

Sustainability: Facts on Canola Farming and the Environment

Canola farmers take pride in how they care for their most valued resource, their land. By adopting leading-edge innovations, farmers are able to produce more canola per acre while maintaining the existing farmland footprint. New plant traits such as herbicide tolerance have helped farmers switch to no-tillage practices and farm more efficiently and sustainably.

BUILDING HEALTHIER SOILS



One of the greatest challenges in growing canola is competition from weeds. Farmers used to rely on tilling the soil to remove weeds from their fields. It dried out the soil, leading to erosion and reduced fertility. With herbicide-tolerant canola, farmers can forgo tillage and use smaller amounts of herbicide to control weeds, keeping our soil moist and fertile. Today's herbicide-tolerant varieties have allowed farmers in Canada to reduce the amount of herbicide they use by 20% since 1996.¹

LOWERING EMISSIONS

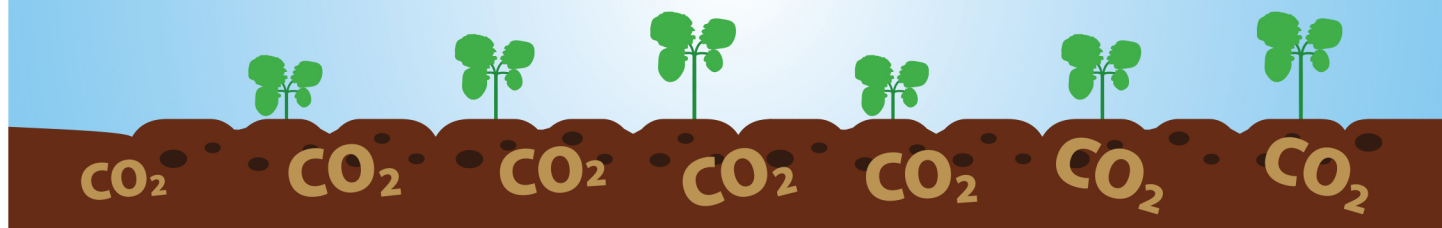


The combination of conservation tillage and growing herbicide-tolerant crops means Canadian farmers are making fewer passes over their fields and using less fuel. Conservation tillage practices have resulted in 126-194 million fewer litres of diesel fuel used on Canadian farms each year, reducing GHG emissions by about 450,000 to 750,000 tonnes per year.²

SEQUESTERING CARBON

In 1991, 7% of Western Canadian farmland was seeded with no-till practices. By 2016, this number had grown to 65%.³ When soils are left untilled, they sequester greenhouse gases. Low-till and no-till farming help

Canadian farmers sequester 11 million tonnes of greenhouse gases in their fields every year⁴. 70% of this sequestration has been due to canola.



¹Graham Brookes and Peter Barfoot, "Environmental impacts of genetically modified (GM) crop use 1996 – 2015: Impacts on pesticide use and carbon emissions" (2017) 8 GM Crops & Food 117 – 147

²RIAS Inc, *The Value of Plant Science Innovations to Canadians*, Prepared for CropLife Canada (Ottawa, 2015)

³CANSIM Tables 004-0010 and 004-0205, Statistics Canada

⁴Environment and Climate Change Canada, *National Inventory Report: 1990-2015, Greenhouse Gas Sources and Sinks in Canada*, (Ottawa: Environment and Climate Change Canada, 2017)