

From Biodiversity to Diversification: resources, tools and technologies to meet new challenges

**An overview of the initiatives to exploit biodiversity
in the framework of the EU legislation for seed
marketing: state of play and perspectives**

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ISTA Seminar, Verona, 29 May 2023



Seed quality

Listig of varieties



Seed certification

International framework for seed rules

<p>OECD Seed of agricultural and vegetable species</p>	
<p>UNECE Seed potatoes</p>	
<p>ISTA Seed testing</p>	
<p>UPOV Variety description</p>	
<p>EU Directives Seed legislation</p>	

Common catalogue of varieties (51.500)

agricultural species

90 species – 29.900 varieties

vegetable species

67 species – 21.600 varieties

EU Seed marketing directives since 1966

local varieties (e.g. luzerne)

seed produced on one or more holdings situated within a clearly demarcated region of origin of the local variety

Rules for the marketing of seeds suitable for the conservation by use, in situ, of varieties threatened with genetic erosion

Implementing measures on conservation varieties:

- **Commission Directive 2008/62/EC – agricultural species**
- **Commission Directive 2009/145/EC – vegetables (including varieties developed for growing under particular conditions)**
- **Commission Directive 2010/60/UE – fodder preservation mixtures**

- Derogation from basic directives for certain aspects of listing and certification otherwise the basic directives apply**
- specific conditions shall be established to take account of developments in relation to the conservation in situ and the sustainable use of plant genetic resources through growing and marketing of seed of:**

landraces and varieties which

have been traditionally grown in particular localities and regions

(are naturally adapted in case of agricultural plant species to the local and regional conditions)

and

threatened by genetic erosion

Common catalogue of varieties (590)

agricultural conservation varieties

27 (out of 90) species – 400 varieties

vegetable species

31 (out of 67) species – 190 varieties

Experiment on cereals population (Commission Implementing Decision 2014/150/EU)

species involved:

wheat, barley, oats and maize

Populations authorised needed to comply with following requirements:

a) result from a given combination of genotypes

b) are considered as units with regard to their suitability for being reproduced unchanged once established in a given region of production with specific agro-climatic conditions

c) are generated by one of the following techniques:

- ❖ **crossing > 5 varieties in all combinations, bulking of the progeny, exposing stock to natural selection in successive generations**
- ❖ **growing together > 5 varieties of predominantly cross-fertilising species, bulking the progeny, repeatedly re-sowing and exposing stock to natural selection until plants of original varieties are no longer present**
- ❖ **inter-crossing varieties using crossing protocols different from those in i or ii to produce a similarly diverse population that does not contain varieties**

Organic heterogenous material (OHM)

Legal basis

- ❖ **Organic Regulation EU 2018/848**
- ❖ **Regulation (EU) 2021/1189**

A plant grouping within a single botanical taxon of the lowest known rank which presents common phenotypic characteristics and is characterized by a high level of genetic and phenotypic diversity between individual reproductive units

Organic varieties (OV)

Legal basis

- ❖ **Organic Regulation EU 2018/848**
- ❖ **Commission executive directive
(EU) 2022/1647 (agricultural species)
(EU) 2022/1648 (vegetable species)**

Vegetables: carrot and kohlrabi

Agricultural crops: barley, maize, rye, wheat

Entry into force 1° of July 2023

An Organic Variety is characterized by a high level of genetic and phenotypic diversity

For the production of organic varieties suitable for organic production, the organic breeding activities shall be conducted under organic conditions and shall focus on:

- ❖ enhancement of genetic diversity, reliance on natural reproductive ability,**
- ❖ agronomic performance,**
- ❖ disease resistance,**
- ❖ adaptation to diverse local soil and climate conditions.**

Revision of the legislation on plant reproductive material

(the Commission proposal expected for June 2023)

General policy framework

- **European Green Deal**
- **Farm to Fork Strategy**
- **EU Biodiversity Strategy for 2030**
- **EU Strategy on adaptation to climate change**