

International Federation of Organic Agriculture Movements EU Regional Group

POSITION PAPER

Towards more crop diversity

- adapting market rules for future food security, biodiversity and food culture



IFOAM EU Group Position on the Revision of the Community Legislation on the Marketing of Seed and Plant Propagating Material, May 2013

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Executive summary

The IFOAM position on seed (IFOAM, 2011) underlines that the increase of seed supply from open pollinated varieties, traditional sources, home gardens and on farm seed needs to be stimulated as diverse plant populations that have evolved in response to local pressures are needed for farming of the future. With this position paper the IFOAM EU Group formulates concrete demands for a European legislation on the marketing of seeds and plant propagating material that would deliver to this end. The current legislation puts burdens on producers of seed and plant propagating material (S&PM) that contribute to the loss of biodiversity and does not recognise the contribution that small breeders, farmers and seed savers make to the development or genetic resources. The ongoing revision of this legislation is a chance to reach improvements. The IFOAM EU Group demands the following:

- 1+2: It should be possible to bring (old and new) niche varieties and populations on the market based on an officially recognised description (ORD) with reduced bureaucratic burden and costs for registration.
- 3: The registration of varieties and the control of the quality of seeds must remain a public service that is accessible to all seed producers.
- 4+5: The evaluation of uniformity needs to be adjusted to the variety type and the assessment of identification criteria should be reduced to agronomic relevant traits.
- 6+7+8: Adapted DUS and/or VCU testing must be available for varieties targeted for organic farming or specific local conditions and the VCU testing should be optional. Moreover, for niche varieties with a restricted market share, the required number of test locations should be reduced.
- 9+10: Outside scope of the legislation should remain the exchange and direct sale by farmers, gardeners and conservation networks to end users of farm saved seeds& plant propagating material from varieties without variety protection.
- 11: The registration of newly developed Composite Cross Populations should be possible on the basis of an officially recognised description, together with a history of use of the populations.
- 12+13: The mandatory information to be provided when seeds & plant propagating material are sold should include species and variety name, origin (region or country), propagation region and production year. The breeding methods and the origins of the basic varieties should be available to the public on demand or registered in a publicly accessible database.
- 14: GMO-free seed must remain available
- 15: Varieties whose variety protection right has expired should remain available.

In addition to the current legislation review, other EU political frameworks that relate to food and agriculture must better consider the use and conservation of plant genetic resources.



1. Introduction

The basis for EU rules on the marketing of seeds and plant propagating material (S&PM) began in the early 20th century. These started as optional rules for the registration of plant varieties under national legislation, with the aim to ensure seed quality, to protect seed users from false specifications and to promote the use of high yielding varieties that would produce enough food for all European citizens. Compulsory registration of varieties in catalogues developed from the 1930s on in some European countries (GELINSKY, E. 2012). The EU legislation (European Commission, 2013) on the marketing of seed currently under review goes back to the 1960s and 70s. Over time a strong inter-linkage with plant breeders rights, regarding the definition and description of plant varieties, has developed. Today, almost a century later, we face new challenges such as climate change, the loss of (agro) biodiversity and the need for sustainable resource management in food production. These challenges make the dynamic for the conservation of plant genetic resources and the further development of adapted varieties and crops based on a broad pool of plant genetics more important.

Environmental problems are reflected in the policy strategies of the European Union. The protection of the environment, and especially biodiversity, is an important part of the EU 2020 strategy (European Commission, 2010) and promoted by the European Union through the 7th Environmental Action Plan (European Commission, 2012) and the EU biodiversity strategy to 2020 (European Commission, 2011). Biodiversity, as well as adaptation to the consequences of climate change and better management of natural resources also play a major role in the debate on the Common Agriculture Policy towards 2020 (European Commission, 2011).

The Commission acknowledges in its *Options and analysis paper* (European Commission, 2011) (Point 2.2 - Room to strengthen sustainability issues) that "other factors [than productivity] have also emerged, such as a focus on developing varieties that need fewer treatments with pesticides, less fertilisers or less water, to allow an improved sustainability of farming. Protection of the environment has become more important".

To meet growing environmental problems such as climate change, the conservation and sustainable use of plant genetic resources for food and agriculture (PGRFA) are essential. The erosion of plant genetic resources poses a severe threat to the world's food security in the long term. The exchange of farm saved seeds and their use for direct sales contributes substantially to the evolution of genetic diversity in agriculture. Farmers and small breeders still play a key role in the dynamic conservation and continuous improvement of PGRFA.

This is acknowledged by the FAO's International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) (FAO, 2001), which is aimed at the conservation and sustainable use of crop



genetic resources and seeks to ensure that the benefits accruing from their use are shared in a fair and equitable manner (FAO, 2001). The Treaty, endorsed by the European Union in 2004 (The International Treaty, 2004) expresses recognition of the enormous contributions that have and continue to be made by the world's farmers in conserving and sustainably using crop genetic resources. It notes that these contributions constitute the foundations for food production around the globe (Article 9). Farmers' rights to save, use, exchange and sell farm-saved seeds and propagating material are essential for maintaining crop genetic diversity and thus for the implementation of the ITPGRFA.

Access to S&PM from diverse varieties is also a pre-condition to safeguard farmers' ability to adapt to local conditions and changing climatic and environmental conditions. The State of the World's Plant Genetic Resources for Food and Agriculture (PGRFA) presented in 2010 states: "*PGRFA remain crucial for helping farmers adapt to current and future challenges, including the effects of climate change. It is vital that we conserve this diversity and increase its use in a sustainable and efficient manner*" and "While there is some recognition of the role of informal seed systems in maintaining agricultural biodiversity and in improving farmers' access to seeds, more efforts are required to boost local seed production, improve access to quality seeds and develop small scale seed enterprises."

The EU seed legislation has a significant influence on the character of seed law in many countries and is in large parts copied by some developing countries, or imposed on them through free trade agreements. This gives the EU a big responsibility to ensure that the access to seeds intended for subsistence and small scale farming directed to local food production remains an inalienable human right (United Nations, 2009).

2. Current legislation contributes to massive loss of agro-biodiversity

Present European seed laws favour the production of uniform varieties (protected by plant breeder's rights) and discriminate against less homogeneous open pollinated varieties and populations. This has resulted in an irreversible of agro-biodiversity.

If a variety is to be sold, it must be registered in the common catalogue. For this registration, it needs to be tested for DUS (distinctiveness, uniformity and stability) while some crops are required also to fulfil criteria for VCU (value for cultivation and use) over a minimum two-year period. The DUS criteria match with varieties bred for use under standardised (conventional) growing conditions, but they prevent the marketing of S&PM of varieties that are of potential additional benefit for organic and low input farming. The varieties are genetically more diverse varieties and populations and can adapt to specific (local) climatic, cultural and soil conditions.



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Compulsory DUS and VCU tests put a huge administrative and financial burden on breeders and prevent smaller and local suppliers from entering the S&PM market. This reduces agro-biodiversity and narrows the supply of varieties for consumers.

The directive for conservation varieties 98/95 (Council Directive 98/95/EC, 14 December 1998) contains an obligation to introduce a legal basis 'to permit, within the framework of legislation on the seed trade, the conservation, by use in situ, of varieties threatened with genetic erosion' and 'to establish conditions under which seed suitable for organic growing may be marketed'. This goal has not yet been met. Whereas special rules for the registration of amateur varieties, landraces, conservation varieties and seed mixtures have been introduced between 2008 and 2010 (European Commission, 2008-2010), the restrictions in the amounts and distribution area, together with the costs and bureaucracy are too limiting to make economic use of conservation varieties possible. This is especially the case for small breeding companies with hundreds of varieties each with a very small market share. Moreover, <u>new varieties</u> with high intra-varietal diversity from agricultural crops like cereals cannot be registered under these rules.

Finally, the needs of the informal S&PM sector have not been taken into account. Currently farmers are legally prohibited from selling or exchanging seeds or planting material.

3. Key demands and recommendations for the review of the EU SP&M marketing law

A main objective of the ongoing revision of the EU S&PM marketing legislation must be to create the legal space required to enable the official registration and marketing of varieties with more genetic diversity and less uniformity. To realise this we need flexibility in the requirements for registration and certification. Not only should the regulation encourage the development of locally adapted varieties, but it must allow farmers to exchange and sell seeds and plant propagating material among themselves that are not protected by intellectual property rights. This is a practice that farmers have done since the dawn of agriculture and has led to the foundation of the rich diversity of PGRFA that we have today.

Demands regarding registration and marketing

1) It should be possible to bring niche varieties and populations on the market based on an officially recognised description (ORD).



It must be possible to register <u>old and new</u> niche varieties and populations (e.g. conservation and amateur varieties, landraces and farmers' varieties, traditional fruit trees, varieties and populations bred for special geographical or climatic conditions or specialised food markets) based only on an officially recognised description (ORD), without additionally official registration and certification. This has already been implemented in the seed law in Switzerland ⁽Confederation Suisse, 2013).

On-farm conservation is dynamic and farmer's plant populations evolve as a reaction to changing farm conditions or consumer demand. This is a desired development. Therefore the description should be updated every 10 years to address variabilities over time. The idea is to describe the varieties/populations to ensure they are identifiable. As a consequence protection of those varieties/populations by plant variety protection PVP would not be possible. Market access for varieties and populations registered in the ORD catalogue must be guaranteed, and cannot be challenged by the later registration of a similar variety in the catalogue of "officially tested" varieties. In case of genetic overlaps between an officially tested, highly homogeneous variety, and an ORD variety, the issue must be solved by additional information to the variety name that highlights the character as homogeneous or population variety.

There should be no discrimination by geographical or quantitative restrictions for the marketing of those varieties and populations. Limitations of the marketing to regions of origin or certain quantities as currently used for conservation varieties (**2008/62/EC**) must end. The niche varieties and populations must be entered onto a publicly accessible list held by the authorities to avoid any confusion with the designation of other varieties.

2) The bureaucratic burden and costs for the registration of niche varieties with a limited market share should be reduced.

3) The registration of varieties and the control of the quality of seeds must remain a public service that is accessible to all seed producers.

Demands regarding official testing and certification

The DUS (Distinctness, Uniformity, Stability) criteria need to be adapted for open pollinated or composite cross populations.



4) The evaluation of uniformity needs to be adjusted to the variety type.

The requirements on morphological uniformity are now an obstacle to authorisation for many open pollinated or composite cross varieties. Clone varieties, inbred lines and hybrids are per se much more homogeneous than open pollinated varieties. Besides that the genetic diversity within open pollinated varieties is necessary to make them more robust and to avoid inbreeding depression. Therefore the evaluation of the uniformity needs to be adjusted to the variety type.

- Populations of cross pollinating and self pollinating species should be described using reproducible frequencies in characteristics rather than the presence of pure uniformity in every individual plant.

- Composite cross populations, which are grown as evolving populations, should be identified by transparent records of the origin and history of the population.

Further research and stakeholder consultation should be undertaken to establish reliable and functioning registration systems for these specific types.

5) Assessment of identification criteria should be reduced to agronomic relevant traits.

The consideration of certain traits and morphological characters should not be compulsory in the description if they have no agronomic relevance or relevance for consumers.

6) Adapted DUS and/or VCU testing must be available for varieties targeted for organic farming or specific local conditions.

Preferably varieties are tested under the local conditions they are bred for. This is already practised in Austria and is under discussion in Germany. Currently testing under conventional conditions is compulsory. This creates unnecessary expenses for organic breeders. Moreover, the "value for cultivation and use" criteria are now focussed on high yields. VCU testing should also take into account other traits such as adaptation to low input or broad resistance to diseases etc.

7) VCU testing should be optional.

The report on the Evaluation of the Community acquis on the marketing of seed and plant propagating material (Food Chain Evaluation Consortium, 2008) states that "*several crop sectors where VCU is not compulsory and (...) several 3rd countries with no regulatory tests are considered as competitive as the regulated VCU crop sectors*". Compulsory VCU testing does guarantee added value for the seed sector or for all seed users. Additional costs for VCU testing are a major concern for many organic breeders, as the expected area where a new organic breed will be grown is still relatively small, while testing



costs are usually not in proportion to the size of the seed market (SUSVAR and ECOPB 2008). Even if adapted testing conditions are provided, compulsory VCU testing would remain an additional burden for breeders and the costs for these tests are a frequent reason why small breeders do not register varieties where VCU is compulsory. Therefore, VCU testing should become an optional requirement for any species and can be used by those breeders and companies that want to use the VCU as a marketing argument for their varieties.

8) For niche varieties with a restricted market share, the required number of test locations should be reduced.

Currently, the rules for testing a local variety with a small market share are the same as for a variety that is sold all over the world.

Demands regarding the informal seed sector

9) The <u>exchange</u> of farm saved seeds& plant propagating material from varieties without variety protection among farmers and gardeners must remain outside the scope of laws on the marketing of seeds.

It should be considered and recognized as in-situ conservation of biodiversity.

10) Seeds& plant propagating material from varieties without variety protection directly sold by farmers, gardeners and conservation networks to end users should be excluded from the scope of this legislation.

Demands regarding composite crosses

11) The registration of newly developed Composite Cross Populations should be possible on the basis of an officially recognised description, together with a history of use of the populations.

A Composite Cross Population is a genetically diverse group of plants, created from known parent lines selected for their particular characteristics. Genetic diversity allows the population to respond flexibly to selective forces in its environment. Plants that are resistant to environmental stresses survive to



produce more seed, and those that respond badly to stresses produce less for the next generation. In this way, a population can adapt to a specific growing environment. While some individual plants are selected out, most of the diversity is retained between generations, allowing the population to tolerate unpredictable climate and disease conditions. With enough diversity there will always be some plants that have the necessary traits to survive. If a composite cross population is grown in a new region for 2-3 generations, it can be considered as having adapted partially to this new region. It is essential therefore, for populations that are used for seed, that the history of cultivation of the population is maintained.

Further demands

12) The mandatory information to be provided when seeds & plant propagating material are sold should include species and variety name, origin (region or country), propagation region and production year.

13) The breeding methods and the origins of the basic varieties should be available to the public on demand or registered in a publicly assessable database.

Breeders, farmers, gardeners and even private allotment holders want to know how their seed is produced and which techniques are used. Also consumers have the right to know which techniques are used to produce their food. Protoplast fusion and some other breeding techniques which are not subject to the current EU labelling rules for genetically modified organisms under regulation 1829/2003 and do not respect the integrity of the genome and the cell or the natural reproductive ability of a plant variety (IFOAM 2012) are rejected as production methods by many breeders, farmers or consumers. Therefore the information on the use of such techniques should be publicly available in a seed database.

14. GMO-free seed must remain available

Efficient measures to prevent any unlabelled GMO presence in conventional (non-GMO) and organic seed must be implemented, otherwise it will be impossible for non-GM agricultural production to continue. These measures must be enshrined in EU legislation. Clear liability rules are needed as the cost burden resulting from the prevention of GMO contamination as well as testing, analysis and



compensation for damage compensation must not be shouldered by GMO-free food, feed and seed producers. Companies that place GMOs on the market must be made liable for the any costs imposed on the GMO-free sector.

15. Varieties whose variety protection right has expired should remain available.

It should not be possible – as happened with the 'Linda' potato variety in Germany – for the variety approval to be withdrawn by the breeder company shortly before the variety protection expires. This has resulted in farmers no longer having access to this particular variety.

4. A future for agro-biodiversity

Beyond the seed & plant propagating material marketing legislation, other factors threaten the future development of agro-biodiversity. Plant variety property rights must be shaped in a way that does not hinder the further use and development of genetic resources by farmers, gardeners and breeders. Patents should not be given to plant varieties. Also the current practice of the European Patent Office to patent certain elements of breeding processes - a procedure that comes close to patenting plants - must be urgently revised with the objective of protecting and further developing biodiversity and farmers rights.

The maintenance, further development and use of genetic resources must also in the future be possible without any GMO contamination. Therefore EU wide binding rules are needed to prevent contamination with GMOs and to make polluters liable for the costs they cause for prevention and compensation of damage related to GMO contamination.

The conservation and further development of genetic resources is crucial for our future food security, to enhance the environment and to enable food producers to react to climatic changes. Agrobiodiversity is a public good and should therefore be supported by public programmes. A new EU programme for the conservation of genetic resources should be launched, highlighting the role that networks of farmers, gardeners and NGOs play in this concern. Rural development programmes and also the new European Innovation Partnerships should be used to support rural stakeholders to engage in the decentralised conservation and further development of genetic resource use and marketing.



5. Annex

Definitions

Niche varieties: a landrace, an old variety, an ecotype in case of fodder crops, or any other variety including new varieties, where the requirements for the approval on the variety list does not apply. Varieties from genetic engineering are excluded from this definition.

Open Pollinated (OP) varieties: are varieties of self pollinating and cross pollinating species in contrast to hybrid varieties obtained by controlled crossings each year. OP varieties have stable traits from one generation to the next. Open pollinated plants are fairly similar to each other but usually not as uniform as hybrids.

Composite cross population: is a population of genetically heterogeneous individual plants obtained by multiple crosses of parental genotypes and subsequent bulk propagation which allows adaptation to local conditions by evolutionary processes.

Conservation varieties: traditionally grown varieties and landraces and varieties of 'no intrinsic value' for crop production but developed for growing under particular conditions.

Amateur varieties: varieties that are not used for commercial agricultural production, i.e. varieties that are only grown for private use by hobby gardeners or subsistence farmers.

Landraces: A landrace is a dynamic population(s) of a cultivated plant that has historical origin, distinct identity and lacks formal crop improvement. Landraces are often genetically diverse, locally adapted and associated with traditional farming systems.

Commitments of the European Union to conserve and enhance the use of genetic resources and biodiversity in farming

UN (1992): Convention on Biological Diversity (CBD) Signed by the European Union in 1992 and approved in 1993. Entered into force in 1993

FAO (1996): Global Plan of Action for the Conservation and Sustainable Utilization of Plant Genetic Resources⁻ Adopted by the FAO Council, including by the EU, in 1996

FAO (2011): Second Global Plan of Action for Plant Genetic Resources for Food and Agriculture. Adopted by the FAO Council, including by the EU.

FAO (2002): International Treaty on Plant Genetic Resources for Food and Agriculture signed by the European Union in 2002 and approved in 2004. Entered into force in 2004



EU Commission (2011): Biodiversity strategy 2020

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(http://ec.europa.eu/food/plant/propagation/conservation_varieties/index_en.htm)

- European Commission, 2010: Europe 2020: A strategy for smart, sustainable and inclusive growth <u>http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:2020:FIN:EN:PDF</u>
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- European Commission, 2011: Legal proposals for the CAP towards 2020 (http://ec.europa.eu/agriculture/cap-post-2013/legal-proposals/index_en.htm)
- European Commission, 2011: Options and analysis of possible scenarios for the review of the EU legislation on the marketing of seed and plant propagating material (<u>http://ec.europa.eu/food/plant/plant_propagation_material/review_eu_rules/docs/15042011_op_tions_analysis_paper_en.pdf</u>)



- European Commission, 2012: General Union Environment Action Programme to 2020 "Living well, within the limits of our planet" (<u>http://ec.europa.eu/environment/newprg/proposal.htm</u>)
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<u>http://ec.europa.eu/food/plant/plant_propagation_material/review_eu_rules/docs/s_pm_evaluati</u> <u>on_finalreport_en.pdf</u>, annexes:

<u>http://ec.europa.eu/food/plant/plant_propagation_material/review_eu_rules/docs/s_pm_evaluati</u> <u>on_finalreport_ann_en.pdf</u>

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