

Rapeseed (Canola)

DESCRIPTION

Rapeseed is composed of a pod (lignocellulosic biomass), bean (oil and protein) and stalk (lignocellulosic biomass).¹ Rapeseed has a higher oil content than soy and may have similar applications to other vegetable-based oil. Canadian plant breeders developed canola in the mid-1970s as a genetic variation of rapeseed. Canola has low levels of erucic acid and glucosinolates, making the oil and meal more edible. The availability of higher yielding cultivars would help establish canola as a new crop for Wisconsin agriculture. In addition to the grain, there are [crop residues](#).

CLASSIFICATION

Plant-based oil, plant-based protein, starches and sugars, lignocellulosic biomass

SOURCE INDUSTRY

Rapeseed farming. See the [Grains & Crops industry roadmap](#).

ANNUAL VOLUME GENERATED IN WISCONSIN

Not grown in significant quantities in Wisconsin. Yield trials conducted throughout Wisconsin for the past eight years show that rapeseed yields compare well to Canadian and other northern US growing areas, indicating that it could be introduced as an additional cash crop for Wisconsin.

CURRENT APPLICATIONS

Oil for human consumption; biodiesel (in Europe)¹

PRICE

\$400-\$450/ ton²

APPLICABLE BIOREFINING PROCESSES

[Lipid extraction](#), [esterification](#), [transesterification](#)

REFERENCES

¹ Oplinger, E.S. et al. 1989. Alternative Field Crops Manual. University of Wisconsin Extension, Cooperative Extension. www.hort.purdue.edu/newcrop/afcm/canola.html (8 April 2004).

² Government of Alberta Agriculture, Food and Rural Development Weekly Crop Market Review. April 9 2004. www.agric.gov.ab.ca/economic/stats/wkgrain.html (8 April 2004).