



crop insurance premium costs are assessed based on a determination from an insurer in the private sector. Canola harvest time is expected to be greater compared to soybeans because lower ground speeds are required (~ 2 mph). Therefore, variable costs for direct combining winter canola are assumed to be 30 percent higher than for soybeans. Haul and handling machinery costs are computed based on canola seed yields. These costs do not include costs of storage.

### Considerations

A producer pondering winter canola should consider the economic returns to the crop, including expected yields, costs of production and marketing. Winter canola has not been widely used as an alternative crop in Iowa and there are uncertainties regarding its potential in Iowa crop rotations. On average, land values are greater in Iowa than in regions where winter canola is typically grown (i.e. the southern Plains and the Pacific Northwest). Therefore, canola yields higher than the national average are necessary to make winter canola economically competitive with traditional crops. While there is not evidence that winter canola yields in Iowa are greater than the national average, growing conditions in Iowa tend to be more favorable (i.e. greater rainfall and better soils) than in areas where winter canola is typically grown. Finally, though varieties of winter canola are winter hardy, there is a risk of winterkill if winter conditions are too extreme, such as exposure to subzero temperatures without snow cover for several days (13). The canola crop may compensate to some degree of winterkill and still produce acceptable yields, but if spring plant counts are lower than 1-2 plants per square foot, the producer may decide to terminate canola and plant a different crop in the spring.

As with other commodities, the price of canola seed is influenced by global trading. Canola trades on the Intercontinental Exchange (ICE) as rapeseed futures in Canadian dollars per Metric Ton. Thus, when calculating canola prices, the Canadian currency exchange rate should be also taken in account. We recommend looking at the

Oklahoma State University's guide to calculating canola prices (14). Canola seed prices are tied to other commodities, especially to soybeans. During the last decade, canola prices (by weight) have steadily remained around 25 percent higher than soybeans. However, it should be noted that marketing of canola seed in Iowa is not well established, and substantial losses due to transportation costs may be incurred if marketing out-of-state. There are few local buyers for canola oilseed in the state, so finding a potential buyer should be done before planning to grow this crop.

Producers should focus attention to these and other factors when assessing how well winter canola fits their own rotation. We will continue to evaluate this crop, hoping to understand better its potential for Iowa farms.

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### Recommended Reading

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**Table 1. Estimated Costs of Production for Winter Canola in Iowa**

|                                       | Price per unit      | Units used | Costs Per Acre         |
|---------------------------------------|---------------------|------------|------------------------|
| <b>Preharvest Machinery</b>           |                     |            |                        |
| Tandem disk                           | \$6.40/pass         | 2 passes   | \$12.80                |
| Apply bulk fertilizer                 | \$3.30/pass         | 1 pass     | \$3.30                 |
| Apply herbicide                       | \$4.20/pass         | 2 passes   | \$8.40                 |
| Field cultivate                       | \$5.10/pass         | 1 pass     | \$5.10                 |
| Drill                                 | \$8.10/pass         | 1 pass     | \$8.10                 |
| Apply spring N fertilizer             | \$3.30/pass         | 1 pass     | \$3.30                 |
| <b>Seed, Chemical</b>                 |                     |            |                        |
| Canola seed                           | \$5.50/lb           | 5 lb       | \$27.50                |
| Fertilizer                            |                     |            |                        |
| Nitrogen                              | \$0.40/lb           | 120 lb     | \$48.00                |
| Phosphorus                            | \$0.45/lb           | 30 lb      | \$13.50                |
| Potash                                | \$0.35/lb           | 15 lb      | \$5.25                 |
| Sulfur                                | \$0.30/lb           | 10 lb      | \$3.00                 |
| Herbicide                             |                     |            |                        |
| Burndown (Glyphosate)                 | \$0.20/oz           | 24 oz      | \$4.80                 |
| Pre-plant incorporation (Trifluralin) | \$4.85/pint         | 2 pints    | \$9.70                 |
| Lime (including application)          | yearly cost         |            | \$8.80                 |
| Crop Insurance                        |                     |            | \$20.33                |
| Miscellaneous                         |                     |            | \$10.00                |
| Interest on preharvest variable costs | 5.15% for 10 months |            | <u>\$7.24</u>          |
| <b>Total Preharvest Costs</b>         |                     |            | <b>\$199.12</b>        |
| <b>Harvest Machinery</b>              |                     |            |                        |
| Combine                               | \$24.74/acre        | 1 acre     | \$24.74                |
| Grain cart                            | \$8.90/acre         | 1 acre     | \$8.90                 |
| Haul                                  | \$2.31/acre         | 1 acre     | \$2.31                 |
| Handle (auger)                        | \$1.07/acre         | 1 acre     | <u>\$1.07</u>          |
| <b>Total Harvest Costs</b>            |                     |            | <b>\$37.02</b>         |
| <b>Labor</b>                          | \$13/hour           | 2.45 hours | <b>\$31.85</b>         |
| <b>Land Charge</b>                    | \$266/acre          | 1 acre     | <b><u>\$266.00</u></b> |
| <b>Total Costs per Acre</b>           |                     |            | <b>\$534.00</b>        |
| <b>Total Cost per Cwt.</b>            |                     |            | <b>\$28.11</b>         |