



**House of Commons Standing Committee on Agriculture and Agri-Food**

**April 30, 2013**

**Study of Innovation and Competitiveness**

**Speaking Notes**

**Patty Townsend**

**CEO, Canadian Seed Trade Association**

Thank you Mr. Chairman and members of the Committee.

I am very happy to be here to talk to you about the role of the seed industry as the foundation of agricultural innovation and competitiveness. I bring apologies from our President who was unable to come to Ottawa on short notice. You are stuck with me but I will do my best to make a valuable contribution to your study.

The Canadian Seed Trade Association brings together 132 member companies. Our members are involved in all aspects of seed, from plant breeding 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.

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".

Agriculture and Agri-Food Canada has estimated that 9 out of every 10 bites of food taken by people around the world starts with the planting of a seed. Seed is the foundation of the world's food supply and it's an important contributor to its supply of fibre, fuel and industrial products.

Seed is the driver of the innovation that the world's farmers will need in order to feed, fuel and clothe a world population that is expected to reach more than 9 billion in the next 35 years. Studies have shown that over half of the yield gain in most crops is from genetic improvements delivered by seed, so farmers are looking to the seed sector to provide them with the superior genetics they will need to improve productivity and to protect the environment in which they operate.

Almost every week, there is another announcement of a significant achievement in plant breeding and research, by public and private sector researchers. The impacts are already substantial. According to Science Daily: "there has been a step-change in speed and cost-effectiveness. What previously took six generations to achieve can now be done in two."

Recent achievements ranging from the discovery of a gene that can improve photosynthesis, to genome sequencing for wheat and chick peas, to the development of insect tolerant wheat varieties promise future yield increases of more than 50% in the world's staple crops.

In the shorter term, advances are being made in drought and heat resistance; efficiency of water and nutrient use; disease resistance; and in the quality and health benefits of oils and meals. All of these and other advances are entering the innovation pipeline at a rapid pace and hold great promise for farmers and consumers.

The question becomes whether and how Canadian farmers will be able to access these advances. The answer is: Only when Canada's policy and regulatory environment facilitates investment.

Where the private sector is able to generate a return, it invests. In 2012 CSTA's members invested over \$109 million in research, plant breeding and variety development. That is over 5% of their combined sales and represents a 94% increase from the previous five years.

Most of that investment has been in three crops: canola, corn and soybeans where the operating environment facilitates a return on that investment in order to re-invest in the development of even better varieties.

Breeders and developers working with these crop kinds operate in more flexible regulatory environments. For example, corn is not subject to variety registration, and soybeans and canola registration has evolved to meet the needs of the market place.

They also have access to better tools to protect their inventions – new traits, attributes and varieties. The development of hybrid corn and canola mean that farmers purchase seed every crop cycle in order to continue to get the superior performance delivered by hybrids.

Improved performance and attributes in canola, corn and soybeans have also been developed with the use of modern biotechnology, which allows for the use of more effective intellectual property protection tools, like patents and technology use agreements.

However, private sector investment in some of Canada's other major crops, like wheat, barley, oats, flax and pulse crops has lagged. In 2012 only 8% of private sector investment was in wheat breeding, 2% in barley breeding, 1% in flax breeding and there was no significant investment in breeding of oats or pulse crops.

To date, the government of Canada has been the largest investor in plant breeding and research in these crops. But the government has been reducing and redirecting investment in plant breeding and research and is looking to the private sector to fill in - on its own or in partnership with public institutions. The private sector is keen to increase its role, but that can only happen in a policy and regulatory environment that will foster investment.

**First**, our members need a continued commitment to regulatory and trade decisions that are founded in science. Science is reproducible and measurable. Regulatory processes that are based on science ensure that innovation is assessed in a consistent manner, giving confidence to consumers and to the developers of innovation. Public opinion, market acceptance and other socio economic factors are not consistent over time or geography and must not enter into regulatory and trade decisions made by government.

**Second**, private sector investors need flexible, predictable, and enabling regulatory environments. The government has taken some substantial steps towards improved regulatory systems, including the removal of kernel visual distinguishability as a requirement for wheat variety registration; and the development of a framework that **could** facilitate more efficient variety registration for all crop kinds.

However, there is still so much more to do. While I am speaking of variety registration, I need to point out that the so called “three-part” registration system implemented 5 years ago has not yet improved registration because even within this system, changes that should be simple have to be made by regulation.

We look forward to some of the provisions contained in Bill C-18 – the Agricultural Growth Act - which we hope you will soon have before you. Specifically, we support the ability use foreign data for registration purposes and the ability to incorporate some documents by reference.

The review of the registration system that was launched last fall is also positive for plant breeders and developers. We hope that it will give crop value chains the opportunity to design systems that will best serve their needs.

**Third** – in order for the private sector to invest, it needs to be able to generate a return that will cover costs. That has not generally been the case in crops like wheat. One of our members provided us with a real life example - FT Wonder, developed in Ontario. The company invested 9 years and over \$ 900 thousand to develop and bring the soft red winter wheat to the market. After 3 years in the market place the company had not even recovered half of its investment. Obviously this is not sustainable.

Effective protection of intellectual property means that plant breeders and developers can set conditions on the use of their varieties for a specified period of time. The conditions can and most often do include remuneration or a royalty. For crops like cereals, pulse crops, flax and special crops, the only real form of intellectual property protection available is Plant Breeders’ Rights.

Bill C-18 strengthens Plant Breeders’ Rights by giving breeders the ability to set conditions for a longer time, and over more uses. For example, in addition to selling and advertising for sale, the breeder would be able to set conditions on production, reproduction, conditioning, stocking for sale, import and export of their varieties. At the same time, the Bill entrenches an exception for farmers, to allow them to save and store grain produced from protected varieties, and to condition it for use as seed on their own farms.

Amended Plant Breeders’ Rights legislation will give plant breeders and developers increased confidence to invest in Canada, and it will also give international plant breeders and developers the confidence to give Canadian farmers access to superior varieties developed abroad.

**And last for today** – our members need improved access to markets. Canada is the world’s 5<sup>th</sup> largest exporter of seed. Our production environment, comprehensive food safety regulations, seed quality standards, and efficient production and processing systems give Canada an advantage over many of our competitors.

However Canada is not able to capture some very substantial opportunities internationally because many countries impose barriers to trade that are not founded in science, but are politically driven.

We appreciate that the government has adopted a very aggressive trade agenda, and encourage negotiators to remain steadfast in all negotiations in support of timely and science based approvals, and the development of trade facilitating measures to address low level presence of approved GM events in shipments of grain and seed.

I apologize if I have gone over time Mr. Chairman, but I will be happy to answer any questions.