VISION

New varieties without plant patents?



The European Patent Office decided last month that no more patents will be issued for 'essential biological processes' in plants. A good development, says Richard Visser, professor of Plant Breeding at Wageningen.

'I think it's a good thing the European Patent Office is listening to public criticism of the patenting of plants. That criticism says that patents hold back the development of new crops because the company with the patent can prevent other companies from continuing to improve the plant. As a result, patents are thought primarily to benefit big companies. These criticisms are met by ending the patentability of "essential biological processes".'

What are essential biological processes?

'They are processes and characteristics in a plant that already exist and that we discover and isolate. But there is more than one way of interpreting that. You could patent the first resistance gene against potato blight, because that hadn't been done before and was in that sense a new method. It was much harder or even impossible to patent later resistance genes. Our knowledge develops fast, so patents have been granted in the past for "new" biological process which we consider very normal nowadays.'

What does that mean for plant variety rights?

'The ruling restores the importance of plant variety rights in the plant breeding sector. Under these rights, other breeders have the right to use new varieties for further breeding. In the old days, it would take you at least 10 years to develop an improved variety, but nowadays – with ever better and faster techniques such as CRISPR-Cas – you can do it in a couple of years.'

So how can plant breeders recoup their investments?

'We need to develop new regulations for that. Breeders of maize have already agreed among themselves: we won't use a competitor's new variety for further cross-breeding for the first three years. People respect each other's advantage gained from their development efforts. That increases their chances of recouping their development costs on the market. Another option is for companies to pool their patents in a licensing platform. If a competitor wants to use your patent to continue developing a variety, an arbitration committee sets a market-oriented fair price that then applies to everyone who wants to use that patent.' **@** AS