



**INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS**  
GENEVA

**SYMPOSIUM ON CONTRACTS IN RELATION TO  
PLANT BREEDERS' RIGHTS**

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SESSION II: EXPERIENCES OF BREEDERS:  
ROLE OF CONTRACTS IN THE EXERCISE OF BREEDERS' RIGHTS

ROYALTY AREA COLLECTION - A NEW CONTRACT BASED  
APPROACH TO ROYALTY COLLECTION

*Mr. Chris Green, Director, Senova Ltd, United Kingdom*

1. At the outset it is important to understand the market place in the United Kingdom (UK) and the commercial problems that exist with open pollinated crops such as cereals. I will therefore spend some time covering the background to the concept of this new royalty approach before detailing its structure and operation.
2. To survive, any business must generate wealth from its activity. Profits are generated from income. Essentially there are four key income generating areas available to the plant breeder. The largest of these is the seed royalty element; then secondly is the margin achieved on the sale of seed; in some instances, especially with niche crops, thirdly there is the possibility for production levies on the crop out turn, and finally, income can be generated through public research grants or other affiliations. However industry remains dependent upon royalty income generation at its mainstay.

*Consider for one moment the areas where income is generated. How sustainable is each in the future? Which is the most commercially fragile? Which shows the greatest potential for growth?*

3. The business of plant breeding is about developing and promoting innovation. In this respect, it is therefore about intellectual property and, **its management**. I emphasise the word management because one can have the best regulatory system but this counts for little without adequate supervision and management by the company of its IP.

4. A problem with the plant breeding industry is that from the first point of sale, control becomes diluted. At the point when the breeder first commercialises a new variety at breeders, pre basis or basic seed level, they have total awareness and control of their IP in that they know who the buyer is and who uses their variety. However as volumes increase with successive generations the management of IP deteriorates and as a consequence control is lost.

5. In Europe the predominance of royalty is collected on certified seed however with changed legislation farm saved seed royalties have become a significant contributor and vital for the on going investment in breeding programmes. At a National level the levy rate for farm saved seed is set at a “sensibly lower” rate than that for certified seed which in the case of cereals for the UK hovers around 51%. We are very fortunate to have an agreement with the National Farmers Union and with their collaboration have developed a cost effective system for the collection of royalty used as farm saved seed.

6. A snapshot of the cereal royalty income in the UK shown my powerpoint presentation also indicates the proportion collected as certified and as farm-saved. The certified seed royalties are collected from licensed seed processors that is to say the commercial seed companies and the farm-saved element is mainly collected from company’s operating mobile seed processing units with further smaller proportion coming from direct payments by growers. Prior to 1996 there was no royalty income from farm saved seed. So, on the face of it, the picture looks encouraging.

7. However the reality is somewhat different. In the cereals market, farm saved seed accounts for about half of the total crop sown in the UK. I contest that the primary reason why a grower will use farm saved seed is that the genetic benefit has already been proven on that farm and to that farmer. By this I mean, having grown the variety the grower appreciates and values its performance, field characters and management fit on their farm. The genetic expression or, genetic promise of a variety remains the same regardless of whether it is produced from certified seed or from farm saved seed. However as the royalty rate on farm saved seed is only half of that charged on certified seed the plant breeding industry is being denied income from half of the market.

8. The situation is made worse by an increasing level of evasion where growers of farm saved seed are not paying the levy as required. It is estimated that the UK plant breeding industry is denied some £2 million per year through evasion alone. This level of evasion is equivalent to 15% of the total net amount collected on cereals. Despite the best endeavours of the UK breeders through the British Society of Plant Breeders (BSPB) to stem the flow, evasion continues and year on year significant losses are being compounded.

*Is the plant breeding industry therefore optimising its intellectual property position?*

9. In some part I believe that the present and traditional method of royalty collection on certified seed actually impinges upon the ability to secure optimum returns for breeders.

10. Current legislation on farm-saved seed allows growers to benefit from genetic improvements at a reduced royalty. This is an anomaly and a cost to the plant breeding industry. So what options for change are available?

*So is the solution to “change the legalisation or change the approach?” Well, probably the answer is both but one route would be complex and time consuming.*

11. In addressing these issues and others such as the trend to lower seed rates, Senova Limited decided on a new road map for royalty collection and have pioneered a new approach for IP management.

12. In its simplest terms, this detaches royalty from the cost of seed and in its place royalty is structured on a hectare basis and charged directly to the grower. Under the name of Royalty Area Collection (RAC), Senova’s objective was to improve the royalty income and at the same time have a more dynamic relationship with growers. through better management of their intellectual property combined with sound market intelligence.

13. Senova have a 100% market share of the 100,000 hectares of winter oats established each year in the UK. It was decided in 2006 that new oat varieties would be introduced under A Royalty Area Collection scheme and at the same time to adopt one unified royalty rate to be applied across all certified and farm saved seed.

14. These new varieties were sold under a new sale purchase agreement. This contract declares the unified royalty rate and stipulates the terms and conditions of purchase and obliges growers to sign their acceptance. The British Society of Plant Breeders (BSPB) is appointed to administer the scheme on behalf of Senova.

15. This approach delivers a number of benefits to the supply and value chain. For many years, the sellers of certified seed have argued that with each increase in royalties they become less competitive compared to the farm saved seed sector. Invoicing growers directly for the royalty has two advantages: firstly, we express a clear value to the cost of genetics on an area basis; secondly, we allow the seed trade to compete more fairly with farm saved seed. It must be remembered that the reason growers use farm saved seed is because the variety has proven itself on the farm.

16. In placing a royalty value per hectare we allow the grower to then make a direct financial appraisal to the benefits of the new variety. I believe through the wider adoption of an area royalty based system that growers will become more aware of the added value that they are receiving from breeders’ year on year.

17. It may go without saying that if plant breeders acting individually or as a whole, can improve their management of IP, they will improve their profitability.

*Senova’s royalty area collection (RAC) is in its second year and I wish now to cover its structure, procedures and the experiences we have had to date.*

18. The RAC is based on contracts where the growers, in effect, contract out of the farm saved seed exemption under Plant Breeders Rights. The RAC is centred on a contractual framework based on individual breeders terms and conditions of sale, with agreements being brought into place with both merchants (seed distributors) and individual growers. In the case of Senova, there is a further agreement with the BSPB to collect and administer the scheme on their behalf.

19. The specific condition of sale outlines the RAC for each variety providing detail of the unified royalty rate per hectare, the payment terms and the requirement to maintain all records on the use of seed and subsequent crops. It provides Senova with the rights of inspection and audit. Growers are obliged to sign the agreement and are aware that they will be invoiced directly by the BSPB.

20. At the onset of the scheme, it was decided that the agreements should be explicit and simple. Initially Senova decided that seed could be released on the verbal acceptance of the terms by the grower on the proviso that the signed agreement would follow.

21. Bag tags are used to reinforce the obligations.

22. So there are a number of agreements. The first is between Senova and its merchants. Seed is invoiced without royalty, merchants are obliged to provide the address of each grower, the quantity sold, delivery and holding addresses and date of delivery. This information provides the basis of the IP data trail. The second agreement is between the merchant and the grower and obliges the farmer to accept that the royalty will be paid on the declared area established at the unified royalty rate on the seed purchased and any subsequent seed used as farm saved seed. The grower also accepts that Senova or its appointed agent have the right to both field inspections and to inspect any records on the use of seed supplied and subsequent crops.

23. The grower is informed that BSPB will act on behalf of Senova in the collection of royalty and administration of the scheme.

24. The success of the scheme will rely on the honest declaration of the grower and it is from that sowing declaration on the area established that triggers an invoice from the BSPB. Whilst we have the right for audit and inspection we have not enforced this as we initially wish to work in an environment of trust. Senova however, is rigorous in checking seed rates and the areas established from the certified seed purchased. In our case, we are also working closely with oat millers in verifying varietal off take. We are only too aware that there is a fine line between compliance of growers and rejection due to being bureaucratically cumbersome.

25. In the respect to the unified royalty rate, this is collected on an individual variety basis and has been fixed for the first two harvests. In calculating the rate we have considered value benefits to the variety, its potential, competitive activity and are own corporate needs. The unified rate is considerably lower than commercially certified seed but is greater than the prevailing farm saved seed rate. Distributors and growers were informed that for the two new oat varieties the rate was set at £8,25/ha for the first two years of release. This compares with alternative winter oat varieties which have a royalty rate of £65/tonne. The average sowing rate for winter oats in the UK is around 150kg/ha, however we have noted that growers especially those adopting new varieties have a tendency to establish at considerably lower rate e.g. 120kg/ha. This was another major consideration in moving to an RAC based approach.

26. We are hopeful that this new model of calculating royalty on an area based system will increasingly find favour with breeders, distributors and growers. For breeders it offers better management of IP allowing individual companies to monitor what is happening with their varieties in the market place. For seed merchants it provides greater parity to compete with farm saved seed and allows the seed processor to concentrate on selling and promoting certified seed. For the grower it provides a more tangible and transparent cost of genetics and

will allow them to make better cost benefit analysis with new varieties. By implementing this across the industry, it should also sustain a vibrant and successful plant breeding industry.

27. What we have learnt is that while the approach appears simplistic, its implementation requires much by way of education. Whilst on the face of it the scheme is simple in its approach, it is time consuming as merchants find themselves explaining the system to individual growers. It is therefore vital that at every stage that we explain the scheme and endeavour to ensure that the clear messages are given to stakeholders and growers.

28. The scheme does however allow for better market intelligence and with a specific software programme it should allow a better year on year monitor on what is happening in the market place with our IP. As evasion occurs on older varieties, it will be possible to curtail their production in favour of adopting a more robust royalty method with the new varieties.

29. So where we are now is that we believe the scheme has made significant in-roads and that we have at least created an environment for change. We have now sufficient confidence to consider the feasibility of extending an RAC to other crops and varieties within our portfolio. Indeed, our sister company, Cygnet, will release a new potato this autumn under a RAC.

30. In closing, I have three end point messages for the industry:

The first is that we need to continue to evolve and I encourage plant breeders to revisit their commercial approach and consider for instance the use of contract law working alongside PBR to strengthen these rights and improve their income. At the same time, we must find a means to capture a more equitable share of the added value that plant breeders are delivering year on to the market;

Secondly, we must educate not only growers, influencers and regulators in the hope that better legislation and compliance will emerge;

Thirdly, we must be resolute in the enforcement of our rights. Abuse of intellectual property is a crime and deprives us of income.

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