

BSPB Response to the Gowers Review

General Introduction

The British Society of Plant Breeders Limited (BSPB) would like to respond to The Gowers Review with respect to both Patents and Plant Variety Rights (PVR). The Society represents the majority of the commercial plant breeding companies for agricultural crops in the UK. Most of the member companies are multinationals with a UK representative. There are only three plant-breeding companies that are wholly UK owned.

The Society has two main functions, firstly to represent the members with respect to policy and technical issues and secondly to licence out the breeders intellectual property (IP) and collect royalties on their behalf. The IP rights that are licensed by the Society are European Community (EC) or UK National plant variety rights together with the derogation right stemming from Farm Saved Seed use (see additional paper). The commercial breeders deal with their individual patents themselves.

The response to the review will be split into two sections primarily representing the two types of IP; firstly patents and then plant variety rights (PVR).

BSPB's views with respect to Patents

Patents and other IP

1. How IP is awarded

- a) Complexity is inevitable when advanced technology is combined with law. At the International/European level, the complexity and cost is increased by the lack of a European Patent Regulation which could reduce needless translation etc cost (see also 1 (i) below) and could bring a coherent European approach to the implementation of the patent 'research exemption' and the PVP 'breeders' exemption' (see also 3 (c) below).
- b) We see no major difficulties – perhaps not all breeders are sufficiently aware of the need to protect suitable technology internationally by patenting.
- c) For patents, the main problem for most breeders is the expense of expert legal advice.
- d) For patents, favorably (even taking into account that British breeders do not need to spend money translating their patents into English).
- e) For patents, we support the existing structure and are against change. While sympathetic to the idea of services being paid according to what they cost to provide, it makes no sense to load charges onto the phase of innovation development, where money is pouring out. The early phases of patent protection should be kept as cheap as possible – later, when the value of the invention is clearer, expensive renewal fees are justified. If the invention has been a success, the innovator can afford to pay them. If it is not being used, high fees should encourage the owner to give it up.
- f) With patents, the question is somewhat delicate. Some granted patents appear too broad, or obvious, or both. Small breeders are nervous of being sued, which may result in *de facto* monopolies that are unjustified. Another important tool for plant breeders is **trade secrets**, particularly as applied to hybrid seed. Hybrid seed is prepared by crossing two different true-bred parent lines. The progeny of the first generation (F1 seed) are uniform (as they

each have the same genetic inheritance) and show improved properties (hybrid vigor). The F1 seeds however do not breed true. Each has a random genetic inheritance, and a wide range of properties. Thus the farmer cannot satisfactorily save and replant them. Accordingly, the plant breeder has built-in intellectual property protection in an F1 hybrid variety, so long as he retains control of the two parents from which it is bred. This may be done by PVP rights on the parents, but more commonly this is replaced (sometimes supplemented) by retaining physical control of the parents as 'trade secrets'.

- g) For patents, there is a provision in European law that 'plant varieties' cannot be patented. However, this is very narrow – it bites only on specific varieties as such. Plants can be patented - for example, plants containing a new gene (GM plants). On the whole, we believe that the exclusion of plant varieties from patenting is a good thing. If there is a true invention, it is unlikely to be confined to a single variety (just as an invention relating to automobiles would never be confined to a single model of car). A second exclusion is of patenting 'essentially biological processes for the production of plants and animals' (which Directive 98/44, Art 2.2 makes unpatentable if they consist "*entirely of natural phenomena such as crossing or selection.*"). The ambit of this exclusion is unclear (as is its rationale). The main effect seems to be benign, in that it inhibits attempts to patent breeding processes that are already known or used but not well documented, or obvious improvements of such processes.
- h) None - apart from expense.
- i) For patents, all three systems work reasonably well. The UK office is helpful, fair, and user-friendly. The European Office (EPO), which is more important, works generally satisfactorily. It is not as responsive to users as the UK Office, but does its best. The competition from national offices stops it from becoming too autocratic. If a decision of the EPO causes a real problem to a particular class of users, they have the alternative of seeking national patents: and from time to time this is made use of. Continuing difficulties are delay and expense. It takes several years to obtain grant of a European patent. This may then be opposed. The opposition system is a good opportunity for competitors to test the validity of patents and knock out invalid ones relatively cheaply, but it is very slow. It is rare for an opposition (with associated appeal) to be complete in less than four years. During that time the patentee is hindered in enforcing his patent (most Courts will not grant injunctions while an opposition is pending): and the opponent may not dare to start manufacture for fear of having to stop later. And some oppositions last much longer - 10 years is not unknown. Official fees - particularly for search - are relatively high. Translation costs inhibit extending the protection of a granted European patent to all 26 member countries. As to international patent systems, the PCT works well, and is relatively inexpensive. It allows innovators to defer expensive foreign filing decisions for a further 18 months (over the normal priority period of one year). This is extremely useful in allowing further time to establish the potential of an innovation in its early stages. The PCT system was initially very complex and full of traps for the unwary. It remains complex, but most of the traps have now been removed.

One cloud on the horizon for biological innovators is the current discussion of **disclosure of origin of genetic resources**. There are proposals to make this mandatory. Enormous uncertainty however remains about what will have to be disclosed and what will be the penalty for failures. Currently there is no confidence that any system proposed will be either useful or practicable - and fears that it may damage the full range of biological innovation without appreciable benefits in reducing 'biopiracy'.

2. How IP is used

- a) Our members use plant variety rights, patents and trade secrets. Plant variety rights are used for open-pollinated plant varieties, which the farmer can (if he chooses) reproduce from season to season by saving seed. Done carefully, this produces material of acceptable quality. 'Farm-saved seed' saves the farmer buying seed annually, but the breeder loses sales even though his PVP IP is being used and giving as much benefit as with bought-in seed. It is subject to European regulation (EC 2100/94, Article 14). Farmers have a right to reproduce protected seed of most important crops, subject to payment of royalties. Small farmers do not have to pay. Payment rates are determined by National authorities (they must be 'sensibly lower' than the rates paid by seed merchants and, due to implementing regulations, cannot be significantly more than half the rate of merchant sales). Not all farmers pay up willingly, and policing is very difficult (See additional paper). Protection of hybrid seed is by trade secret and by PVP of the parent-lines. Because F1 hybrids do not breed true, the farmer cannot satisfactorily reproduce them from saved seed. Patents are not available for plant varieties as such, nor for 'essentially biological processes' (see 1.(i) above): they are mainly used for protecting GM crops.
- b) (See 2.a)
- c) (See 2.a)
- d) IP is very important to our members, because of the ease with which seed (other than hybrids) can be reproduced. Illicit reproduction undermines investment in breeding. However, so far as we know, the value of members' IP is not usually considered separately from the value of the underlying business. If a variety is not being exploited, the IP protecting it will generally not be worth much.
- e) A patented plant may not be sold for many years after the patent term starts. Indeed, where GM technology is in question, moratoria and safety testing have held up exploitation beyond the normal patent term of twenty years. There is accordingly a case for SPCs (patent extensions) in this area, corresponding with what is already in place for pharmaceuticals and pesticides.
- f) IP does not, strictly, promote innovation. Rather it mitigates a powerful disincentive to innovation - that of failing to profit from success. Most innovations fail - many before they reach the market, many in the market. This is Darwinian selection - a powerful mechanism. It is not possible to be certain in advance which innovations will succeed. Those that are a success have to pay for the others. If they do not, private holders of capital will not invest in innovation, which will accordingly be much reduced. Governments cannot substitute for private funds: because they cannot provide the requisite variation for the market to select from; and because failure is not adequately penalised. IP is necessary in order to make it worthwhile to invest. This is particularly true where (as with plant varieties) a successful new innovation can often be readily copied with minimal further investment.
- g) No comments.
- h) No doubt there is a correlation, but we are sceptical about putting too much faith in detailed comparisons. Comparison of numbers of patents filed by Europeans and Japanese, for example, would need to take into account the much greater tendency of Japanese to file

patent applications on minor improvements, and to file many more related applications on the same development.

- i) No.
- j) With patents, in our field at least, 'defensive patents' are filed sometimes to prevent others using the technology, and sometimes to control the way they use it. More generally, we see defensive patents on alternative technology as broadly acceptable: defensive patents on improved technology may be less so. If the technology is simply alternative, the innovator needs protection from it in the same way as from direct copying.

3. How IP is licensed and exchanged

- a) This depends entirely on the specific circumstances, for example the relationship between the parties, the reputation of the licensee, the policies of the licensor, and so on. For patents, there can never be any guarantee of getting a licence. The Biotech patenting Directive 98/44 was supposed to ensure that patent-holders could not stop the development of useful new plant varieties, by providing that compulsory licences should be available under patents where necessary to exploit a new plant variety showing 'significant technical progress of considerable economic interest' (Directive, Article 12.3). However, this is a dead letter (in UK, at least). In order to demonstrate technical progress, it is necessary first to produce the variety: which will itself be infringement. Compulsory licences do not frank prior infringement.
- b) Generally, licensing partners are determined by market relationships and market strengths and weaknesses. It is not typically the case that a breeder will develop technology or varieties and then look round for a partner to exploit them.
- c) This is an area in which we believe there are **major problems** for UK breeders. We are specifically concerned about patent exemptions for research. Plant breeders, in common with many other technologists, advance mainly by incremental improvements. When a new variety comes on the market, breeders take samples and cross them with other strains, hoping to produce further improvements. Much the same is done in other technologies: when a new patented camera (say) appears, rival manufacturers buy one (or build something similar) and experiment with possible improvements. Such improvements may use the patented technology, or obtain the same or better results in a different way. In the first case, marketing an improved camera will not be possible without leave of the original inventor (which may be obtainable, if the improvement is significant): in the second, no such permission is required. But for plant breeders, **all experimenting with a patented variety (ie using it to cross with another variety to create a distinctly different new variety) means reproducing it**. This is infringement, according to the Biotech Directive 98/44. It may be excused by the 'research exemption': many think it is. But the matter is not clear. If it is not excused, the breeder's position opposite the patentee is very weak. Even if his improved variety falls outside the scope of the patentee's right (for example, because it no longer contains a particular gene), he is not necessarily free to sell it, because it can be said to be the product of infringement in the past. Under the plant variety rights regime (PVR), this situation is recognised and specifically provided for: it is not infringement under PVR to use a protected variety as a source of variation to produce new varieties: known as the 'breeder's exemption', this is codified in Regulation EC2100/94 (Article 15.d). But without a corresponding clear exemption in patent law, breeders are at risk of being sued by patent owners if they experiment with plant varieties covered by patents. Given the expense (both in money and time) of being sued, few breeders are willing to run this risk. This means they

are deprived of access to germplasm in new varieties coming on the market, if those varieties are covered by patents. The Biotech Directive (98/44) recognised this danger, at least in part, and therefore provided that compulsory licences should be available under patents for varieties that showed significant technical advance. But this provision is ineffective (in UK at least) because to demonstrate this advance, the variety must first be produced: which will necessarily involve infringement. In Germany and France, this point has been accepted: clauses have been introduced into the laws implementing 98/44 which prevent breeders being sued for development of new varieties. No such clauses are found in the British law; this distorts competition between UK breeders and others and in the long-term will lead to less breeding work in the UK as multinational breeders in particular will base such work where the legislative environment is less vulnerable.

We seek a general clarification of the UK law of research exemption, to allow research to proceed unhampered by patents. The patentee should be entitled to assert his rights when the results of the research are commercially exploited: not before. Failing this, a specific exemption for plant breeders, along the lines adopted in France and Germany, would meet our needs.

d)- f) We are not aware of any.

g) No comment.

h), i) We are not aware of any - anti-trust considerations must of course be taken into account.

j),k) Our members (we believe) are generally aware of these provisions for patents, but mostly prefer to retain full control of whom they license. Patents on developments of less interest will normally be abandoned, saving the full renewal fee. From our standpoint, we do not consider 'licences of right' of significant interest.

l) Generally, we believe that licensing by mutual consent works much better than a system in which a licence is granted under duress. It may be appropriate to have the threat of compulsory licensing available as a last resort to discourage unreasonable behaviour. But we aren't aware of any recent cases (concerned either with patents or plant variety rights) in which a compulsory licence has been successfully sought. See also our comments on 3.a) above.

4. How IP is challenged and enforced

a), b) UK patent actions are extremely expensive, and to be avoided if at all possible, except by those with very deep pockets. Small breeders hold few patents, and, because of the expense, treat those of their competitors with exaggerated respect, possibly resulting in *de facto* monopolies of unjustified scope. See also the discussion under 3.c) above.

c) Little used.

d) No experience.

e) Alternative Dispute Resolution (ADR) requires the agreement of both parties to the dispute, and this is typically not forthcoming.

f) Cost is the main problem. If a patent is to be challenged, this may often be done by means of a European opposition, if the problem is identified early. Such proceedings are relatively

cheap, but they are also slow. See 1.i) above. Further, the EPO often takes a more generous view of patent validity than the UK High Court.

- g) This is a major factor for plant breeders in making investment decisions. The existence of a published patent application covering a particular area will typically be powerfully dissuasive against entering the area, at least without first checking if the patent applicant is likely to be prepared to license. The validity of the patent application (unless there is a clear case of prior publication over the whole scope of the claims) is almost irrelevant. Even if the breeder is completely confident of succeeding in a lawsuit (which is not often the case), the time and expense involved would be better spent more constructively.
- h) Much the same as for enforcing national rights: cost and uncertainty.

SPECIFIC ISSUES

We have no comments on any Copyright issues.

Utility Models

We doubt if a Utility Model system would be of advantage to UK innovators. We are against adding to existing IP rights without clear evidence of need. Utility Models are typically not examined, so they are even more of a burden on small competitors than dubious patents. We believe that 'minor innovations' can typically (and properly) be protected by a UK patent application.

SPCs

SPCs are not currently available in our field. For GM plants they would indeed be appropriate, the exploitation of GM plants having been held up unreasonably for many years. The details of any scheme for patented plants would however need to be worked out with some care.

Trade Marks

We have no detailed comments on trade marks. We do however have some concerns about the coherence of decisions on European law in this area. It is important that common English words or phrases should not be completely removed from the public domain, but should be available to all for use as descriptors.

Designs

No comments.

Legal sanctions

- a) Where infringement is found, an injunction should be normal, **but not automatic**. An injunction is an equitable remedy, and thus should always be at the discretion of the Court. Cases in which (in our view) injunctions should not be granted include cases of 'research use', where the patentee has suffered no commercial damage (i.e., loss of sales), and wants the injunction either to suppress academic (or at least pre-market) research, or as a bargaining factor to extort unreasonable licensing terms.

- b) We are totally against criminal sanctions for IP infringements that do not amount to counterfeiting. Patent and trade mark suits often involve fine judgments as to both validity and infringement. The penalties for error should not include criminal sanctions. If they do, the unintended consequences will be serious. One will be that companies will be even more unwilling to ignore dubious patents than they are at present. Another could be that farmers illegally saving seed could be sent to prison!(which BSPB would not support).

Competition policy

We have no suggestions.

International Exhaustion

To be able to continue to innovate, innovators need to be able to recover sunk costs. One way of doing this is to charge each customer as much as they are willing to pay, provided that is above marginal cost. This is obviously impractical. However, markets can be partially segregated, so that the rich pay more and the poor less. If the price must be the same everywhere, so that each buyer pays the same price and the same contribution to sunk costs, then the rich will pay less and the poor will pay more (or not be able to afford the product at all). It is therefore reasonable, and socially beneficial, to allow reasonable market segregation, certainly by patents and probably also by trademarks. International exhaustion would prevent this - already, cheap drugs for developing countries are often diverted to richer countries, because of the profits that middlemen can earn.

BSPB's views with respect to Plant Variety Rights

1. How IP is awarded

- a) Both EC and UK PVR are relatively straightforward to obtain although it takes considerable time (a minimum of two years). The variety must undergo two years of trials to show that any new variety is Distinct, Uniform and Stable (DUS). The DUS requirements are tested in a similar way in many EU countries, although there are some local protocol differences or differing reference collections which can create a situation where a variety is classed as distinct in one state and not distinct in another.
- b) There are no major difficulties with respect to breeders being aware of the protection of their varieties by PVR. However breeders are not sufficiently aware of the need or the possibility to protect varieties with patents internationally where possible.
- (c,d,e) Costs of protecting varieties with PVR is less in the UK than in Europe in spite of the fact that the UK carries out its own DUS trials. The costs are reasonable compared to the cost of testing - however they can be high compared to the value of the IP in some species.
- f) In our view, lack of trust is not a major problem for PVR and the licensed system of certified seed production and sale where each seed lot produced must be produced within the statutory certification scheme and has its own seed lot reference number which is traceable and auditable. However the situation differs for farm saved seed (FSS) where breeders rely on farmers to be honest with respect to their declaration of use of FSS. We are of the view that a large number of farmers do declare their use of FSS correctly, however the breeders have no method of being able to verify this information with respect to variety or quantity used.

- g) No specific barriers for PVR.
- h) No specific barriers for PVR, except expense.
- i) As stated above, it is relatively straightforward to obtain EC or UK PVR. However, there are problems with respect to enforcement of PVR relating to the use of FSS.

2. How IP is used

(a, b, c) Dealt with under Patents and in separate paper.

- d) IP protection is important to our members because of the ease with which seed or propagating material can be reproduced (with the exception of hybrids). Illicit reproduction undermines investment in plant breeding. The plant breeders continue to develop new varieties containing specific and improved characteristics for the end users such as Malsters; millers; and the sugar and potato industry. However, they still find it difficult, in a large number of cases, to continue to raise sufficient finance to re-invest into the research and development of new varieties from the royalties collected from the use of these new varieties.
- e) For the majority of plant species that can be protected by PVR, the term of protection is 25 years, which in most cases exceeds the commercial life of a variety. For potatoes the term is 30 years, however, because it takes longer to get a new potato variety onto the market, this may not exceed the commercial life of a good potato variety. The term of a plant variety right starts at around the same time as commercial sales.
- f) Dealt with under patents.
- g) No comments.
- h) Innovation can be measured in the plant breeding industry by the success stories relating to disease resistance, yield increase improved agronomic characteristics of varieties. Data and methodology relating to enforcement of other types of IP can be helpful.
- i) No.
- j) No.

3. How IP is Licensed and exchanged

- a) From a breeder's perspective negotiating licences for PVR works well in practice, with different arrangements in different countries being reached either between licensed commercial agents or central bodies such as BSPB in the UK or SICASOV in France.
- b) If a company wishes to produce and/or sell certified seed of varieties protected by PVR, licensed by the Society, they make an application to BSPB to obtain the relevant licence. The company also has to be registered with DEFRA to be licensed to sell seed. BSPB undertakes a credit check to see if the company is creditworthy and if everything is in place, a licence is issued.

Plant breeding companies tend to approach BSPB if they wish us to license their varieties.

- c) There is a Research Exemption provision within the Plant variety rights legislation. Breeders can use protected material for research/experimental purposes. However see patents for further information where there is patented material within a variety.
- d) No.
- e) No.
- f) Competition law must be taken into account when drafting licences.
- g) No comment.
- h) We are not aware of any.
- i) We are not aware of any.
- j) Not applicable to PVR.
- k) Not applicable to PVR.
- l) BSPB has not had any direct experience of the Compulsory licence provisions. and therefore it is difficult to say whether they are effective or not and whether they need improving. However we are aware of a Compulsory licence application being made by a company to import seed of potatoes of a protected variety in 2001. It is the plant variety office that presides over making such a decision. There are certain criteria set out in the legislation, which must be reached before a compulsory licence can be granted. The applicant failed to obtain a licence in that particular case.

4. How IP is challenged and enforced

- a) Plant variety rights are for the most part enforceable where seed production and sale is carried out under licence. Any crop of certified seed produced is given a seed lot number by the certification authority. It is then sold with the seed lot number attached, under a variety name. This makes obtaining evidence of infringement much easier as the seed lot number is unique and can be traced throughout the seed chain. For this reason, infringement of plant variety rights by seed merchants is relatively rare.

The main problem for the BSPB members in this area is the collection of information required to collect farm-saved seed royalties/remuneration. As noted in 2.a) above (and the special paper), farmers are legally entitled to save seed from crops produced on their own land. Briefly, the problem is that BSPB does not have details of all the farmers in the UK who are using FSS of protected varieties. Where we do have details of a farmer and we ask him for information regarding use of FSS, we have no method of verifying the information provided by him and in some cases he may refuse to provide the information. It is an honesty box system, where there is a large occurrence of evasion. Recent decisions of the European Court of Justice have made it much more difficult for breeders to obtain the information required to collect the FSS royalties and enforce their rights. (See additional paper). In addition, the Data Protection Act can be restrictive in obtaining information related to IP use and infringement.

- b) The cost of taking an infringement case through the courts is potentially enormous; upwards of £50,000. Mainly legal and court fees.
- c) If we have enough proof of infringement we will confront the company which has been shown to infringe a breeder's right and demand that they pay the lost royalties plus any costs, eg interest on money lost. Therefore the ability to collect the relevant information to prove IP infringement is a very important factor in deciding which route to go.
- d) No experience
- e) Dealt with under patents. Also improved ability to access information to prove whether there is infringement or not, therefore reducing the need to go to Court to prove it.
- f) Cost is the main problem.
- g) Dealt with under Patents
- h) Much the same as for enforcing national rights: obtaining evidence, cost and uncertainty.

Specific Issues

See additional paper on plant variety rights.

Plant Breeders' Rights

Certified seed and certified royalties

The EC and UK plant variety rights (PVR) are granted under European Regulation 2100/94 and The Plant Varieties Act 1997, respectively. Under both sets of legislation, the breeder is able to “control” certain acts in relation to the propagating material of his varieties protected by PVR. These acts are multiplication; conditioning; offering for sale; selling or marketing; exporting; importing and stocking.

For most combinable crops, the BSPB licenses seed merchants to produce crops of either first generation (C1) or second generation (C2) seed of varieties protected by PVR. The seed must be produced within a statutory certification scheme that ensures the seed is of a particular standard. The seed can then be sold by the merchant and at the first point of sale a certified royalty is collected on the number of tonnes sold of that C1 or C2 seed.

For species of grass, the royalty is collected on the total weight of seed certified of a particular variety. For potatoes the royalty is collected on the total number of certified hectares grown of a particular variety, although some breeders also collect a tonnage royalty as well.

The legislation allows the royalty to be collected at any point along the chain from seed production through to the harvested crop but it can be collected only once on any generation of seed. This can be restricting for the breeder. If he wants to collect the royalty at any other point, for example on grain sold or per loaf of bread or bottle of whisky, then this must be set up under contract law and at the moment cannot be done under the plant variety rights legislation.

Farm Saved Seed (FSS) and FSS remuneration

When a farmer produces a commercial crop (for example of wheat or barley or potatoes) on his own land, he can harvest that crop and retain some or all of the crop to use as seed in the following year(s). This use of “farm-saved seed” is allowed under provision in the legislation for an exemption from the plant variety right. This exemption is found in the legislation that covers both EC and UK plant variety rights and applies to protected varieties and varieties essentially derived from protected varieties. It does not however apply to hybrids.

The exemption from a plant variety right allowing farmers to use FSS of protected varieties has certain conditions attached to it. The main ones are as follows:

FSS Royalties/Remuneration

- c) The farmer must pay a level of remuneration for the use of that seed that is “sensibly lower” than the certified royalty rate for the lowest level of certified seed production for the same variety. There is great uncertainty about the term “sensibly lower” as it has never been defined by the European legislation. The breeders and farmers (or their representative organisations) can come to an agreement as to what that level is, however if there is no agreement with respect to what the rate “sensibly lower” is, then the rate should be 50% of the certified royalty rate.

In the UK we currently have an agreement with the farming unions with respect to the sensibly lower rate for combinable crops species. These range from 40% of the certified C2 rate for peas to 53% for cereals. For potatoes there is no agreement between the breeders and the farming unions. The breeders have therefore set their FSS rates at 50% of the certified rate.

The genetic material in seed saved by farmers on farm is exactly the same as that found in certified seed for the same variety and yet the royalty collected for its use is approximately half for the FSS. The breeders and BSPB are of the view that that this restriction on the FSS royalty distorts and creates a false market. Nowhere is this type of restriction found in other areas of IP.

In addition, the FSS Remuneration collection system is an honesty box system, where the breeders have no method of verifying the information provided to them by the farmer. We estimate that we lose 10% of the total royalty income each year. The ability of the breeders to request information from farmers has also recently been affected by two European Court Rulings (*Schulin* and *Jaeger*). These court rulings have stated that before a breeder can ask a farmer whether he has used FSS of a protected variety, he must have “evidence” that the farmer has farm-saved seed or may farm-save seed of that particular variety. A similar decision has been given with respect to the information provided by FSS processors to breeders.

These rulings have driven a coach and horses through the workability of the FSS collection system and the European Seed Association is currently trying to persuade the Commission to get this changed. The UK breeders would like the Commission take a fresh look at the FSS legislation and consider how methods of farming have changed since it was drafted. This would show them how the balance between income to the breeders and an exemption allowing farmers to use FSS is out of kilter, resulting in the breeders losing a large quantity of royalty income for use of their IP.

Use and Movement of seed

- ci) The farmer can only save seed on land which is within his “own holding” and the seed must be taken from a crop that was produced on his “own holding”.
- cii) The farmer’s “own holding” means any holding or part of a holding which the farmer actually exploits for plant growing, whether as his property or otherwise managed under his own responsibility and on his own account.
- ciii) FSS can only be planted on the holding on which it was produced. Farmers cannot sell, buy, barter or otherwise transfer FSS outside their own holding.
- civ) It is the responsibility of the farmer to declare and pay the breeder/BSPB for FSS seed used of protected varieties.

The definitions of both farmer and “own holding” in the legislation no longer reflect the practical world of farming. So many farmers are now contract farming several farms either on a yearly or long term basis. The breeders have no method of verifying who is farming which land and who is the person responsible for declaring FSS sown and paying the royalties due. The Single Farm Payment system has made this much more complicated. “Own holdings” can be several hundred miles apart and FSS can be moved between them as long as the land is being farmed within one business. This was not what the spirit of the legislation originally intended.

Finally, Small Farmers are exempt from payment of FSS remuneration. The definition varies depending on whether the farmer is a cereal or potato grower. It can change from year to year and we are unable to verify this. Under the new SFP scheme it is possible that there will be a different definition for 'small farmer' for Scotland, England and Wales and Northern Ireland, another loophole for evasion of the FSS royalty.

In general, the legislation requires updating to reflect what is happening in agriculture today and to provide the plant breeders with sufficient royalties (from both certified and farm-saved seed) to re-invest in plant breeding for the future.