

Plant Variety Rights Act 1987 review: Issues Paper – Submission template

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Interest	We are primarily interested as the Breeder's Representative in New Zealand for many potato breeding companies from throughout the world

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Responses to Issues Paper questions

Your submission may respond to any or all of the questions from the Issues Paper. There is an additional box at the end for any other comments you may wish to make.

Text boxes will expand as you complete them.

Objectives of the PVR Act

1 Do you think the objectives correctly state what the purpose of the PVR regime should be? Why/why not?

Yes, in agreement that objectives align with the purpose

2 Do you think the PVR regime is meeting these objectives? Why/why not?

Partially meets the objective. Falls short in duration of protection allowing only limited royalty recovery especially. Virtually no royalty collection possible for significant period of the protection while undertaking pre commercial field trials and then multiplying seed for sale.

3 What are the costs and benefits of New Zealand's PVR regime not being consistent with UPOV 91 (e.g. in terms of access to commercially valuable new varieties, incentives to develop new varieties)? What is the size of these costs/benefits? What are the flow on effects of these costs/benefits? Please provide supporting evidence where possible.

Most European based potato breeders work within UPOV91 and through extra local country legislation for potato varieties extension of protection to 30 years exists. For varieties imported to NZ, foreign breeders are increasingly insisting that we as their agents must pay royalties to them for the duration of the protection period they have in their homeland. The real cost is once the 20-yr NZ protection period ends that competitors here swoop in and start production and sale of good varieties. These competitors have no licence agreement for production and sale here with the foreign breeder so pay no royalty. They also have made no investment in quarantine, PVR protection, field trials and commercial development yet benefit immediately from seed sale. Us as the original importer have met considerable costs and continue to pay royalty fees to the foreign breeder making our customer pricing less competitive. Example Agria potatoes, now 30% of market share grown by competitors, cost in loss of trade to us approximately \$1,000,000 annually. Breeder royalty stream not captured and returned to them approximate cost of \$50,000 annually.

4 Do you think there would be a material difference between implementing a sui generis regime that gives effect to UPOV 1991 (as permitted under the CPTPP) and actually becoming a party to UPOV 91? If so, what would the costs/benefits be?

Not really sure what the difference to us would be

Farm-saved seed

5 Are there important features of the current situation regarding farm-saved seed that we have not mentioned?

Yes, breeders or their representatives must have the right to contract out of allowing farm saved potato seed by right. The key reason for this within the seed potato industry that seed is a six year bulk up pipeline from tissue cultures through to commercial seed sale. The final year commercial seed has six years of investment and allowing farm saved seed could spell commercial ruin for the seed supplier and the growers of this seed if it were unable to be sold. Merely allowing the breeder to collect a royalty on farm saved seed only recoups about 5-7% of the cost of seed produced. The surety of likely sale of the final seed generation is vital to commercial viability.

6 Can you provide any additional evidence/information that would assist us to understand this issue? For example, the nature and extent of royalties that are currently paid in different sectors, and the proportion of crops planted each year using farm-saved seed.

Starting with one tissue plant in year zero, approximately 0.5 kg of seed is produced. This seed is repanted to produce about 5-7kg of second generation seed, and so on for 6 years till commercial sale. Typically a 100 tonne seed potato sale program starts with one hundred tissue plants at year zero and ends up at 100 tonnes six years later. Royalty on the 100 tonnes is in the vicinity of \$50/t or \$5,000. The seed crop of 100 tonnes is worth about \$90,000 (most of which goes back to the seed producing farmer, approximately \$75-80,000). If farm saved seed is allowed then in a year where potato prices are low farmers may elect to plant farm saved seed only. While the ability to get the \$5,000 royalty exists, the ability to recoup the extra \$85,000 of commercial/supplier value must also be protected. Without this you create potential for a boom-bust seed supply industry.

7 Do you think there are problems with the current farm-saved seed arrangements? What are they? What is the size of these problems? What are the consequences of these problems? Please provide evidence where possible.

Refer answer to question six above. Also farm saved seed has not undergone industry seed certification so potential exists for poor quality and/or disease spread to occur. Current example is recent discovery of Potato Mop Top Virus in a processing line at McCain's Timaru factory. Ability exists via seed certification and field crop inspections to monitor and intercept the problem, eliminating or at least significantly reduce the risk of virus spreading.

Further example is that farm saved seed of lower quality can have a detrimental impact on the subsequent crop and can result in consumer problems. Example of this was Bolesta seed potatoes being used for production of crops for use by ETA to make crisps. Farm saved seed had virus in it that caused the crop to not cook properly. ETA removed Bolesta variety from their approved lines for processing, variety failed in NZ after this.

8 Do you think there are benefits of the farm-saved seed arrangements? What are they? What is the size of these benefits? What are the consequences of these benefits? Please provide evidence where possible.

The only benefit from farm saved seed is when there are real seed supply shortages, e.g. seed crops fail certification or a variety is rapidly growing in popularity then some volume recovery is possible to support this. This must be under an agreed program with the breeder/seed supplier

9 Do PVR owners use mechanisms outside the PVR regime to control farmers' use or saving of the seeds of their protected varieties? What are these?

Terms of Trade are used with customers to prevent use of farm saved seed or to ensure where farm saved seed is used that royalty collection is enforceable

10 Do you think farmers should have to get permission from the PVR owner before sowing the farm-saved seed of a protected variety? Why/why not?

Too complex to get permission directly from the PVR owner as the owner is usually a foreign breeder. Must ensure that the permission is in writing via the breeder's representative and consider this an absolute requirement.

11 What do you think the costs and benefits of a mandatory royalty scheme would be? What could such a scheme look like (e.g. should it cover all, or only some, varieties)?

No need for mandatory royalty scheme as potato industry is fairly tight in terms of farmers and seed suppliers. Suggest that the cost of a mandatory scheme would be large and ensuring compliance would be complex.

Rights over harvested material

12 Are there important features of the current situation regarding rights over harvested material that we have not mentioned?

All harvested material from potatoes is potentially usable for propagation. Probably best left to contracts between seed suppliers and customers.

13 Do you agree with our definition of 'harvested material'? Why/why not?

Yes

14 Do you think there are problems with the current scope of PVR owners' rights over harvested material? What are they? What is the size of these problems? What are the consequences of these problems? Please provide evidence where possible.

As stated in 12, all potatoes can be propagated. Some issues have arisen where consumers have purchased consumption potatoes e.g. from supermarket or farmers market, then grown crops for resale without any royalties paid. Collection of these royalties has been near impossible

15 Do you think there are benefits to the current scope of PVR owners' rights over harvested material? What are they? What is the size of these benefits? What are the consequences of these benefits? Please provide evidence where possible.

Refer also to answer to question 7 re Bolesta example to point out the lack of control and loss of reputation of the protected variety via unauthorised use of material. I see the potential for increase in the scope to cover harvested material further for a couple of reasons. Firstly where there is a niche or speciality variety the ability to take a branded product to the market and get a return on the cost of doing this is desirable. Example of this is the Inca Gold brand using a PVR protected variety. Significant cost has gone into brand development and marketing that will hopefully return a higher margin to the supplier. Competition or open marketing would probably not have seen this variety and brand make it to market, and would have eroded value of the offer.

Rights over similar varieties

16 Are there other important features of the current situation regarding distinctness that we have not mentioned?

No

17 Are there other important features of the concept of EDVs that we have not mentioned?

Only that some foreign breeders have a reluctance to make their material available for use by domestic breeders and will only do so if EDV's have agreement to a royalty stream back to the original owner of parent material.

18 Do you think there are problems with the current approach for assessing distinctness? What are they? What is the size of these problems? What are the consequences of these problems? Please provide evidence where possible.

No

19 Do you think there are benefits with the current approach for assessing distinctness? What are they? What is the size of these benefits? What are the consequences of these benefits? Please provide evidence where possible.

No comment

20 How might technological change affect the problems/benefits of the current approach for assessing distinctness that you have identified?

The use of gene splicing techniques (watered down version of GMO) has gained provisional approval overseas yet is not approved here. It should be embraced as the ability to overcome a variety short coming through splicing of one potato gen into the same species presents no real risk and could have huge grower benefits e.g. drought resistance, diseases resistance etc.

21 Do you have any examples of a plant breeder 'free-riding' off a variety? How often does this happen? What commercial impact did this have? Please provide evidence where possible.

No so much breeders, but competitors. Example Agria dominates the yellow flesh fresh market for potatoes in NZ. Many “similar” yellow fleshed varieties are market as Agria type. This presents a clear attempt to mislead the consumer and in some instances non Agria product has been marketed in Agria bags. Commercial impact, every tonne of non Agria marketed in the Agria space is one tonne less of Agria sold.

22 Do you think there are problems with not having an EDV regime? What are they? What is the size of these problems? What are the consequences of these problems? Please provide evidence where possible.

Yes, need to look after the leader in this space, not the parasites than build off the leader, e.g. Agria examples above

23 Do you think there are benefits of not having an EDV regime? What are they? What is the size of these benefits? What are the consequences of these benefits? Please provide evidence where possible.

No comment

24 How might technological change affect the problems/benefits of not having an EDV regime that you have identified?

Refer answer to question 20

Compulsory licences

25 Are there important features of the current situation regarding compulsory licences that we have not mentioned?

No

26 Do you think there are problems with the current compulsory licence regime? What are they? What is the size of these problems? What are the consequences of these problems? Please provide evidence where possible.

Refer to answer to question 15. The ability to give someone a headstart when investing in branding and taking a new product to market is crucial. In the absence of this the investment is much less likely.

27 Do you think there are benefits with the current compulsory licence regime? What are they? What is the size of these benefits? What are the consequences of these benefits? Please provide evidence where possible.

None really

Enforcement: infringements and offences

28 Are there important features of the current situation regarding infringements and offences that we have not mentioned?

No

29 Have you been involved in a dispute relating to the infringement of a PVR? How was it resolved? How was it resolved (e.g. was alternative dispute resolution used)? How effective was the process?

Yes, on numerous occasions. Generally resolved via agreement to recompense for loss of royalties but very hard to extend to losses of potential profit from seed sales.

30 How prevalent are PVR infringements and offences?

Probably discover and resolve on average 1 per year. Believe the extent of the problem is larger but it is very difficult to police, verify and track all offences.

31 Do you think there are problems with the infringement provisions in the PVR Act? What are they? What is the size of these problems? What are the consequences of these problems? Please provide evidence where possible.

Little bit too discretionary and to enforce legally is very expensive

32 Do you think there are problems with the offence provisions in the PVR Act? What are they? What is the size of these problems? What are the consequences of these problems? Please provide evidence where possible.

No one bothers with the offences provision- too much time, no civil provision and relying on third party (police or PVRO) to enforce

The kaitiaki relationship and the PVR Act

33 How does the current PVR regime assist, or fail to prevent, activity that is prejudicial to the kaitiaki relationship? What are the negative impacts of that activity on the kaitiaki relationship?

No comment

34 What are the problems that arise from the PVR grant process, or the grant of PVR over taonga species-derived varieties more generally, for kaitiaki relationships? Please provide examples.

No comment

35 What role could a Māori advisory committee play in supporting the Commissioner of PVRs?

No comment

36 How does industry currently work with kaitiaki in the development of plant varieties? Do you have any examples where the kaitiaki relationship was been considered in the development of a variety?

No comment

'Discovered' varieties

37 Are there examples of traditional varieties derived from taonga species that have been granted PVR protection? Do you consider there is a risk of this occurring?

No comment

Offensive names

38

What characteristics might make a variety name offensive to a significant section of the community, including Māori?

No comment

Transparency and participation in the PVR regime

39

What information do you think should/should not be accessible on the PVR register? Why?

Full application and technical questionnaire should be available

40

As a plant breeder, do you gather information on the origin of genetic material used in plant breeding?

Yes, via our breeding partners

Other Treaty of Waitangi considerations

41

What else should we be thinking about in considering the Crown's Treaty of Waitangi obligations to Māori in the PVR regime? Why?

No comment

Additional issues

42

Do you have any comments on these additional issues, or wish to raise any other issues not covered either in this section, or elsewhere in this paper?

Term of Grant, refer also to the answer to questions 5 and 6. A typical timeline for seed potato protection and development goes something like this.

Year 0- Identify a promising variety from foreign breeders and look to bring to NZ. Apply for quarantine space. Apply for PVR as must do within four years of first commercial sale overseas (remember these varieties are relatively new in their country of origin and as yet commercial unproven)

Year 1- Get material into quarantine space, takes approximately 6 months to clear as it must go through one complete growing cycle. Once cleared apply for import permit and import

Year 2- Material arrives in NZ as tissue cultured plantlet. Establish in tissue plant laboratory

Year 3- First tissue plants for field planting or minituber production. Approximate cost so far \$3,600 quarantine, \$150 courier, \$220 import permit, \$500 PVR application, \$600 tissue culture establishment, tissue plants to field and production \$500/variety, total approximately \$5,070 per variety

Year 4- First field generation produced, material now available for PVR trials (additional PVR trial fee of \$1,600/variety) and potentially regional testing in our own Eurogrow variety trials

Year 5- PVR granted, field trials continue, trying to build customer interest.

Year 7- First pre commercial trials by customers for promising looking lines. To date all up cost of about \$7,000 to \$7,500 per variety. Note only about 1 in 6 varieties imported progresses to pre commercial trails and about 1 in 10 makes it into some form of commercial production.

Year 9- First commercial seed order on the outcome of positive test outcomes. Then seed multiplication starts, taking 6 years from tissue plants to field to getting generation 6 (G6) seed

Year 15- First significant volume of commercial seed potentially available, 10-12 years after PVR granted

Our concern over the term of the grant is the short time of only 8-10 years to capitalise on the investment made. Moving in line with European term of grant of 30 years for potatoes provides more certainty of a return for those varieties that make it to market and helps offset the losses on those varieties that fail to make it.

As one of NZ's largest importers of foreign potato genetics we have provided significant benefit to the NZ industry. Imported potato genetics make up approximately 85% of the potato crop planted in NZ. In order to retain NZ's competitive position this new genetic importation must continue. For it to continue companies such as Eurogrow need sufficient time to recoup the investment made.

The current 20 year term of grant sees us investing in trips to meet with breeders, select genetics, quarantine, PVR registration and trials, doing all pre commercial trials and development etc. For successful varieties (due primarily to our investment and expense) the 20 year moment arrives and the parasitic companies swoop in and take market share.

Other comments

43 Are there any additional comments you wish to make about the PVR Act review Issues Paper?

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