taken to grant or not to grant a title

PATENTS FOR PLANT-RELATED INVENTIONS



Patents

European Legal Framework

A. European Patent Convention (EPC)

- Provides for patent protection for all fields of technologies
- 38 member states
- Administered by the European Patent Office (EPO)

B. EU Directive 98/44 (Biopatent Directive)

- Provides for the protection of biotechnological inventions, including inventions relating to biological material
- Implemented in Implementing Regulations of EPC
- Used as supplementary means of interpretation of the EPC

C. Regulation (EU) No 1257/2012 implementing enhanced cooperation in the area of the creation of unitary patent protection

- Establishing a European patent with unitary effect
- Establishment of a Unified Patent Court deciding on the infringement and validity of both Unitary Patents and classic European Patents.
- Includes a limited breeders' exemption in Art 27c



The European patent system

What can be protected, the requirements

yes

- Inventions in any field of technology
- Invention = a technical solution to a technical problem
- That is:
 - new
 - inventive
 - have an industrial application
 - have been sufficiently disclosed

no

- Discoveries
- Inventions contrary to public order and morality etc.
- Methods for treatment of the human or animal body by surgery or therapy and diagnostic methods

Article 53(b) EPC:

- Plant varieties *per se*
- Essentially biological processes for the production of plants and animals
- *Rule 28(2) Implementing Regulations:*
 - Plants and animals exclusively obtained by means of an essentially biological process

Patents - Scope of protection

- Determined by the patent claims: claims can be of two type:
 - product claims/product by process claims or
 - process claims (manufacturing process or working process)
- In case of manufacturing process claims directly obtained product also covered by the process claim
- For biotechnological inventions: protection extends to any biological material into which the patented invention is incorporated and in which it expresses its function
- Any act (e.g. production, marketing, import, export...) with/of the invention is covered by the patent protection, i.e. requires the authorization of the patent holder

Patents – The exceptions

- Private, non-commercial use;
- Use for research (interpretation varies between countries)
- For biotechnological inventions: use as FSS (as in the PVP Regulation)

- Limited breeders' exemption: in a few European countries & the UPC Agreement also the use of biological material for acts done for the purpose of breeding, or discovering and developing other varieties are exempted

Patents – The process

Europe:

- One centralized examination process by EPO conducted by specialized patent examiners → after 18 months, patent application published
- In examination: examine if patentable subject matter & fulfils criteria
- During examination phase applicant might be requested by EPO to delete, amend or restrict claims
- If examination is completed → decision on grant or rejection
- Validation in selected EP countries
- provides protection for 20 years as of application

Position

Brussels, 4 June 2024

Euroseeds View on Intellectual Property

[24.0386.3-Euroseeds-view-on-IP.pdf](#)

Guiding Principles



- Effective protection and practical enforcement possibilities of intellectual property (IP) rights are a precondition for the continuous innovation in plant breeding – fair return on investment
- Access to all forms of plant material, including commercially available plant varieties, for the breeding of new varieties is indispensable
- No single IP system is capable of covering all the relevant innovations and needs [from breeding technologies over trait development to final plant varieties]

Questions?





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Thank you!



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