

Position

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Benefits of the “Breeding Exemption” to Society

The FAO IT PGRFA, the Standard Material Transfer Agreement and the Nagoya Protocol all clearly recognize the important value of free access to protected varieties and support the breeding exemption.

In 2050, some 9 billion people will be living on our planet and will need to be nourished. At the same time, arable land is already shrinking significantly, due to urbanisation, growing population, and climate change. The challenge for future agriculture is to produce more on less land – and also with a view to resources-efficiency and sustainability. To achieve this, highly productive varieties are needed, that can be grown in an economic and sustainable way. By producing such varieties modern plant breeding contributes significantly to one of the basic needs of society: enough food that is healthy and produced for reasonable prices in an efficient and environment-friendly way (1).

Innovative plant breeding can thus have great impact. But it is a time-consuming and costly endeavour. Plant breeders invest approximately 12 to 16 % of their turnover into the development of new varieties, which is higher than in most other industries focused on research and innovation (2). Private and public plant breeders have to find a way to re-finance these expenses. Both the entrepreneurial interests of the breeder as well as the general public interest therefore ask for a suitable framework that ensures adequate return on investment to the plant breeder for his accomplishment. Intellectual property rights are the means to establish such a framework.

The best-suited form of Intellectual Property (IP) protection for plant varieties as such is the plant breeder’s rights system (PBR) as provided for within the framework of the UPOV Convention (3). Until now, 67 countries and the European Union have decided to create a protection for plant varieties under this convention conforming to harmonised standards easy to comply with. This encourages also small breeders to apply for variety protection. The UPOV PBR system protects just

a unique combination of genetics, which means that other genetic combinations can be used freely. An important cornerstone of the UPOV plant breeder's rights system is the compulsory exception to the breeder's right, the so-called "breeding exemption". This exemption provides that all varieties protected by PBR can be used for further breeding by crossing and selection and the resulting variety can be commercialized without any obligation to the PBR holder.

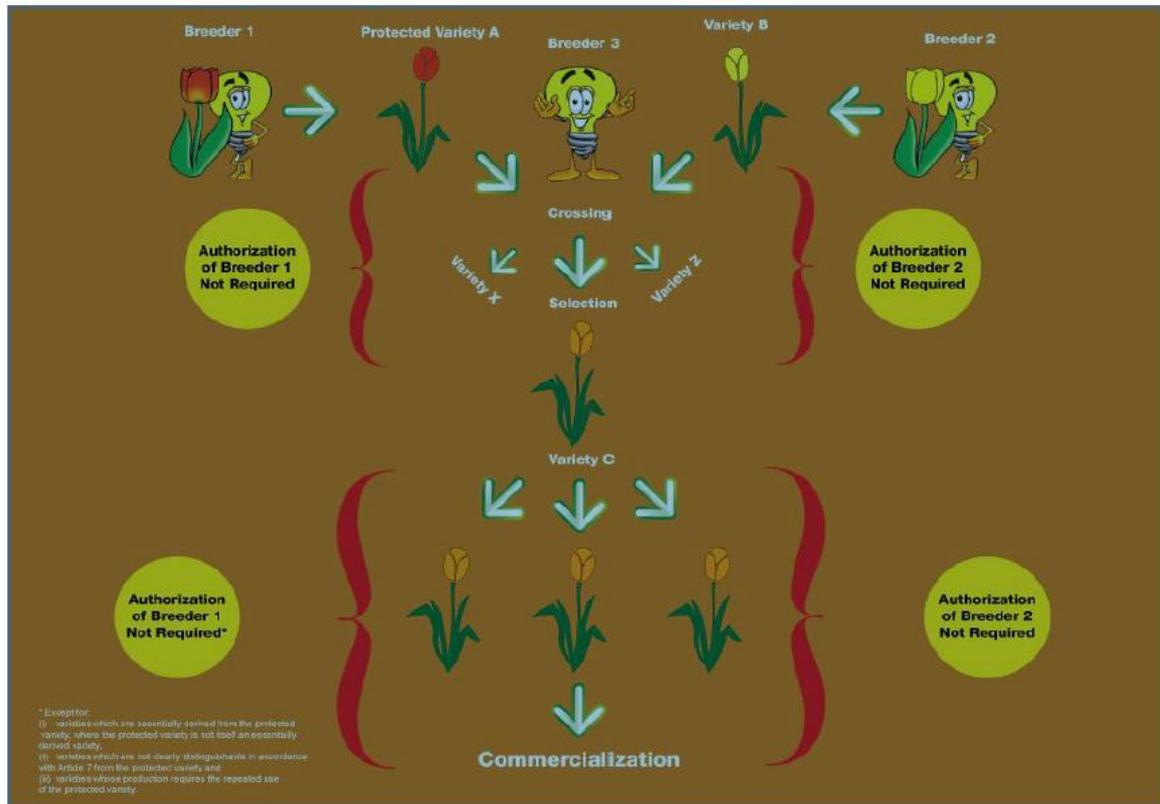
As everybody who crosses and selects plants is considered to be a breeder, free access and free breeding is allowed for everybody under this exemption: (professional) breeders, farmers, public research institutes, gene banks and amateurs alike. It is a very important and valuable feature of which all those engaged in breeding have profited and are still profiting. This feature can be regarded as a kind of "open source" system and has always been relied upon by breeders for further improvement on each other's varieties. The genetics of all varieties are thereby freely available to anybody for further development and to collect knowledge. This principle has also been acknowledged by the FAO International Treaty on Plant Genetic Resources for Food and Agriculture (IT) to which 125 countries and the European Union are contracting parties (4). In its article 13.2 (d) (ii) the IT recognizes the benefit sharing value of the PBR system's breeding exemption.

Article 5(4) of the Nagoya Protocol (5) provides that for the purpose of benefit-sharing benefits can be monetary and non-monetary ones. The Annex to the Protocol provides a non-exhaustive list of non-monetary benefit-sharing measures which highlights the importance of sharing of R&D results specifically with regard to priority needs such as food security. In this respect it is very important to underline that under the PBR regime the "open source" system of the breeding exemption has been a crucial tool that makes the sharing of R&D results possible since the adoption of the first UPOV Convention in 1961. The free access and use of all genetic resources is to the benefit of all breeders in all countries, including and especially in the provider countries, as well as to the benefit of all farmers and end-users profiting from improved varieties.

Plant breeders consider it an important development that the Nagoya Protocol – like the FAO IT PGRFA and its Standard Material Transfer Agreement – clearly recognizes the real value of this free access to protected varieties and supports the breeding exemption.

The breeding exemption has contributed greatly to continuous breeding progress and a great diversity of plant varieties (6) since it ensures free access to genetic pools and avoids dependencies. The breeding exemption has helped to preserve and promote a diversified breeding industry consisting of big as well as small and medium-sized, but competitive and high-performing breeding companies. The breeding exemption provides benefits both for public and private research in both developing and developed countries. Farmers are the ones that profit first via a rich choice from a wide range of new and improved varieties, but the real advantages go to the whole society via the provision of safer and healthier food, less environmental harm and better choice of products.

Picture 1: The breeding exemption (source: UPOV)



1 Marcel Bruins: The Evolution and Contribution of Plant Breeding to Global Agriculture; World Seed Conference 2009, UPOV Publication No. 354 (E)

2 ESA Brochure on Biodiversity and Plant Breeding, p. 2., available at: <http://www.euroseeds.org/position-papers>

3 Convention on the Protection of New Plant Varieties, see also <http://www.upov.int>

4 <http://www.planttreaty.org>

5 Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity

6 Marcel Bruins: The Evolution and Contribution of Plant Breeding to Global Agriculture; World Seed Conference 2009, UPOV Publication No. 354 (E)