Review of Scientific Method

Set Up Your Experiment

Go through the scientific method to determine what your experiment will be or what you will be testing.

The Scientific Process:

1. Ask a question.
    a. What is it you want to test?
2. Research what might happen.
3. Develop a hypothesis.
    a. After researching your question, write down what you think will happen based on what you know?
4. Test your hypothesis by conducting an experiment.
    a. Write down how you will conduct your experiment.
    b. What conditions need to be exactly the same to get your desired results? Note what your controlled variables, independent variables and dependent variables will be.
5. Analyze your data and draw a conclusion.
    a. Conclude what happened in your experiment and record your findings.

Complete the following as you set up and conduct your on-farm trial.

1. What is your question/what do you want to test?

_____

_____

_____

2. Research what might happen. Record any notes here.

_____

_____

_____

3. Develop a hypothesis. What do you think will happen in your trial?

_____

_____

4. Test your hypothesis by conducting a small scale on-farm trial. Fill in the following information to help you conduct your experiment.

Variables		
Independent Variable – what will you be changing in the experiment. (There should only be one item listed here.)	**Dependent Variables** – What will you be measuring or observing	**Controlled Variables** – What will you be keeping the same during the experiment

Your Hypothesis (Fill in the blanks with the appropriate information from your own experiment.)

If (I do this)… _____, then

(this) _____

_____

will happen.

5. Analyze your data and draw a conclusion. What happened with your trial?

_____

_____

_____

_____

Observations

Write down observations from your plots on a weekly basis. Record such things as if the plants look better or worse after you conducted a treatment (if applicable). Observe the leaves, soil, stem, and ear. Are the plants all healthy or are some healthier than others? Did you encounter any disease or pests?

Date	Observations for Control	Observations for Treatment

Date	Observations for Control	Observations for Treatment