# Canola

*Brassica napus* (Cruciferae)

**Fast Facts:**

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| Acres in Washington: 10,000 in 2006 |
| Number of Growers: 25-30 |
| Per Acre Value: $450 a ton |
| Value of Production in Washington: $11,250-$13,500 |

**Description Of crop:**

Canola is a type of edible oil that was developed in Canada through plant breeding and is a cultivar of rapeseed. Traditional rapeseed oil contains higher amounts of erucic acids and glucosinolate both of which have been deemed undesirable for human consumption by the United States Food and Drug Administration. Canola oil is healthier due to its low to zero saturated fat, high monounsaturated oil content and beneficial omega-3 fatty acids. Canola is a broadleaf plant that is a member of the mustard family. It is an annual dry land crop that produces yellow flowers, and long thin pods. Each canola plant will have several seedpods containing the tiny round seeds that are crushed to make the oil. Each seed contains about 40% oil. Canola can be introduced easily into a four- year rotation and like wheat, is grown as both a spring and a winter crop. Fall seeded canola is sown in September to October. Spring seeded canola is sown from late March through early May. Canola can be seeded and harvested with small grain farming equipment, provided that adjustments are made to accommodate the small seed size. Washington canola is harvested in late August using one of two methods. It can be cut standing with a conventional dry land combine or it can be swathed and windrowed. Farmers in Washington are looking at canola for biodiesel production as a new cash crop. Biodiesel is made from almost any plant -derived oil and can be used in most conventional diesel engines. A Washington state law requires biodiesel to make up at least 2% of the total diesel sales in the state by 2008, which creates a market for canola. In August 2007, the nation's largest biodiesel refinery opened in Grays Harbor, Washington.

Some farmers are concerned that the canola crops will cross- pollinate with their nearby crops. Canola outcrosses readily with other brassica crops and may also act as a vector to insects and diseases that may increase risks to specialty seed crops. As a result, a law was enacted that authorizes the Washington State Department of Agriculture to establish *Brasssica* seed production districts. There is also genetically modified (GMO) canola, which is resistant to herbicides. The plants are modified but the oil is not, it is the same as oil from conventional canola. When marketing canola the negative connotation of the word "rape" from

rapeseed resulted in the friendlier name "canola" based on the acronym - Canadian Oil Low erucic Acid.

**Key pests:**

Insects are the main pest in canola and can reduce up to 80% of its yield if not controlled. The main pest is the cabbage flea beetle, which can affect both fall and spring seeded canola. They tend to invade canola from surrounding vegetation. The diamondback moth, the cabbage seedpod weevil and the cabbage aphid are also pest problems in canola. Unlike insects, weeds are a less severe problem because, if canola is planted under good seeding conditions, it is a good competitor with weeds. The main weed pests are lambsquarter, pigsweed, mayweed, knapweed and various grasses. The main disease affecting canola is white mold, which is a fungal disease that affects the crowns and stem of canola.

**Key pesticides:**

The cabbage flea beetle can be controlled with a seed treatment of Helix, the diamondback moth with Sevin or Capture, The cabbage seedpod weevil and aphids can be controlled with Capture. Weeds can be controlled through a preplant treatment of Treflan. Growers can also use Assure II and Round-up if the canola is Round-up ready. White mold is controlled with Quadris, and Ronilan.

**Critical pest Control issues:**

Growers should use disease resistant varieties when possible. There are both spring and winter types of canola. Generally the winter types have a greater yield potential then the spring varieties, which also tends to suffer from increased insect and weed pressures. Several crops have diseases in common with canola so rotation considerations are important. Canola is also sensitive to certain herbicides so care needs to be taken when looking at past and present applications.

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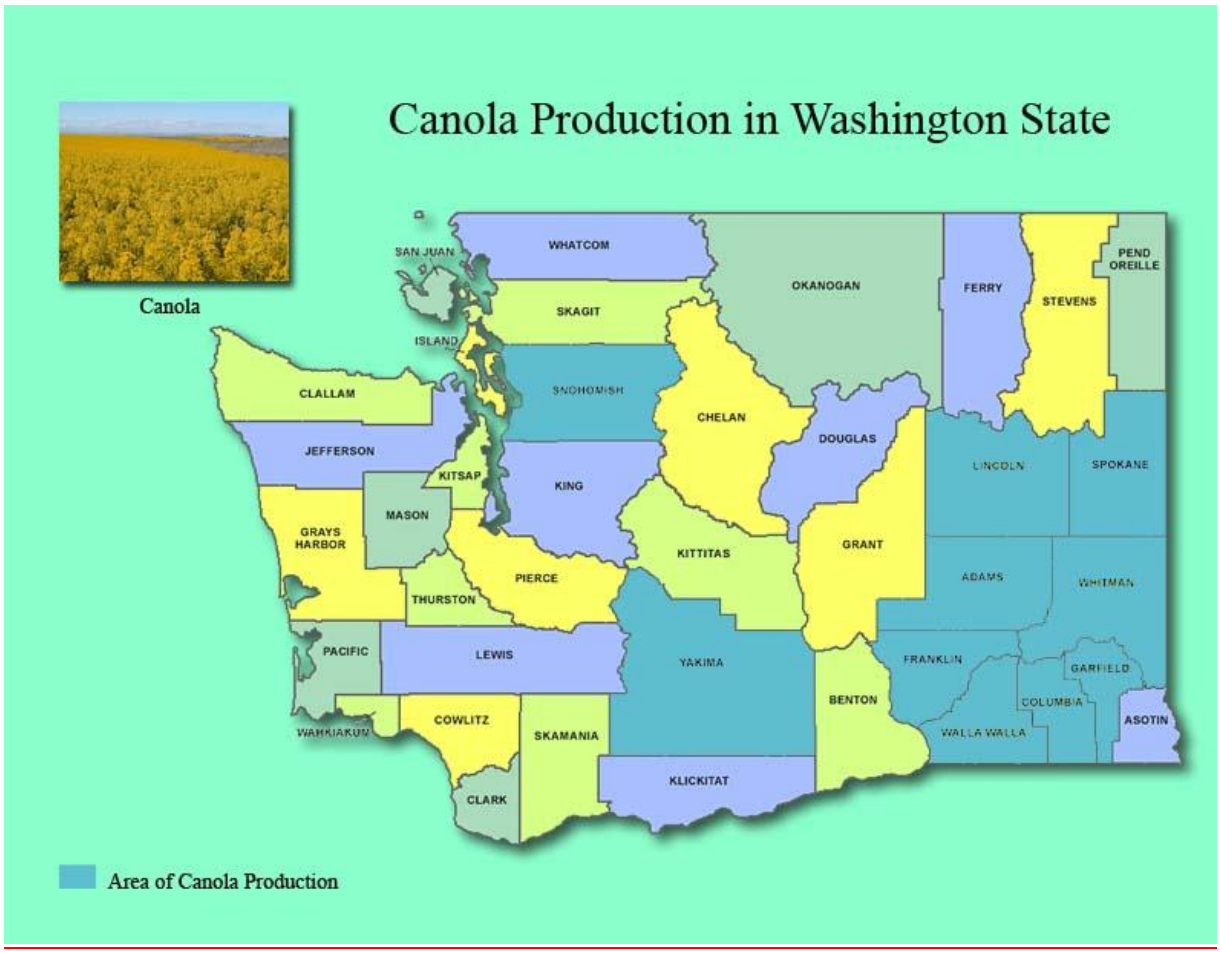
**Location**
**Of production:**

Adams, Garfield, Franklin, Columbia, Lincoln, Spokane, Walla Walla, Whitman, Snohomish and Yakima counties.



**Pictures:**