



**Investing in
bio-based materials
and manufacturing**



**ONTARIO
BIOAUTO COUNCIL**

The business of soybeans

Like any other industrial commodity soybeans are bred, planted, harvested and processed to meet the needs of a customer. Expectations of the end-users are met while ensuring the best quality, supply and price.

There are generally two major types of soybeans grown in Ontario, commonly referred to as oil (or crush) beans and food beans. Oil beans are grown for producing oil and high-protein meal which is used as a protein supplement in livestock rations. Key quality factors for oil beans are oil content, protein content and the fatty acid composition.

Soybean composition

10-year averages:
Carbohydrates 37.2%
Protein 41.9%
Oil 20.9%

In 2006 the average oil content for Ontario soybeans was 21.4%. Long term trend lines show an upward movement for oil content in Ontario beans.

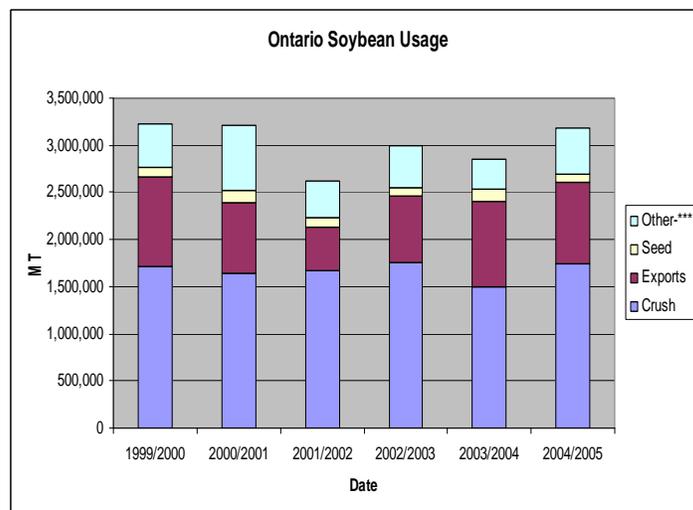
In 2006 the fatty acid composition for Ontario soybeans was:

Fatty Acid	Percentage
C16:0	10.6
C18:0	3.2
C18:1	17.1
C18:2	54.8
C18:3	12.7

Other minor fatty acids totaled 1.4% to 2.0%.

Soybean uses

The compositions of various soybean varieties change depending on the intended use of the bean.

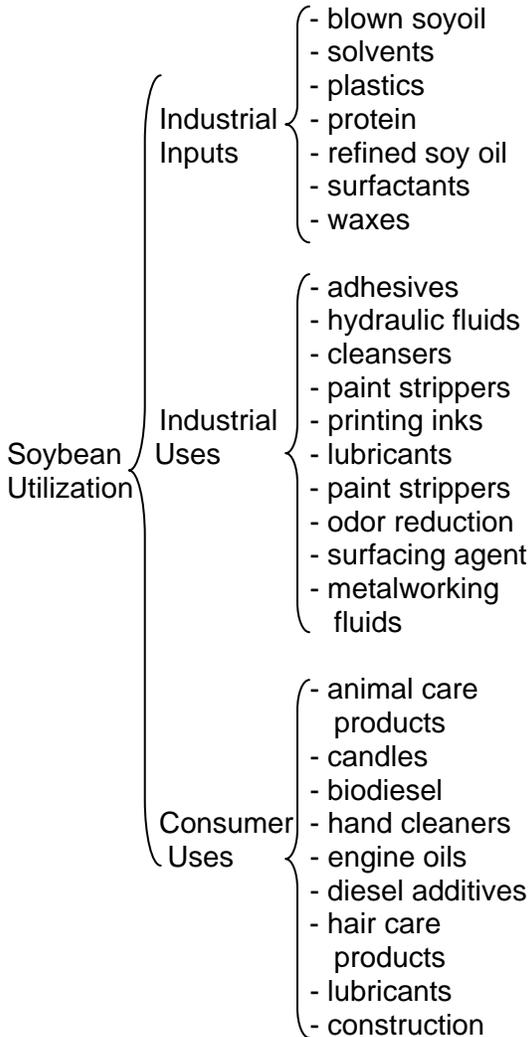


***Other – domestic uses, feed, waste, dockage

Source: Statistics Canada, OMAFRA, AAFC, Ontario Soybean Growers

Oil/crush beans

Most of the crush beans are used for food oil markets. However there are growing markets for soy-oil such as bio-fuel production, soy-polyols for plastics and foams, waxes, lubricants among other applications.



Quality

Growers manage their crop rotations, their tillage systems and their planting and harvesting schedules with the goal of consistently producing superior soybeans. For example, all growers who apply agricultural pesticides in Ontario must first be licensed by the provincial government and can only use pesticides when and where required.

Ontario growers work within the Canadian Identity Preserved Recognition System which ensures complete traceability from producer through to processor. This ensures the highest quality and reliability.

Elevators painstakingly test every farm delivery to ensure it meets all quality criteria before allowing the soybeans to be unloaded. As well, Canadian soybean elevators are equipped with state of the art processing equipment.

Soybeans in Ontario

Soybeans have become a key part of the Ontario economy and steadily increased in planted hectares over the last 10 years. The farm gate value totals approximately \$740 million dollars off 930,776 hectares. When other industry sectors are added such as inputs, processing, transportation a multiplier effect of 2.5 times makes the soybean industry worth \$2.2 billion dollars in Ontario.

More statistics and information on the Ontario Soybean industry is available at:

www.omafra.gov.on.ca
www.grainscanada.gc.ca
www.soybean.on.ca

Funding for this publication was made available by Agricultural and Agri-Food Canada through the Agricultural Adaptation Council.

