

# Livestock Research Protocols

## Replacing Corn with Hybrid Rye in Feeder Pig Rations

**Objective**: To compare the feed efficiency, daily gain, feed cost per pound of gain and carcass quality when a portion of the standard ration is replaced with hybrid rye.

### **Project Period**

March 2018 to May 2019; three feeding turns

Standard Ration	Hybrid Rye Ration	Hybrid Rye Ration	Standard Ration	Standard Ration	Hybrid Rye Ration
Feeding Turn 1		Feeding Turn 2		Feeding Turn 3	

#### Farmer-cooperator will:

- Take photos throughout the project and keep in contact with PFI with updates and questions.
- Send feed samples in for a complete nutritional analysis before feeding to pigs.
- Split litters into two groups of feeder pigs, randomly. Try to keep each group as even as possible with number and sex of animals.
- Measure initial weights and sex of each piglet. Note any health concerns or veterinary treatments.
- Ear tag control and treatment animals with different color ear tags.
- Feed one group a ground a standard ration and the other group a ration where a portion of the corn is replaced by hybrid rye. Keep records of ration composition and nutritional analysis.
- Note the date of each grinding and mixing, and feed ration within 14 days of mixing. Keep records of the costs of grinding and mixing.
- Record when animals were fed and how much was supplied to each group, in order to calculate amount consumed, rate of gain and feed efficiency. Weight feed in and feed not consumed.
- Take individual weights of each pig every two weeks.
- Collect carcass information at time of processing.
- Send samples for meat flavor and quality testing at ISU food science laboratories (optional).
- Track all costs and profits, in order to calculate economics.

#### **Practical Farmers of Iowa will:**

- Monitor progress of project and provide support when needed.
- Analyze the data and write a report.
- Publish results in a PFI research report, on PFI website and potentially other outlets.
- Pay the Farmer Cooperator a fee of \$550 at the conclusion of each turn in 2018 and 2019.

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The terms of this Research Protocols document are subject to the terms of the individual Research Cooperator's Memorandum of Understanding agreement with PFI. To the extent these terms may differ or conflict, the Memorandum of Understanding shall control.