Food for thought

Canadian farmers use innovative plant science technologies to grow food more efficiently and sustainably, which contributes to an affordable supply of safe and healthy foods for Canadians.

Building healthier communities

Canadian consumers spend much less on groceries and have access to higher quality and longer-lasting produce than people in many other areas of the world.

Plant science innovations reduce food loss and waste, from farm to table, by combating diseases, insects and weeds.

Food prices

45%

Without plant science innovations prices would be 45% higher on average for many food staples, an increase of approximately $4,500 annually per Canadian household.

Without pesticides harvests for some fruit and vegetable crops would be cut in half because of insects, weeds and diseases.

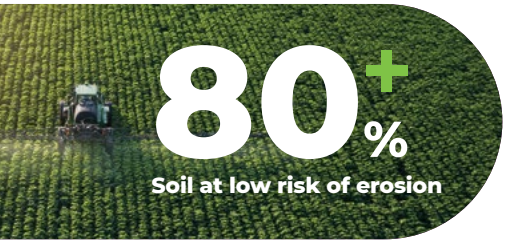
Protecting our environment

Canadian farmers are growing more food on less land, using less resources. This is great news for the environment and for biodiversity.

- Thanks in part to plant science innovations, more farmers have been able to adopt conservation tillage and no-till farming.
- The carbon sequestration and fuel savings from no-till and conservation tillage practices saved an estimated 20 billion kgs of greenhouse gas emissions from being released into the atmosphere between 1996 and 2018, which is equivalent to removing about 13 million cars from the road for a year.
- Almost 34 million acres remain in a natural state (untouched by agriculture) due to plant science innovations enabling greater productivity on existing agricultural land. This helps to preserve wildlife habitats and protect biodiversity.
- Canadian farmers saved 1.2 billion litres of fuel between 1996 and 2018, because of no-till and conservation tilling practices.

Without plant science innovations farmers would need 44% more land (an area roughly the size of all the Maritime provinces combined) to produce what they do today.

Plant science innovations have made pesticide use in Canada more efficient, helping farmers effectively protect their crops from pests using fewer inputs.



- Seed innovations like herbicide-tolerant corn, soybeans and canola reduced the need for pesticide use by as much as 35% in Canada between 1996 and 2018.
- More than 80% of farmland in Canada is now at a very low risk of soil erosion, thanks to the adoption of no-till and conservation tilling practices – a large improvement over the last three decades.
- Advancements in precision agriculture have allowed farmers to be more targeted than ever in their pesticide applications putting the pesticides exactly where and when they are needed.

All facts, figures and claims are adapted from a commissioned study by RIAS Inc.
The Value of Plant Science Innovations to Canadians in 2020

Looking for more information? Visit HelpingCanadaGrow.ca