This presentation is a brief summary of canola trial work by MSU in the Upper Peninsula of Michigan from 1986 through 2005.

The trials include several winter and spring canola variety trials, a winter canola planting date trial, a spring canola sulfur fertilizer trial, and a 3-year nitrogen fertilizer rate and timing trial.
**1987 Spring Canola Evaluation**

- **UP Experiment Station, Chatham**
  - 9 varieties
  - Avg yield: 818 lbs/a
  - Hi: 1,302 lbs/a -- Lo: 445 lbs/a

- **Menominee Co.**
  - 3 varieties
  - Avg yield: 1,687 lbs/a
  - Hi: 1,774 lbs/a -- Lo: 1,544 lbs/a

- **Iron Co.**
  - 3 varieties
  - Avg yield: 2,033 lbs/a
  - Hi: 2,600 lbs/a -- Lo: 1,600 lbs/a

Spring canola variety trials held in 3 U.P. locations in 1987. Number of varieties, average yields at each location, and hi/lo yields for each location are indicated. More complete information is available in the 1987 Upper Peninsula Research Report, MSU Department of Crop and Soil Science.
Winter canola variety trials held in 2 U.P. locations in 1987. Number of varieties, average yields at each location, and hi/lo yields for each location are indicated.

Winter canola varieties yield much better than spring varieties under ideal conditions. However, depredation by deer and winter kill have proven to be too risky when growing winter canola. Spring canola varieties are now preferred.

More complete information is available in the 1987 Upper Peninsula Research Report, MSU Department of Crop and Soil Science.
Winter canola variety trial at Chatham in 1988. Very good yields.
Two separate winter canola variety trials were conducted at Chatham in 1989, both with excellent yields.
A winter canola planting date trial was conducted at Chatham in 1989. 3 planting dates were included starting on August 12. Plantings were also made on August 20 and August 30. Crop yield dropped precipitously based on later planting date.
This slide captures the multi-year averages of spring and winter canola variety trials across all U.P. locations from 1986 through 1988.
A winter canola variety trial at Chatham performed poorly.
Winter canola variety trial in 1996, Menominee County. Yields were mediocre.
Spring canola variety trial in Menominee County with poor yields.

- Menominee Co
- 5 varieties
- Average yield: 1,143 lbs/a
- Hi: 1,483 lbs/a -- Lo: 636 lbs/a
1997 Spring Canola Sulfur Fertility Trial

<table>
<thead>
<tr>
<th>Variety</th>
<th>0 lb S/a</th>
<th>10 lb S/a</th>
<th>20 lb S/a</th>
<th>2 lb foliar S</th>
</tr>
</thead>
<tbody>
<tr>
<td>Celebra</td>
<td>825</td>
<td>945</td>
<td>950</td>
<td>845</td>
</tr>
<tr>
<td>Oscar</td>
<td>810</td>
<td>1,415</td>
<td>1,375</td>
<td>1,025</td>
</tr>
</tbody>
</table>

10 lbs of sulfur per acre, applied as ammonium sulfate, gave a good yield boost to both varieties of canola on this sandy site.
Yields were generally low at both sites on spring canola variety trials in Alger and Iron counties.
Split application of nitrogen fertilizer appears to have a negative impact on yield, possibly due to low nitrogen availability during the critical growth stages of the crop, machine travel over established canola plants, and possible plant injury from direct contact with fertilizer.

<table>
<thead>
<tr>
<th>Rate (N lbs/A)</th>
<th>At Pltg</th>
<th>Spt App</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>1046</td>
<td>998</td>
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<tr>
<td>120</td>
<td>1164</td>
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<tr>
<td>200</td>
<td>1364</td>
<td>1200</td>
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<tr>
<td>Mean</td>
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<td>1082</td>
</tr>
<tr>
<td>CV</td>
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<td>13</td>
</tr>
<tr>
<td>LSD</td>
<td>142</td>
<td>158</td>
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</table>