Using On-Farm Tests

Guide A-608

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Rapid development of new technologies applied to agriculture and new genetic techniques make it essential for farmers to stay competitive. Consider what it would mean if farmers could increase the silage yield by 300 to 500 pounds per acre. If those farmers were selecting the best set of hybrids for their operations, it’s not an unreasonable goal. On-farm test plots are one of the best tools producers can use to select new management systems, varieties, and hybrids.

Agricultural scientists test crops varieties or cultural practices in small plots. But well-conducted on-farm tests can provide additional information about the variety or practice under a broad range of actual conditions that producers can encounter. This makes the results of on-farm tests relevant to farmers’ practices, costs, and potential problems.

To get good information from on-farm tests, they should be conducted at several locations and over several years. It’s also important to keep track of all the conditions that can vary from site to site or year to year. Some of these factors include weather, soil types, fertilizer applications, irrigation, as well as insecticides and herbicides that may have been used.

Use the attached record sheets to chart your own on-farm tests.
On-Farm Research Management

Producer/farm: .................................................................

Address: ...........................................................................

Date planted: .................................................................

Date harvested: ..............................................................

Treatments compared:
1. ..................................................................................
2. ..................................................................................
3. ..................................................................................
4. ..................................................................................
5. ..................................................................................
6. ..................................................................................
7. ..................................................................................
8. ..................................................................................

Objectives
1. ..................................................................................
2. ..................................................................................
3. ..................................................................................

Crop rotation (previous 3 years)

Last year: ...........................................................................

2 years ago: ....................................................................... 

3 years ago: ....................................................................... 

Rain (per month)

Jan: ________________  May: ________________  Sep: ________________

Feb: ________________  June: ________________  Oct: ________________

Mar: ________________  July: ________________  Nov: ________________

Apr: ________________  Aug: ________________  Dec: ________________
Observations (such as, insects, diseases)

Date: Observation
1. 
2. 
3. 
4. 
5. 
6. 
7. 
8. 
9. 
10. 

Inputs

Fungicides (Type, rate, method):
1. 
2. 

Herbicides (Type, rate, method):
1. 
2. 
3. 
4. 

Insecticides (Type, rate, method):
1. 
2. 
3. 
4. 

Fertilizer (Type, rate, method):
1. 
2. 
3. 
4. 

Tillage operations (Type, method)
1. 
2. 

Irrigations (Date, amount applied)
1. 
2. 
3. 
4. 
5. 
6. 

Other inputs:
1. 
2. 
3. 
4.