



# Protecting Intellectual Property

Properly protecting plant breeders' work results in increased innovation and better varieties available to farmers and society. Farm-saved seed inhibits innovation – and is increasing. The seed industry must find ways of protecting its investment.

By Stephanie Fehr

“THERE IS TOO MUCH farm-saved seed used,” says Bryan Gerard. “It is a real economic issue for seed companies.” The President of JGL Inc., a company that licenses soybean and wheat varieties, says that billions of dollars have been lost in seed sales worldwide due to farm-saved seed use, resulting in a decrease in new varieties brought to market.

Gerard says there is a reduction in innovation when breeders don't see a return on their investment. “Farm-saved seed obviously slows down development of next generation products, innovation, and solutions to environmental, energy, food/nutrition, and pharmaceutical issues because (breeders) are seeking a return on their investment,” says Gerard. “Farm-saved seed takes that away.”

Penny Maplestone, Operations Manager for the British Society of Plant Breeders Ltd., says plant breeders in her country are feeling the sting of farm-saved seed use. According to Maplestone, plant breeders' income has dropped by 18% in real terms over the last six years due to a 20% drop in the volume of certified seed sales, lower seeding rates, and farmers choosing farm-saved seed instead of certified seed. “Farm-saved seed use is now at a level where a significant proportion of the breeders' income is derived from it (through a U.K. royalty collection system on farm-saved),” says Maplestone. Approximately 35-50% of seed use for the major crops is farm-saved; to compound the problem, “the royalty on farm-saved seed legally has to be ‘sensibly lower’ than the certified rate – regarded by the European Union as 50%.”

So every time farm-saved seed is used, the breeder makes about half what the going rate for new seed would be. Add to that the fact some farmers are evading farm-saved seed payments along with the illegal selling of farm-saved or uncertified seed (known as brown bagging), and you have seriously reduced returns for breeders.

Bernard Le Buanec, Secretary General of ISF, stated in a recent presentation to UPOV on enforcing plant breeders' rights that farm-saved seed is one of the biggest issues facing the seed industry.

While UPOV '91 – the most recent convention – puts a limit on reproducing a protected variety for seed purposes, some would argue that it doesn't go far enough. Previous Acts of the UPOV Convention put no limit on the use of farm-saved seed, said Le Buanec, so UPOV '91 is a step in the right direction. “Indeed, in painting the darkest possible picture of the situation but which is the legal – and increasingly practical – reality, all farmers could buy their seed of a variety from the breeder just once and then produce their own seed of it on the farm every year thereafter,” said Le Buanec. “The breeder, after all his breeding time and investments, would have a market for one year.”

# Argentina

There are certain regions of the world that are more dependent than others on farm-saved seed – the former Eastern Bloc countries, some of the major Asian agricultural countries, and South America for example. “I believe the geographic regions that have shown resistance to biotech have poor intellectual property protection, and countries that don’t readily enforce intellectual property rights have the highest percent of farm-saved seed,” says Gerard. “In addition, farm-saved seed is actually increasing in those areas.”

Of note is the large amount of farm-saved Roundup Ready soybeans being used in South America. Because the seed and intellectual property protection laws are relatively weak in Argentina and Brazil, Monsanto has halted some sales of its soybean varieties and has been vigorously negotiating an end-point royalty, according to Bert Innes, who has served on the ISF Intellectual Property Committee. “Monsanto has been targeting the market country – the customer – and collecting a royalty there,” says Innes. “In most places, IP laws say you must not use, sell or import patented articles (that haven’t been properly protected). Monsanto has the opportunity to say ‘you’re importing my patented articles so I’m going to collect my royalty over here’.”

Innes notes Australia has implemented end-point royalties as a matter of policy. “In Australian wheat there is an end-point royalty collected,” says Innes. “That’s actually not a bad idea because it allows farmers to share the production risk with the breeder, and from the breeder’s perspective, they get the royalty no matter where the seed came from.”


Approximately 20% of the soy and wheat acres in Argentina are planted to certified seed, according to ArPOV, the Argentine Association for the Protection of Plant Varieties. The current law on plant varieties was adopted in 1973 which, at the time, was an improvement. But according to Adolfo Mac, Executive Director of ArPOV, because of technological advances since then, today “the legal frame is neither enough nor effective for the protection of property rights.”

There is work underway to update the system. “Suggestions to improve the protection of intellectual property are being presented to the State, both by the Argentine Seed Association and ArPOV,” says Mac. “The proper situation would be limiting farm-saved seed and defining the small farmer – being the only ones excepted of the payment.” These measures would bring Argentina in line with UPOV 1978: however, the government has been slow to act. “Many suggestions to correct and improve the situation concerning farm-saved seed have been presented to the government, though it has not yet exercised its mediator role to achieve a fitting solution for all the players of the seed industry,” he adds.

With farm-saved seed rates increasing (using the example of cereals in the ISF survey, to 67.5% for the 14 countries that responded) it’s clear that something more needs to be done. “We are not alone in the U.K. in our concerns that the protection afforded by the current UPOV system, and more importantly the legislation that implements it and the interpretation of that implementation, are not enough to enable the industry to generate the level of reward that it needs to stay in business,” says Maplestone. “The International Seed Federation and the European Seed Association have this as a priority also.”

Maplestone goes on to say that, at a national level, the immediate concern is to fix the gap in farm-saved seed income. “We are investing in a new database and

collection system for farm-saved seed remuneration. This will significantly strengthen our ability to contact farmers directly. We want to establish a level playing field for farm-saved seed on which all users pay and those who do pay are not subsidizing those who do not.”

It can be tricky to negotiate the line between plant breeders’ rights and farmers’ privilege to save seed. Chris Green, Managing Director of SW Seeds in the United Kingdom, sums it up well. While it is important that farmers retain their right to farm-saved seed, according to Green, they must realize where the innovation comes from. “We don’t want to see that growers can’t use farm-saved seed,” he says, “but they have to realize and respect the intellectual property behind the seed.” 

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