

CLE position on easier access to plant biotech patents

May 2023

Plant-related inventions contribute to making agriculture more sustainable and play a significant role in maintaining a stable food supply.

Biotechnology innovation needs to be encouraged via a solid and predictable IP framework

CropLife Europe is in favor of facilitating access to patents for breeders and supports any of its members' initiatives in this regard.

Biotechnology innovation plays a key role in driving long-term agricultural productivity, rural development, and environmental sustainability by encouraging the creation of new solutions.

The plant science industry is one of the world's most research- and development-intensive industries. While innovations in conventional plant breeding are safeguarded by plant variety rights (PVPs), innovations in plant biotechnology can only be protected through patents. PVPs are not aimed at protecting trait innovations while patented traits can easily be transferred to any variety of a given crop or used in a multitude of plant varieties or crops by simple crosses.

Moreover, as in any field of technology, patents ensure transparency in the innovation landscape and enable technology transfer between different actors down the value chain. The plant biotechnology "innovation ecosystem" gathers companies of all sizes, as well as research institutes that contribute to the development of new products to the benefit of farmers, consumers, and society at large. Patents allow these players to safely invest in the development of biotechnological innovations by turning ideas into tradable goods while providing the necessary confidence that their efforts and investments can be protected.

Some of the most successful applications of biotechnology have enabled breakthrough innovation in plant breeding. Modern plant breeding is largely dependent on plant-related inventions to develop more productive, efficient, and environmentally friendly plant varieties for Europe.¹ Those innovations are then subject to the world's most stringent regulatory authorization procedures to ensure products entering the market are safe for human and animal health and the environment.

New genomic techniques (NGTs) have shown to have a great market potential thanks to their flexibility and affordability² and patent protection of traits developed by NGTs will play a key role in the development and dissemination of the next generation of plants.

¹ A few years ago, this was demonstrated by the Ogura case. Ogura is an oilseed rape hybridization technology developed by INRA, the French National Research Institute. Ogura developers invested €56 million and nearly a decade of work bringing the Ogura oilseed rape hybrids to market and required 15 years to break even on their investments. The technology was commercialized under non-exclusive licenses by INRA and created €1.0 billion in economic benefits to society with €960 million, or 75%, accruing downstream to farmers and consumers. More information is available in the report "*Who benefits from intellectual property rights for agricultural innovation? The Case of Ogura Oilseed Rape in France*" https://croplife.org/wp-content/uploads/2016/04/ogura_report_-_final_report_update_8oct2015.pdf).

² Parisi, C. and Rodriguez Cerezo, E., Current and future market applications of new genomic techniques, EUR 30589 EN, Publications Office of the European Union, Luxembourg, 2021, ISBN 978-92-76-30206-3, doi:10.2760/02472, JRC123830. <https://publications.jrc.ec.europa.eu/repository/handle/JRC123830>.

CropLife Europe members promote easier access to patented traits for all breeders, including small breeders

Some actors in the value chain still consider that they might face challenges in accessing patented plant traits and request a higher level of transparency. These issues have in particular been raised by small companies who might feel precluded from making full use of third-party patented innovations in their breeding activities, as they are used to with non-patented traits.

CropLife Europe members take these challenges and concerns very seriously. They have a vital interest in ensuring that companies of all sizes successfully develop new varieties for the market and, in particular, use patented plant traits in further plant breeding. This can be achieved through transparency and easier access to genetic material for breeding purposes and to patented traits through licenses. For this reason, CropLife Europe promotes access to patents for breeders and supports any of its members' initiatives in this regard.

CropLife Europe members are engaged in bilateral licensing and are committed to a number of platforms that deal with the challenges of access to patents. These initiatives are open to all breeding companies in the value chain, and in some cases they specifically address smaller companies' needs. Examples include:

- Euroseeds PINTO Database³: provides transparency by making the link between a commercial plant variety and a patent or patent application, information provided for free, and which is currently not available elsewhere.
- International Licensing Platform Vegetable (ILP)⁴: guarantees worldwide access to patents that cover biological material for vegetable breeding.
- Agricultural Crop Licensing Platform (ACLP)⁵: commits its members to grant commercial licenses to their commercial patented traits to other members on fair conditions and provides a mechanism to facilitate certain breeding activities such as access to germplasm for further breeding. Small breeding companies benefit from preferred membership conditions.
- Several company initiatives⁶

These initiatives increase transparency about the plant biotech patent portfolio and offer opportunities to acquire licenses on fair conditions and on the basis of standardized contracts. Their aim is to make contract processing user-friendly and thus limit the transaction efforts and costs to a minimum, especially for small companies. The mutual granting of intellectual property rights between actors in the value chain (so-called cross-licensing) can also be handled via these platforms.

CropLife Europe is convinced that reliable, structured, and fair access to patents and thus effective participation in the "innovation ecosystem" can be maintained by breeding companies of all sizes and to the benefit of the entire value chain.

We need an effective IP legal framework as well as an enabling regulatory framework

The collaborative initiatives mentioned above promote transparency and easier access to patented innovations. Some of these initiatives are new and have yet to unleash their full potential. All players in the value chain are encouraged to actively integrate these initiatives into their operational processes and, if necessary, develop them further.

³ <https://euroseeds.eu/pinto-patent-information-and-transparency-on-line/>

⁴ <https://ilp-vegetable.org/>

⁵ <https://aclp.eu/>

⁶ Bayer's small breeders initiative offers EU small vegetable breeding companies access free of cost to Bayer's licensable patents on traits in vegetables which are in the Euroseeds PINTO database. (<https://www.bayer.com/en/agriculture/free-access-to-patented-innovation-for-small-vegetable-breeding-companies>); Corteva proposals for collaboration (<https://www.openinnovation.corteva.com/our-interests.html>).

CropLife Europe and its member companies are committed to safeguarding a balanced IP system that, on the one hand is based on high-quality patent rights and PVP for incentivizing all actors to innovate in all aspects of plant innovation and, on the other hand, enables breeders to continue accessing commercial plant varieties for breeding by supporting a breeder's exemption as well as fair transparency and licensing mechanisms.

Effective IP protection including patents for plant biotechnology inventions such as new genomic techniques and products obtained therefrom is vital to stimulating and incentivizing innovation. New technologies can help overcome today's environmental and societal challenges and safeguard food supply. As well as a stable and effective IP legal framework, we need an enabling and science-based regulatory framework that makes these innovative products available to farmers in the EU and appropriately protects human and animal health and the environment.