BioEnt Agricultural Consulting

Gary Manley 269-273-7070 or 269-816-1080

CORN INSECT AND DISEASE REPORT

Grower MSU Date 9/25/2014

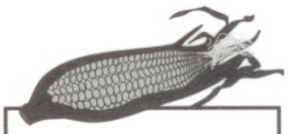
Field(s) GIR5

Full Dent

Crop Stage early Black layer Plant Height _____

Soil Moisture 0-12" Ok 12-24" Ok 24+_____%AWC

VT _____ Leaves Silk _____ % Pollination_____ good / fair / poor



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

Nitrogen Deficiency on lower leaves ☐ Yes ☐ No

Uniformity_____

General Appearance_____

Leaf Color Yellowing

Nitrogen Deficiency_____

Air Temperature _____ °F

Cold Normal Hot

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

plant population 32 x 16 — number of rows

$$\frac{28.7 \times 32 \times 16}{90} = 163.3 \text{ bu/A}$$

Yield estimate based on counting number of kernels per corn ear from only one ear of corn/plot.

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CORN INSECT AND DISEASE REPORT

Grower MSU Date 9 25 2014

Field(s) G2R5

Crop Stage Black layer Plant Height —

Soil Moisture 0-12" ok 12-24" ok 24+ ____ %AWC

VT ____ Leaves Silk ____ % Pollination ____ good / fair / poor

ACTION

- [x] None Required
- [ ] Watch
- [ ] Yes, see below

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

Uniformity ____

General Appearance ____

Leaf Color dry down

Nitrogen ____

Deficiency ____

Air Temperature 70's °F

Cold / Normal / Hot

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

34 kernels per row × 16 number of kernel rows / 30 × 14 plant population

$$\frac{29.5 \times 27 \times 15}{90} = 132.8 \text{ bu/A}$$

Grain yield estimate based on counting number of kernels per corn ear from only one ear of corn per plot.

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Gary Manley 269-273-7070 or 269-816-1080

CORN INSECT AND DISEASE REPORT

Grower MSU Date 9/25/2014

Field(s) G3R5

Crop Stage Black layer to early Black layer Plant Height

Soil Moisture 0-12" ok 12-24" ok 24+ %AWC

VT Leaves Silk % Pollination good / fair / poor

ACTION

- [x] None Required
- [ ] Watch
- [ ] Yes, see below

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

Uniformity

General Appearance

Leaf Color

Nitrogen Deficiency Twisting dry down

Air Temperature °F [ ] Cold [ ] Normal [ ] Hot

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

30 X 16 - number of rows

Plant population ~ $\frac{29.6 \times 30 \times 16}{90} = 157.9$ bu/A

Grain yield estimate based on counting number of kernels per ear of corn from only one ear of corn per plot.

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BEAN INSECT AND DISEASE REPORT

Grower MSU Soybeans Field Name G4R5

Date 9/25/2014 Crop Stage Leaf drop Plant Height —

Ave.(n=5) Stand Count _____ Soil Moisture Ok %AWC

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

Leaf Color _____

Nitrogen _____

Deficiency finishing down.

Total Leaf Damage _____ %

Round-up Seed ☐ Yes ☐ No

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

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

Comments: mature –

$5.00 ID 179

Purdue Crop Diagnostic Training and Research Center

Corn & Soybean Field Guide

2004 Edition

Integrated Pest Management
Purdue University

Purdue University Cooperative Extension Service

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:

$$\frac{\text{(ear \#) X (avg. row \#) X (avg. kernel \#)}}{90}$$