SEGUNDO EJERCICIO. TURNO LIBRE

RESUMEN. TIEMPO: 30 MINUTOS

Competitive and sustainable farming in Europe: give breeders a chance

The newly created Agricultural Crop Licensing Platform (ACLP) simplifies access to patented traits for European plant breeders, enabling them to leverage the latest technologies and help farmers to meet the challenges of sustainable food production.

Europeans rightly expect safe food at affordable prices. But this is getting harder and harder for European farmers to do. Consumer expectations regarding quality and price keep rising, while farmers face increasing pressure to adopt sustainable practices, for example, by reducing their carbon emissions and the impact agriculture has on soil and water. Across the EU, arable farmers are increasingly confronted with drought conditions while the amount of cultivatable land is shrinking. At the same time, the EU is making trade agreements with exporters of agricultural produce that are exposing European farming to ever greater competition. European agriculture cannot afford to be left behind as producers in other parts of the world have access to the latest agricultural technologies. If farmers have access to the best available seed varieties, as well as other innovations, they can tackle these competing challenges.

EU policymakers are currently negotiating new rules for developing innovative plant varieties through new genomic techniques (NGTs). These techniques allow plant breeders to introduce highly desirable characteristics such as improved drought tolerance or pest resistance, helping plants cope with challenges like water shortages or maintaining yields, without increasing the use of crop protection products or fertilisers.

These sought-after traits can be enhanced by speeding up traditional plant breeding techniques, which, until now, have required long-term work crossing varieties to develop desired traits. Plant breeding can focus, for example, on developing varieties with shorter stems, that are more resistant to heavy rain. It can also improve plants' resistance to common diseases, such as rhizomania, a common disease affecting sugar beet crops.

NGTs use very precise genome-editing tools to target the traits breeders want to enhance in a plant's own DNA. The precise targeting means that the desired characteristics can be boosted in a single generation rather than the dozens or hundreds that traditional plant breeding requires. Unlike genetic modification, NGTs do not introduce genetic material from other organisms. They work with the material that is already a natural part of the plant's DNA.

If we want European farmers to continue to produce safe, affordable food and farm in an environmentally sustainable way, we need to ensure that plant breeders have access to the latest plant technologies in their already shrinking toolbox.

Currently, for many breeders across the EU, making the most of the latest varieties can involve navigating the complex world of patents.

Intellectual property (IP) protection, which includes patents, is often portrayed as blocking access to an innovative technology. In actual fact, it's not. IP protection plays a crucial role in ensuring access to and safeguarding scientific progress by securing a fair return on investment for researchers.

In Europe, plant varieties can be protected under the Plant Breeders' Rights system, which grants breeders the ability to market their innovations while allowing others to use them for further breeding.

However, technological inventions, such as new traits or breeding techniques, may be protected by patents, provided they meet certain legal requirements, which include being genuinely inventive and having an industrial application. In this case, users have access to the patented technology through different mechanisms such as licensing. Effective IP protection ensures that innovators benefit from their inventions. This encourages healthy competition, which leads, in turn, to more innovation.

This can be a complex environment to navigate, especially for breeders who are not trained as IP specialists. Small businesses that want to use patented innovations can face obstacles such as lack of transparency regarding the existence of a patented trait, complexity in negotiating with a patent holder, and insecurity about fair terms and conditions. These time-consuming and expensive processes can lead some companies to refrain from breeding new varieties with the latest innovations or to fear they might be infringing patents when using a new variety released on the market.

In order to reduce this complexity, plant breeders have launched several initiatives such as platforms to improve transparency around patented traits and to facilitate access to patents. These platforms strike a balance between rewarding innovation and ensuring fair availability so no single organization can monopolize critical patented inventions.

For over a decade, the International Licensing Platform (ILP), has been providing access to patented traits in vegetable crops. Recognising the need for a similar system in other crops, European plant breeding companies sought to expand this model to a wider range of crops, including corn, sunflower, cereals, sugar beet, potatoes, fruit and flowers. In 2023, a group of European plant breeding companies came together to launch the Agricultural Crop Licensing Platform (ACLP), with the aim of facilitating fair access to patented traits and promoting innovation across multiple crop types.

This new platform makes it easy for breeders to access current and future technologies. Instead of having to worry about complex patent rules, all they need to do is enter a standard licensing agreement and agree on a royalty fee with the patent holder. If they cannot reach an agreement within six months, they have the right to go to arbitration at the end of which they are guaranteed to get a license to use the patented variety. This system covers over 95% of all patented traits currently available on the market in Europe.

The ACLP has been developed by plant breeders as a way to ensure that seed companies can offer their customers the best available varieties to deal with the competing challenges faced by European agriculture.

If we want European farmers and Europe’s agriculture to remain competitive and produce food in a sustainable way, we must continue to enable access to the best plant varieties that the latest technologies can provide.