**Corn Insect and Disease Report**

**Grower:**

**Field(s):** GIRS

**Crop Stage:** Early Black Layer

**Plant Height:**

**Soil Moisture 0-12**: OK
**0-24**: OK
**24+**: %AWC

---

### Vigor

- **Good**
- **Ok**
- **Poor**
- **General**
- **Spotty**

### Stress

- **Heat**
- **Moisture**
- **Nitrogen**
- **General**
- **Spotty**

### Stress-Chlorophyll

- **None**
- **Low**
- **High**
- **General**
- **Spotty**

### Weed Control

- **Good**
- **Ok**
- **Poor**
- **Spotty**

- **Grasses**
- **Broadleaves**
- **Perennials**

### Nitrogen Deficiency on Lower Leaves

- **Yes**
- **No**

---

### Insect Species

<table>
<thead>
<tr>
<th>Insect Species</th>
<th>Life Stage</th>
<th>Evaluation</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn Borer</td>
<td>instar</td>
<td>% plants affected</td>
<td></td>
</tr>
<tr>
<td>WBCW</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W.C. Rootworm</td>
<td>adults</td>
<td>Beetles/plant</td>
<td></td>
</tr>
<tr>
<td>C. Ear Worm</td>
<td>larvae</td>
<td>% ears affected</td>
<td></td>
</tr>
<tr>
<td>Spider Mites</td>
<td></td>
<td>% plants affected</td>
<td></td>
</tr>
<tr>
<td>Japanese Beetle</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

### Diseases

<table>
<thead>
<tr>
<th>Disease</th>
<th>PLT/PART Affected (sampled)</th>
<th>AFFECTED (range)</th>
<th>LESIONS square inch ear leaf</th>
<th>EVALUATION % Plt. Aff.</th>
<th>THRESHOLD B/N/A</th>
<th>DIST. G/S/L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthracnose</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NCLS - fungi</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leaf Blight - fungi</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rust</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Comments:**

- **Kernels/row**

  **Plant Population:**
  
  $$28.7 \times 32 \times 16 = 163.3 \text{ bu/A}$$

  Yield estimate based on counting number of kernels per ear from only one ear of corn/plnt.
**BioEnt Agricultural Consulting**  
**CORN INSECT AND DISEASE REPORT**

**Grower:** MSU  
**Date:** 9-25-2014

**Field(s):** G2R5

**Crop Stage:** Black layered  
**Plant Height:**

**Soil Moisture 0-12”**: OK  
**12-24”**: OK  
**24+**: %AWC

**VT** Leaves  
**Silk**  
**% Pollination**

**good / fair / poor**

**Vigor:**  
- [x] Good  
- [ ] Ok  
- [ ] Poor  
- [ ] General  
- [ ] Spotty

**Stress:**  
- [ ] Heat  
- [ ] Moisture  
- [ ] Nitrogen  
- [ ] General  
- [ ] Spotty

**Stress-Chlorophyll:**  
- [ ] None  
- [ ] Low  
- [ ] High  
- [ ] General  
- [ ] Spotty

**Weed Control:**  
- [x] Good  
- [ ] Ok  
- [ ] Poor  
- [ ] Spotty

- [ ] Grasses  
- [ ] Broadleaves  
- [ ] Perennials

**Nitrogen Deficiency on lower leaves:**  
- [ ] Yes  
- [ ] No

**INSECT SPECIES** | **LIFE STAGE** | **EVALUATION** | **COMMENTS**
---|---|---|---
Corn Borer | instar | % plants affected | /
WBCW | adults | Beetles/plant | /
W.C.Rootworm | larvae | % ears affected | /
C. Ear Worm | | % plants affected | /
Spider Mites | | | /
Japanese Beetle | | | /

**DISEASES** | **PLT/PART Affected (sampled)** | **AFFECTED (range)** | **LESIONS square inch ear leaf** | **EVALUATION % Plts. Aff.** | **THRESHOLD B/N/A** | **DIST. G/S/L**
---|---|---|---|---|---|---
Anthracnose | | | | | | /
NCLS - fungi | | | | | | /
Leaf Blight - fungi | | | | | | /
Rust | | | | | | /

**Comments:**  
- Kernels per row: $54 \times 16 = \frac{39.5 \times 77 \times 15}{90} = 132.8 \text{ b/acre}$
- Grain yield estimate based on counting number of kernels per corn ear from only one ear of corn per plot.

**Rev 02/01/12**
**BioEnt Agricultural Consulting**

**CORN INSECT AND DISEASE REPORT**

Grower: MSY  Date: 9/25/2014

Field(s): G3R5

Crop Stage: Black Layer to nearly Black Layer

Soil Moisture: 0-12" OK, 12-24" OK, 24+ %AWC

VT Leaves Silk % Pollination good / fair / poor

**Vigor:**
- Good
- Ok
- Poor
- General
- Spotty

**Stress:**
- Heat
- Moisture
- Nitrogen
- General
- Spotty

**Stress-Chlorophyll:**
- None
- Low
- High
- General
- Spotty

**Weed Control:**
- Good
- Ok
- Poor
- Spotty
- Grasses
- Broadleaves
- Perennials

Nitrogen Deficiency on lower leaves: Yes / No

**Uniformity**
- Good
- Fair
- Poor
- General
- Spotty

**General Appearance**

**Leaf Color**

**Nitrogen Deficiency**
- Normal
- Hot

**Air Temperature** °F

---

### INSECT SPECIES

<table>
<thead>
<tr>
<th>INSECT SPECIES</th>
<th>LIFE STAGE</th>
<th>EVALUATION</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn Borer</td>
<td>instar</td>
<td>% plants affected</td>
<td></td>
</tr>
<tr>
<td>WBCW</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W.C. Rootworm</td>
<td>adults</td>
<td>Beetles/plant</td>
<td></td>
</tr>
<tr>
<td>C. Ear Worm</td>
<td>larvae</td>
<td>% ears affected</td>
<td></td>
</tr>
<tr>
<td>Spider Mites</td>
<td></td>
<td>% plants affected</td>
<td></td>
</tr>
<tr>
<td>Japanese Beetle</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

### DISEASES

<table>
<thead>
<tr>
<th>DISEASES</th>
<th>PLT/PART Affected (sampled)</th>
<th>AFFECTED (range)</th>
<th>LESIONS square inch ear leaf</th>
<th>EVALUATION % Pilts. Aff.</th>
<th>THRESHOLD B/N/A</th>
<th>DIST. G/S/L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthracnose</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NCLS - fungi</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leaf Blight - fungi</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rust</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Comments:**

- Kernels per row
  - 30 x 116
  - number of rows

- Plant population
  - \( \frac{29.6 \times 30 \times 16}{90} = 157.9 \text{ b/a} \)

Grain yield estimate based on counting number of kernels per ear of corn from only one ear of corn per plot.
**BioEnt Agricultural Consulting**  
**BEAN INSECT AND DISEASE REPORT**

Grower: M.S.  
Field Name: 6485  
Date: 9-25-2014  
Crop Stage:  
Plant Height: \[\ldots\]  
Ave. (n=5) Stand Count:  
Soil Moisture: Ok  
%AWC: \[\ldots\]  
Sun: PC, Cloudy  
Temp:  
Time:  
Wind Speed: -H M L N  

**ACTION**  
- None Required  
- Watch  
- Yes, see below  

**Vigor:**  
- \[\_\] Good  
- \[\_] Ok  
- \[\_] Poor  
- \[\_\] General  
- \[\_] Spotty  

**Stress:**  
- \[\_] Heat  
- \[\_] Moisture  
- \[\_] Nitrogen  
- \[\_] General  
- \[\_] Spotty  

**Stress-Chlorophyll:**  
- \[\_] None  
- \[\_] Low  
- \[\_] High  
- \[\_] General  
- \[\_] Spotty  

**Weed Control:**  
- \[\_\] Good  
- \[\_] Ok  
- \[\_] Poor  
- \[\_] Spotty  
- \[\_] Grasses  
- \[\_] Broadleaves  
- \[\_] Perennials  

**Uniformity:**  
- General Appearance: Finishing down  
- Leaf Color:  
- Nitrogen:  
- Deficiency:  

**Total Leaf Damage:** %  
Round-up Seed: \[\_\] Yes \[\_\] No  

### INSECT SPECIES

<table>
<thead>
<tr>
<th>INSECT SPECIES</th>
<th>LIFE STAGE (ELPA)</th>
<th>EVALUATION</th>
<th>DIST (S-G)</th>
<th>THRESHOLD actual</th>
<th>PROJ</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worms</td>
<td>larvae</td>
<td>% plts affected</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japanese Beetle</td>
<td>larvae</td>
<td>% leaf damage</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potato Leafhopper</td>
<td>nymphs</td>
<td># per leaf</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spider Mites</td>
<td>nymphs</td>
<td>% plants affected</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aphids</td>
<td>adults</td>
<td># per plant</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aphids</td>
<td>Alatoid Nymphs</td>
<td>% population</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aphids</td>
<td>Winged Adults</td>
<td>% population</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>larvae adult</td>
<td>% plants affected</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>larvae adult</td>
<td>% plants affected</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural Enemies</td>
<td>L M H</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### DISEASES

<table>
<thead>
<tr>
<th>DISEASES</th>
<th>PLT/PART Affected (sampled)</th>
<th>Region AFFECTED (range)</th>
<th>EVALUATION % Plts. Aff.</th>
<th>THRESHOLD B/N/A</th>
<th>DIST. G/S/L</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Blight</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Downy Mildew</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White Mold</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Virus</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pod Anomalies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Comments:** Mature
Estimating Corn Yields Prior to Harvest

There are several techniques for estimating corn grain yield prior to harvest. This version was developed by the Ag. Engineering Department at the University of Illinois years ago and is the one most commonly used for “quick and dirty” yield estimates in the field. A numerical constant for kernel weight is figured into the equation in order to calculate grain yield. Since weight per kernel will vary depending on hybrid and environment, the yield equation should only be used to estimate relative grain yield. For example, yield will be overestimated in a year with poor grain fill conditions, while it will be underestimated in a year with good grain fill conditions.

Step 1  Count the number of harvestable ears per 1/1000th acre (see page 185).

Step 2  Count the number of kernel rows per ear on every fifth ear. Calculate the average.

Step 3  Count the number of kernels per row on each of the same ears, but do not count kernels on either the butt or tip that are less than half size. Calculate the average.

Step 4  Yield (bu./A) equals:

\[
\frac{(\text{ear} \#) \times (\text{avg. row} \#) \times (\text{avg. kernel} \#)}{90}
\]