Comments:

Bottom leaves showing die back from 1-2 leaves in spot to up to 1 ear leaf in other spots to ear size reduced in dry spots over other spots. Development normal.
**BioEnt – CORN REPORT**

**Grower:** MSU  
**Date:** 8/10/2017

**Field(s):** TI-R1

<table>
<thead>
<tr>
<th>Crop Stage</th>
<th>Plant Height</th>
<th>Soil Moisture 0-12&quot;</th>
<th>VT</th>
<th>Leaves Silk</th>
<th>% Pollination</th>
<th>%AWC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milk</td>
<td></td>
<td>dry</td>
<td></td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

**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

**Comments:**
- Day to day to probe soil one / two bottom leaf dry back in spots - other spots mostly normal ear development normal dry condition effects
- Mixed throughout plot dry spots in plot showing die back 1/2 way up plant.

**DISEASES**
- Anthracnose
- NCLS - fungi
- Leaf Blight - fungi
- Gray Leaf Spot

**INSECT SPECIES**
- Corn Borer
- WBCW
- C. Ear Worm
- Spider Mites
- Japanese Beetle

**Appearance**
- Uniformity (general)
- Development
- General (growth)
- Color

- Leaf Color: Mixed
- Nitrogen: Ok

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

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

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

**Action:**
- None Required
  - Watch
  - Yes, see below
<table>
<thead>
<tr>
<th>Vigor:</th>
<th>Good</th>
<th>Ok</th>
<th>Poor</th>
<th>General</th>
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<tbody>
<tr>
<td>Stress:</td>
<td>Heat</td>
<td>Moisture</td>
<td>Nitrogen</td>
<td>General</td>
<td>Spotty</td>
</tr>
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<td>Stress-Chlorophyll:</td>
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</tr>
<tr>
<td>Grasses</td>
<td>Broadleaves</td>
<td>Perennials</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Nitrogen Deficiency on lower leaves: Yes | No | General | Spotty

# of leaves showing yellowing: Yes | No | General | Spotty

---

**Comments:**

To dry to probe soil.

Bottom leaf die back due to dryness ranges from 1 cm leaf to some spots showing only 1 leaf yellowing at bottom of plant.

Currently plant reduced in size.

---

**Crop Stage:** Milk

**Plant Height:** Normal

**Soil Moisture 0-12**: dry

**VT Leaves**: 0

**Silk**: 100% Pollination: 100%

**Good / fair / poor**

**Appearance**

- Uniformity (general): OK
- Development: OK
- General (growth): OK
- Leaf Color: Mixed
- Nitrogen: OK
- Deficiency: OK

---

**BioEnt – CORN REPORT**

**Grower:** J.R.

**Date:** 8/10/2017

**Field(s):** 73R1

**ACTION**

- None Required
- Watch
- Yes, see below

---

**Crop Stage:** Milk

**Plant Height:** Normal

**Soil Moisture 0-12**: dry

**VT Leaves**: 0

**Silk**: 100% Pollination: 100%

**Good / fair / poor**

**Appearance**

- Uniformity (general): OK
- Development: OK
- General (growth): OK
- Leaf Color: Mixed
- Nitrogen: OK
- Deficiency: OK

---

**Comments:**

To dry to probe soil.

Bottom leaf die back due to dryness ranges from 1 cm leaf to some spots showing only 1 leaf yellowing at bottom of plant.

Currently plant reduced in size.
**BioEnt – CORN REPORT**

**Grower:** MCV

**Field(s):** T4R1

**Crop Stage:** Pollination

**Plant Height:** VT+

**Soil Moisture 0-12″:** dry

**Silk Emerging:** %

**Evaluating % Pollination Active:** 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

**Appearance**
- Uniformity (general growth)
- Leaf Color
- Nitrogen Deficiency

**Weed Control:**
- Good
- Ok
- Poor
- Spotty

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

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

**Weed Control:**
- Good
- Ok
- Poor
- Spotty

**Grasses**
- Broadleaves
- Perennials

**Insect:**
- Japanese Beetle
- Spider Mites
- W.C. Rootworm
- Corn Borer

**Comments:**
- Soil to dry to probe.
- In row grasses / ragweed dense
- Growing development mixed - Pollination to V16 Corn size mixed from 6' to 3' 4' all
- Lower leaves yellowing in spots due to dew
- Plants in general showing N2 deficiency

**Table:**

<table>
<thead>
<tr>
<th>DIST. G/S/L</th>
<th>THRESHOLD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>LESIONS AFFECTED (range)</th>
<th>EVALUATION % PHS. AFFECTED</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
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</table>

<table>
<thead>
<tr>
<th>PLT/PART AFFECTED (sampled)</th>
<th>DISEASES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Anthracnose</td>
</tr>
<tr>
<td></td>
<td>NCLL - fungi</td>
</tr>
<tr>
<td></td>
<td>Leaf Blight - fungi</td>
</tr>
<tr>
<td></td>
<td>Gray Leaf Spot</td>
</tr>
<tr>
<td></td>
<td>Rust</td>
</tr>
</tbody>
</table>

**LIFE STAGE:**
- instar
- adults
- larvae

**POPULATION:**
- Plants affected
- % plants affected
- Bees/pollinators
- % plants affected
- adults
- adults

**EVALUATION:**
- Dead matter
- % plants affected
- % ears affected

**INSECT SPECIES:**
- Corn Borer
- WBCW
- W.C. Rootworm
- C. Ear Worm
- Spider Mites
- Japanese Beetle

**Date:** 8/10/2017

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

**Comments:**
- Gary Manley 269-273-7070 or 269-816-1080
BioEnt – Early Season Survey  Gary Manley 269-273-7070 or 269-816-1080

- Seed Corn  - Corn  - Soybeans  - Wheat  - Green Beans  -

Field Name/Number  MSL  Grower  -  Growth Stage  -

General Appearance  - Size  - Variance  - Leaf Color  - Variance  -

Plant Population  - Soil Moisture 0-12  -  12-24  -  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  - Dense Spots

ACTION:
- None Required  -
- Watch  -
- Yes, see comments

Comments:
- Regrowth up to 12” (mixed)
- Range 0 - 12”
- Leafhoppers 3.5/Sweep
- Regrowth spotty due to dry conditions
- Some plants starting to flower
- to dry to probe soil

- Annual Grasses AG
- Foxtail F
- Panicum - Fall FP
- Quack grass QG
- Wirestem Muhly WM
- Marestail MT
- Crabgrass CG
- Johnsongrass JG
- Shatercane SCA
- Nutsedge NS
- Winter Annuals WA
- Chickweed CW
- Biennials WB
- Cover Crop CC
- Velvetleaf VL
- Cocklebur CBUR
- Milkweed CM
- Pigweed RRP
- Horsenettle HN
- Bindweed - Field FBW
- Bindweed - Hedge HBW
- Smartweed - Penn. PSM
- Smart - Swamp SSM
- Dogbane - Hemp HDB
- Lambsquarter LQU
- Ragweed CRAG
- Ragweed - Giant GRAG
- Dock - Curly CD
- Nightshade - Black BNS
- Jimsonweed JW
- Canada Thistle CTH
- Yellow Rocket YR
- Perennials P
- Pokeweed PW

Germination  -  No  -  1/4” Root  -  Spike PE
Emergence  -  Breaking  -  VC / V1
Nutrient Deficiency  -  Spots  -  General
Soil Compaction:  -  Spots  -  General
Soil Surface:  -  Hard  -  Crusted
Standing Water  -  Small Spots  -  Large Spots
Herbicide damage  -  Emergence stress
Physiological Disorder in Corn  -  Yellowish whorl
Buggywip  -  Stalk bending  -  Twisted whorl
Doubles  -  %
Density  -  Variance
Growth  -  Mixed
Plant spacing  -  Variance
Emergence  -  Variance
Soil Temperature  -  2”

- Root Damage  -  Insects  -  Plants
- White Grubs WG  -  Flea Beetles FB
- Aphids A  -  Slugs S
- Leafhoppers LH  -  Stunted plants
- Foliar Disease-Rust  -  Foliar Disease-Fungi
- Corn Borer-%  -  Stunted plants
- Purplish
- Diseases
- Yellowish
- Nematodes
- Stunting
**BioEnt - CORN REPORT**

**Grower:** MSU  
**Date:** 8/10/2017  
**Field(s):** Irrigated-N Study

**Crop Stage:** Milk  
**Plant Height:** Normal

**Soil Moisture 0-12"**: 75%  
**12-24"**: 80%  
**24+:** 75/80% AWC

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

### 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
- General
- Spotty

### General
- Spotty

### Nitrogen Deficiency on lower leaves
- Yes

### # of leaves showing yellowing
- Yes
- No

### Comments:
- Growth development: Normal
- Low N treatments showing bottom leaf yellowing.

---

**M A P**

---

**DISEASES**
- Anthracnose
- NCLS - fungi
- Leaf Blight - fungi
- Gray Leaf Spot

**Lesions**
- square inch ear leaf

**AFFECTED**
- range

**PLT/PRTR**
- Affected (sampled)

**DIST. G/S/L**

**THRESHOLD**
- B/N/A

**EVALUATION**
- % Plants Affected

---

**INSECT SPECIES**
- Corn Borer
- WBCW
- W. C. Rootworm
- C. Ear Worm
- Spider Mites
- Japanese Beetle

**LIFE STAGE**
- instar
- adults
- larvae
- adults

---

**COMMENTS**
**BioEnt – CORN REPORT**

**Grower:** M.S.

**Field(s):** Non-Irrigated N 2 study

**Date:** 8/10/2017

---

### Plant Height

<table>
<thead>
<tr>
<th>Soil Moisture 0-12&quot;</th>
<th>12-24&quot;</th>
<th>24+</th>
<th>%AWC</th>
</tr>
</thead>
<tbody>
<tr>
<td>dry</td>
<td>dry</td>
<td>dry</td>
<td></td>
</tr>
</tbody>
</table>

### Dist. Gals/L

**Threshold:** B/N/A

### Evaluation

- **% Pfts. Aff.:**
  - Uniformity (general) \( \Box \) Development (general) \( \Box \)
  - Color: \( \Box \) General \( \Box \) Mixed

### Life Stage

| Insect Species | Adults | Nymphs | Larvae | PLT/PART
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn Borer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WBC Moth</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Ear Worm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japanese Beetle</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

### Disease

- **Lesions:** square inch/ear leaf
- **Affect:** (range)
- **affected (sampled)**

### Vigor

- **General:** \( \Box \) Spotty \( \Box \)
- **Heat:** \( \Box \) Moisture \( \Box \) Nitrogen \( \Box \)
- **Stress-Chlorophyll:** \( \Box \) None \( \Box \) Low \( \Box \) High \( \Box \)

### Weed Control

- **Grasses:** \( \Box \) Broadleaves \( \Box \) Perennials
- **Nitrogen Deficiency on lower leaves:** \( \Box \) No \( \Box \)
- **% of leaves showing yellowing:** \( \Box \)

### Stress

- **Chlorophyll:** \( \Box \) None \( \Box \) Low \( \Box \) High \( \Box \)
- **General:** \( \Box \) Spotty \( \Box \)
- **Heat:** \( \Box \) Moisture \( \Box \) Nitrogen \( \Box \)
- **Nitrogen:** \( \Box \) General \( \Box \) Spotty

### Action

- **ACTION:** None Required \( \Box \) Watch \( \Box \)
  - Yes, see below

### Comments:

To dry to probe soil, die back on lone leaves, mixed throughout plot. Range from 1-2 leaves to spots reaching ear leaf, plant size reduced, but corn look ok mostly.