

CIGI Biodiesel Short Courses

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CIGI Biodiesel Pilot Plant

- Small scale batch system installed in a heated trailer
- Normally housed at University of Manitoba Smart Park
- Funded in part by MRAC



Components of the Pilot Plant

- Portable
- Flammable storage
- Seed, oil, meal, biodiesel storage
- Oil seed extraction
- 40 gal reactor (isolated – vented for safety)
- Water Wash
- Ion Wash
- Lab



Biodiesel Short Courses

- Biodiesel industry is impacting oilseed industries, especially canola
- Interest in the Canada
 - difficult to access accurate information, training and technical support



Biodiesel Short Courses

- Objective:
 - To provide unbiased training in Biodiesel production and utilization
- Partner with APAS, and provincial specialists to design and deliver the program
- Blend of lectures, demonstrations and hands on experience
- To be delivered in locations across the prairies



Course Outline

- The Diesel engine
- Biodiesel as a fuel
- Safety considerations
- Chemistry of Fats and biodiesel production
- Feed stock selection
- Oilseed extraction
- Biodiesel process
- Separation methods
- Washing methods
- Methanol recovery
- Quality control
- Glycerol recovery
- Canola meal utilization
- Plant design
- Economics

