
Bill C-18: Agricultural Growth Act
A Submission to
The Senate Standing Committee on Agriculture and Forestry
by
The Canadian Seed Trade Association
January 29, 2015

About the Seed Industry

According to a study done for the Seed Sector Value Chain Roundtable: "The total economic impact (direct and indirect) of the seed industry in Canada is estimated to be \$5.61 billion and the implied employment effect of the seed industry 57,420 jobs accounting for \$1.67 billion in wages and salaries, and generating about \$81.9 million in tax revenue.

The Canadian seed industry is the critical first link in the agri-food value chain. Seed is the starting point for growing crops that produce food, feed and other bioproducts for both the domestic and export markets. Much of the innovation for increased productivity and market opportunities for farmers is delivered by seed.

Due to its unique position as a starting point for the agri-food value chain, it is an industry that embraces innovation and technological advancement to produce new plant varieties with desirable attributes, such as higher yield potential, greater disease resistance, improved grain quality and more. Innovation carried in seed can also help the agriculture sector meet consumer demands for improved nutrition, appearance and processing characteristics as well as help reduce agriculture's environmental footprint.

About the CSTA

CSTA's members have very diverse interests and objectives, and many are competitors in the market place, but they come together as CSTA in support of our mission which is "To Foster Seed Industry Innovation and Trade".

The Canadian Seed Trade Association brings together 130 member companies. Our members are involved in all aspects of seed of 50 different crop kinds; from research, plant breeding, trait and variety development to production, processing, packaging, marketing, sales and trade. They range from single grower retailers to large multinational companies and from distributors of small packet organic herb and garden seed to the world's giants of biotechnology.

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Elements of Bill C-18

CSTA's seed company members and their farmer customers will benefit from several of the amendments proposed in Bill C-18, however most of this submission focuses on proposed amendments to Plant Breeders' Rights.

CSTA's seed company members and their farmer customers will benefit from several of the amendments proposed in Bill C-18 including:

1. The provision for certain elements currently in regulation to be incorporated by reference. For example, removing Schedule III of the Seeds Regulations, which lists crops subject to variety registration and incorporating it by reference will allow for more expeditious movement of crops between parts of the schedule, to better respond to the needs of producers and the market place.

2. Allowing for scientific data from international sources to be considered in approval and registration processes for new varieties will improve the efficiency of Canadian approval processes, but at the same time ensure that the decisions are based on sound, recognized science.

While all of the elements of Bill C-18 can benefit the seed trade, the most important are proposed amendments to Canada's Plant Breeders' Rights Act. This submission focuses on those proposals.

The Background on Plant Breeders' Rights

Canada signed the UPOV convention of 1991 in 1992, but in over 22 years has not updated its legislation to conform to the convention. As the result, Canada is one of only 3 developed country members of UPOV whose legislation does not comply with the most recent convention.

Granting PBR in the United Kingdom resulted in new varieties which moved the UK from a net importer to a net exporter.

Plant variety protection in the form of breeders' rights has been around for a long time in most developed countries. Many European Countries have had plant breeders' rights provisions in place since the 1920s, and the United States implemented a strong system of variety protection, which included patents, in the 1930s. The International Union for the Protection of New Plant Varieties (UPOV) adopted its first convention in 1961.

However, for Canada, it was only when the World Trade Organization dictated that countries had to protect new plant varieties, either by patents or through *sui generis* system, as part of the Uruguay Round agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS) in 1986,¹ that Canada began the work to develop and implement a system of Plant Breeders' Rights.

Canada's Plant Breeders' Rights legislation was implemented in 1990, and Canada became a member of the 1978 convention of UPOV. However, very shortly thereafter, UPOV implemented the convention of 1991. Canada signed the convention in 1992, signalling its intention to ratify the convention. Legislation was introduced in the House of Commons in 1997, but it was not passed. As the result, Canada is one of only 3 developed country members of UPOV whose legislation does not comply with the most recent convention.

There are many examples of the benefits of Plant Breeders' Rights to farmers and to national economies around the world. Here are just a few:

1. PBRs were granted in the United Kingdom in 1964. In 1987, 23 years later, the British Plant Breeding Society reported in its review of the benefits of Plant Breeders' Rights:

*"Improved varieties of grass and clover have contributed to a greater cost effectiveness of milk and meat production. For cereal productivity, official statistics have shown that of the increased wheat yields since 1964, at least 60 per cent was due to the use of new varieties, for barley the figure was 30 per cent and for oats 25 per cent. These improvements have benefited the national economy as the UK changed from net importer of cereals -only 60 per cent self sufficient in 1964 -to net exporter -more than 10 million tonnes were sold abroad in 1987."*²

1 M.BLAKENEY, *Trade Related Aspects of Intellectual property Rights: A Concise Guide to the TRIPs Agreement*, Sweet & Maxwell, 1996, London, p 21.

2 McNeil, D., "Plant Breeding in the UK", *Prophyta*, Volume 42, Number 4, (1988) p.37

In the United States Plant Variety Protection resulted in a 11 fold increase in the number of plant breeders and increased soybean yields by 30%

10 years after Canada implemented Plant Breeders' Rights, a comprehensive review of the impact was done by the Canadian Food Inspection Agency (CFIA). The review found substantial improvements in most sectors.

The implementation of Plant Breeders' Rights did NOT accelerate seed price increases.

2. In the United States, Plant Variety Protection (the U.S. equivalent of PBR) was implemented in 1970. A study conducted in 1989 identified that between 1970 and 1988, the number of plant breeders in the U.S. grew from 6 to 70 and the number of companies involved in plant breeding increased from 6 to 34. The report also stated that more than 458 new varieties of soybeans were introduced to the market in that time, some with yields as much as 30% higher.³
3. 10 years after Canada implemented Plant Breeders' Rights, a comprehensive review of the impact was done by the Canadian Food Inspection Agency (CFIA)⁴. The review found substantial improvements in most sectors.
 - Prior to PBR, the potato sector was unable to secure access to foreign varieties. Between 1990 and 2000 82 of the 91 rights granted for potatoes were foreign varieties. Potato production increased by 18% and farm cash receipts from potatoes increased by 47%
 - The pulse crop sector expanded substantially. Much of that expansion was attributed to the ability to access foreign varieties for development within Canada. 89% of the rights granted in the 10 year period were to foreign varieties.
 - In the cereal sector, public researchers received most of the PBR protection. It was reported that the royalties remitted to the federal government increased by 400% in the ten year period. The PBR review reports that cereal yields increased by between 11% and 22%.

The review also found that the potential negative impacts identified by those opposed to PBR did not occur. For example, there was concern that seed prices would increase and have a negative impact on farmers. The review found that while seed prices increased by 24% in the 10 years prior to PBR, they increased by only 8.6% between 1990 and 2000.

The Impact of Outdated PBR Legislation

At a time where governments are moving away from variety development, with the expectation that the private sector will play a larger role, the investment is going where there is an ability to generate a return on the development of new varieties.

Only 15 of UPOV's 71 member countries do not conform to the UPOV convention of 1991⁵. Canada is one of only 3 developed country members in that number (PBR in New Zealand and Norway conform to UPOV 1978). Now, 22 years after Canada signalled its intention to conform to the UPOV convention of 1991, we are seeing history repeat itself. At a time where governments are moving away from variety development, with expectation that the private sector will play a larger role, it is very obvious that investment is going where there is an ability to generate a return on the development of new varieties.

In 2012 the private sector invested \$110 million in plant breeding and variety development in Canada. That was an increase of 77% from 5 years previous⁶. This is a very positive story for agriculture in Canada. However just under 90% of that investment was in only three crops: canola, corn and soybeans. One thing these crops have in common is that other forms of intellectual property protection (e.g. hybridity, contracts, gene patents and technology use agreements) allow breeders and developers to generate a return on their investment.

3 "A Chronicle of Plant Variety Protection, 1989 Update", Asgrow Seed Company, Kalamazoo, Michigan (June 1989)

4 10-Year Review of Canada's Plant Breeders' Rights Act, Canadian Food Inspection Agency

5 Colombia, Kenya and South Africa's legislation has been found to conform with UPOV 1991, but they have not yet formally ratified. Uruguay and Brazil have implemented legislation that mostly conforms, but does not extend to all crops.

6 Canadian Seed Trade Association private sector investment survey, 2012

Breeders of crops like cereals, flax, pulse crops and special crops only have access to Plant Breeders' Rights to protect their new varieties. For these crops, private sector investment is very low. In 2012, 6% of private sector investment was in wheat breeding; 1.2% in flax breeding and only 0.2% in pulse crops.

Impact on Domestic Investment

Recently some seed companies (large and small) appealed to the Minister for updated Plant Breeders' Rights legislation. They all said that without competitive IP protection measures, including amended Plant Breeders' Rights legislation, Canada will continue to fall behind our competitors as domestic plant breeders are not willing or able to invest where they cannot generate a return.

(the lack of up-to-date PBR is) "a poor environment for our company to recoup its cost for the market development and genetic research work that our company undertakes to develop new opportunities for wheat growers."

"The protection afforded intellectual property through UPOV 91 will significantly strengthen public-private collaborations and other Government of Canada strategic initiatives that support the agriculture sector. Without such protections, it becomes increasingly difficult to share genetic resources, knowledge, experience and physical assets."

It is interesting to note that with the government promise of regulatory reforms and updated Plant Breeders' Rights legislation, the forecasts for future investment in crops other than canola, corn and soybeans is brighter. The private sector is projecting that investment in wheat breeding will increase to 12% by 2017. However, one can speculate that without the promised changes, that picture will change.

Access to International Material

As was the case in the past, Canada's outdated PBR legislation has been an impediment to access to superior material developed abroad. The European Seed Association expressed its concerns first directly to Canada's Minister of Agriculture and Agri-Food and the President of the Canadian Food Inspection Agency, and then to the European negotiating team for the Canada/EU Trade agreement:

"This situation is particularly relevant to the business environment and bilateral relationship between the EU and Canada as a potential factor raising a barrier to trade in seeds, since many European seed companies would not sell their varieties in Canada if they cannot rely on effective IP protection."⁷

Many small and medium sized seed companies also expressed their concerns with the inability to attract new and innovative varieties to Canada.

However, just the announcement of the government's intent to bring our PBR legislation into conformity with the UPOV convention of 1991, has changed the picture. One CSTA member has broken ground on a new cereal research facility in Saskatchewan. Others have announced partnerships with international plant breeders to bring new wheat and rye varieties to Canada. All of these decisions are predicated on updated PBR legislation, and the resulting benefits are all at risk should these amendments not be implemented

⁷ European Seed Association letter to Mr. Philippe Meyer, Directorate-General for Trade, European Commission January 18, 2010

What Will Change with UPOV Compliant PBR Legislation?

Given the negative impacts of not conforming to UPOV 1991, we can see only benefits for Canadian farmers and the agricultural sector, of implementing updated PBR legislation as proposed in Bill C-18.

CSTA is a proud participant in the Partners in Innovation coalition, which exists to demonstrate broad support for the PBR amendments proposed in Bill C-18

History in Canada and international experience has been that the adoption of the most recent UPOV Convention has encouraged both domestic and international investment, and has given farmers more access to new and innovative plant varieties, allowing them to be more competitive in global markets.

Given the negative impacts of not conforming to UPOV 1991 that have been identified in this submission, we can see only benefits for Canadian farmers and the agricultural sector, of implementing updated PBR legislation as proposed in Bill C-18. Updated Plant Breeders' Rights will continue to increase the confidence of Canadian seed companies to invest in plant breeding and variety development in Canada, and will give farmers access to new and improved varieties developed internationally.

CSTA is a proud participant in the Partners in Innovation Coalition, which brings together 20 organizations representing the vast majority of farmers in Canada, and the value chains of most crops across the country. The members of Partners in Innovation have joined together to demonstrate broad support for the amendments proposed in Bill C-18.

The coalition also exists to ensure that the myths and misconceptions of the proposed amendments are dispelled, and that farmers, policy makers and the public have clear and correct information.

Dispelling the Myths:

What will PBR amendments do? What will they not do?

The PBR amendments proposed in Bill C-18 will strengthen the breeder's control over some uses of the breeder's invention. However it also requires the breeder to make protected material available for other breeders, and entrenches, in legislation, the ability of farmers to save the grain they produce to use as seed on their own farms.

CSTA also finds it necessary to ensure that members of the committee understand fully what Bill C-18 proposes for Plant Breeders' Rights.

(a) The Breeder's Right

The proposed legislation does:

- Require the Breeder's authorization (can include paying a royalty) for:
 - Production or reproduction of seed of the protected variety
 - Conditioning for purposes of propagation
 - Offering for sale and sale
 - Stocking for purposes of sale
 - Exporting or importing

The proposed legislation does not:

- Restrict the use of protected varieties for research or further plant breeding
- Restrict the use of protected varieties by non-commercial producers or for subsistence farming
- Allow breeders to unreasonably restrict access to protected varieties
 - if a breeder unfairly or unreasonably refuses to grant a license for a protected variety, the individual requesting the license can apply for a compulsory license from the Plant Breeders' Rights Office

(b) Farmers' Privilege:

The proposed legislation does:

- contain a clear exception for farmers to produce, reproduce and condition the grain they produce for use as seed on their farms.

The proposed legislation does not:

- Prevent farmers from saving, cleaning and storing grain they produce for use as seed on their farms.
- Allow the farmers' privilege to be ended without a legislative change

(c) Royalty Collection

The proposed legislation does:

- allow the breeder to collect a royalty on the propagating material (seed)
- provide the opportunity for the breeder to seek compensation on harvested material only if the breeder can prove that the seed was acquired illegally

The proposed legislation does not:

- establish end point royalties or allow breeders to collect royalties throughout the value chain

(d) Hybrids and Essential Derivation

The proposed legislation does:

- extend the breeders' right to hybrids produced from the breeder's protected varieties
- requires the breeder's authority to commercialize varieties that are essentially derived from that breeder's protected variety

The proposed legislation does not:

- prevent other Breeders from using protected varieties to breed new varieties
 - UPOV 1991 makes it compulsory for breeders to allow other breeders to have free access to protected material to develop new and different varieties.

(e) General

The proposed legislation does:

- extend the protection from 18 years to 20 years for agricultural crops
(However, history shows that Canadian breeders of agricultural crops most often surrender the PBR well before the expiry date, putting varieties into the public domain much sooner)

The proposed legislation does not:

- contain any language about enforcement or penalty when the right is breached. Breeders must seek compensation for breaches through the courts.

Conclusion

Bringing Canadian Plant Breeders' Rights legislation into conformity with the most recent international plant variety protection convention has been a goal of the Canadian Seed Trade Association for over 22 years. The CSTA and its members are confident that the amendments proposed in Bill C-18 will make Canada more attractive to both domestic and international plant breeders, and will deliver innovative new varieties to Canadian farmers, improving competitiveness and creating new opportunities in Canadian and international markets.

We encourage this committee to support the provisions of Bill C-18, the Canadian Agricultural Growth Act, taking a step towards a more vibrant agricultural sector that can play a stronger role in the efforts to feed, fuel and clothe a growing world population while contributing to a healthier environment.