Growth opportunities

Plant science innovations help Canadian farmers to be more productive and efficient, which drives economic growth for Canada through more sustainable production practices.

Growing our economy

$9.2B▲

Crop productivity

Canadian farmers would grow $9.2 billion less worth of crops a year without plant science innovations. This includes $7.7 billion less worth of field crops, $1 billion less worth of fruits and vegetables and $460 million less worth of potatoes.

$8.5B▲

Agri-food exports

Canada's agri-food exports would be $8.5 billion (33%) lower without the use of crop protection products.

The development of pesticides and plant breeding innovations drive significant economic activity, with a combined:

20,400 jobs and **$863 million** **in wages**

over $3 billion **in GDP per year**

72%

Without plant science innovations Canada's net agri-food trade balance could have been as much as 72% lower ($8.5 billion fewer exports) in 2018/19.

Driving greater productivity on the farm

Plant breeding alone has driven a 50% increase in crop productivity over the last century ensuring Canadians have access to a steady food supply.

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

Protecting our environment

Plant science innovations help make agriculture more efficient and sustainable, increasing productivity on existing land and helping farmers do more with less resources.

- Seed innovations like herbicide-tolerant corn, soybeans and canola have made pesticide use more efficient, reducing the use of pesticides by as much as 35% in Canada between 1996 and 2018.
- Advancements in precision agriculture have allowed farmers to be more targeted than ever in their pesticide applications, applying them at exactly the right time and place.
- 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.

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.

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