

Canola Production



Pictures of Canola Variety Trial Plots at UW-Spooner Ag Research Station

What is Canola??

- Canola is a small seeded oil crop
 - Similar in seed size to alfalfa
 - Canola seed contains approximately 40-42% oil
- Both spring or winter annual types exist but we would plant spring annuals
- Short Season Crop between planting and harvest
- Most canola is grown in North Dakota or Northwestern Minnesota



Canola Planting Considerations

- Best to Plant into a clean & firm seedbed
- Canola is typically seeded in 6-7" rows with a billion type seeder or press wheel seeder to maintain seeding depth of around 0.5"
- Seed around 6 lbs per acre
- Plant Canola in late April
 - Canola is susceptible to heat and drought stress during flowering so early planting will be better than late planting.
 - Canola seedlings are frost tolerant



Canola Weed Control

- Conventional Herbicides Labeled

- Treflan – Pre plant incorp
- Select, Poast, & Assure II post emergence grass control
- Sensitive to drift or tank contamination from common broadleaf herbicides

Herbicide Resistance in Canola

- Glyphosate Resistance
- Clearfield Resistance
- Liberty Resistance

Herbicide Rotation Factors

- Volunteer Canola will also be resistant



Once growing canola forms a good canopy to limit late season weed emergence

Canola Fertility Needs

- **UW-Recs** (at optimum soil test levels)
 - Nitrogen 80 lbs/A
 - Phosphorous 45 lbs/A
 - Potassium 80 lbs/A
 - Sulfur 10-25 lbs/A



Above: Broadcast topdressing of Nitrogen on emerged canola

Below: Pictures of Sulfur Deficiency when no sulfur was applied on a sandy soil type

Canola Disease & Insect Problems

- Insects
 - Flea Beetles
 - Grasshoppers (Chippewa Co. Farm variety trials one year)

- Diseases
 - Sclerotinia wilt
 - Black Leg

No problems reported in years of UW-Variety Trial Research



Canola Harvest

- **REQUIRES SWATHING**
 - Canola pods ripen on the plant from bottom to top and need swathing to get uniform seed drying and moistures
 - Swath when 20-30% of the seeds on the main stem have turned from green to brown
 - Swathing too late will cause significant seed loss from shattering
 - Thick stems and bulky plants create big swaths
 - While in swaths, seed & pods rewet when humid or rainfall to help limit shatter loss in the swath



Top: Swathing

Bottom: Windrow in UW variety trial plot

Canola Harvest (part II)

- Remember the canola seed size?? Ever set a combine for threshing seed that size??
 - You need the right settings to not send too much seed out the back of the combine WHILE still producing a clean seed in the bin.
 - Too much foreign matter in the bin with the seed will cause problems with the oil pressing process



Canola Storage

- Remember the seed size??
- The seed is round, small, heavy and runs freely
 - Need very tight truck boxes and storage bins
 - Need special floors in bins or upright bins with cone bottoms (want to fill below your slotted floor and screw up your air flow??)
- Seed can sweat for up to 6 weeks after harvest, heating and spoilage can occur even at 9-10% moisture.



UW Variety Trial Yields

| | Arlington | Chippewa Falls | Spooner |
|---------------------------|-----------|----------------|---------|
| | Lbs/A | Lbs/A | Lbs/a |
| 2006 | 2324 | ----- | 1738 |
| 2005 | 1835 | 1121 | 1700 |
| 2004 | 2453 | 2719 | 1844 |
| 2003 | 2242 | 1670 | 2340 |
| Averages (1985 lbs/A) | 2213 | 1836 | 1905 |

Canola Production Economics

- Income:

| | |
|---------------------|----------------|
| Seed | 1985 lbs/A |
| Price | \$12/cwt |
| GROSS INCOME | \$238/A |

** should call the river to get a current price

** I used the last FSA PCP price that I could find for Monroe Co.

*** Locally I know of someone who got canola trucked here for \$13/cwt

- Expenses (very rough budget)

| | |
|-------------------|----------------|
| Tillage | \$20/A |
| Seed | \$20/A |
| Planting | \$15/A |
| Herbicide | \$12/A |
| Spraying | \$ 7/A |
| Fertilizer | \$60/A |
| Custom Combine | \$25/A |
| Haul | \$10/A |
| Storage | \$ 5/A |
| Land (rent equiv) | \$70/A |
| Labor | ?? |
| TOTAL | \$244/A |

** using rough estimates on costs

Other Canola Information available

- United States Canola Association
<http://www.uscanola.com/index.asp?Type=NONE&SEC={12DFE04E-97C6-471E-ACCA-4DF43C093BC1}>
- Canola Council of Canada
<http://www.canola-council.org/portal.html>
- NDSU Canola Production (A-686)
<http://www.ag.ndsu.edu/pubs/plantsci/crops/a686w.htm>
- Colorado State Publication
<http://www.ext.colostate.edu/pubs/crops/00110.html>