### BioEnt – Early Season Survey

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

- **Comments:**
  - Preplant
  - To not to till or plant
  - Mostly clean of weeds.

#### Field Name/Number: TIRZ  | Grower: MSU  | Growth Stage:  

<table>
<thead>
<tr>
<th>Plant Population</th>
<th>Soil Moisture 0-12</th>
<th>Wet 12-24</th>
<th>Wet 24+</th>
<th>%AWC</th>
</tr>
</thead>
</table>

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

#### 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
- Grasses
- Broadleaves
- Perennials

#### General Appearance

<table>
<thead>
<tr>
<th>Size</th>
<th>Variance</th>
<th>Leaf Color</th>
<th>Variance</th>
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#### Plant Population

<table>
<thead>
<tr>
<th>Soil Compaction:</th>
<th>Soil Surface:</th>
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<tbody>
<tr>
<td>Spots</td>
<td>General</td>
</tr>
<tr>
<td>Hard</td>
<td>Crusted</td>
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#### Emergence

<table>
<thead>
<tr>
<th>Nutrient Deficiency</th>
<th>Spots</th>
<th>General</th>
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<tbody>
<tr>
<td>Spots</td>
<td>General</td>
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</table>

#### Nutrient Deficiency

<table>
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<th>Spots</th>
<th>General</th>
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<tbody>
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<td>Spots</td>
<td>General</td>
<td></td>
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</table>

#### Soil Temperature

<table>
<thead>
<tr>
<th>Soil Temperature</th>
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</table>

#### Cutworms CW
- Armyworms AW
- Stalkborers SB
- Wireworms WW
- Spider Mites SM

#### Foliar Disease-Rust
- Foliar Disease-Fungi
- Corn Borer-%
- Stunted plants

#### Root Damage

- Insects
- Diseases
- Nematodes
- Stunting

####GERMINATION

- No
- 1/4" Root
- Spike PE
**BioEnt – Early Season Survey**  
Gary Manley 269-273-7070 or 269-816-1080

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

**Field Name/Number:** [ ]

**Grower:** [ ]

**Growth Stage:** [ ]

<table>
<thead>
<tr>
<th>General Appearance</th>
<th>Size</th>
<th>Variance</th>
<th>Leaf Color</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant Population</td>
<td>Soil Moisture 0-12</td>
<td>wet</td>
<td>12-24</td>
<td>wet</td>
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</tbody>
</table>

**Vigor:**
- [ ] Good
- [ ] OK
- [ ] Poor

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

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

**Weed Control:**
- [ ] Good
- [ ] OK
- [ ] Poor
- [ ] Spotty
- [ ] Dense Spots

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

**ACTION:**
- [ ] None Required
- [ ] Watch
- [ ] Yes, see comments

**Comments:**

- [ ] No till —
- [ ] To wet to plant
- [ ] Good weed control

---

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

**Germination:**
- [ ] No
- [ ] 1/4" Root
- [ ] Spike PE

**Emergence:**
- [ ] Breaking
- [ ] VC / V1

**Nutrient Deficiency:**
- [ ] Spots
- [ ] General

**Soil Compaction:**
- [ ] Soil Surface:
  - [ ] Spots
  - [ ] General
  - [ ] 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:**
- [ ] Variance

**Plant spacing:**
- [ ] Variance

**Emergence:**
- [ ] Variance

**Soil Temperature:**
- [ ] 2"
BioEnt – Early Season Survey  Gary Manley 269-273-7070 or 269-816-1080

Seed Corn  Corn  Soybeans  Wheat  Green Beans

Field Name/Number  T3 R2  Grower  VUY  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
□ Grasses  □ Broadleaves  □ Perennials

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

Comments:
Pre plant
To wet to till
or plant
Mostly weed free

□ 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
□ Lambsquarters 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  □ Hard  □ Crusted
□ Standing Water  □ Small Spots  □ Large Spots
□ Herbicide damage
□ Emergence stress
□ Physiological Disorder in Corn  □ Yellowish whorl
□ Buggywig  □ Stalk bending  □ Twisted whorl
□ Doubles _________%
□ Density _________ Variance _________
□ Growth _________ Variance _________
□ Plant spacing _________ Variance _________
□ Emergence _________ Variance _________
□ Soil Temperature _________ 2”

□ Cutworms CW
□ White Grubs WG
□ Seed Corn Maggots
□ Armyworms AW  □ Flea Beetles FB
□ Aphids A  □ Foliar Disease-Rust
□ Wireworms WW  □ Foliar Disease-Fungi
□ Spider Mites SM  □ Corn Borer-%
□ Leafhoppers LH  □ Stunted plants

□ Root Damage
□ Insects
□ Plants
□ Diseases
□ Purplish
□ Yellowish
□ Nematodes
□ Stunting
## BioEnt - Early Season Survey

**Date:** 5/4/18

**Field Name/Number:** [T4P]

**Grower:** [MSY]

**Growth Stage:**

---

### General Appearance

- **Size**:
- **Variance**:

### Plant Population

- **Soil Moisture**: 0-12
- **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**
- **Grasses**
- **Broadleaves**
- **Perennials**

### Action

- **None Required**
- **Watch**
- **Yes, see comments**

---

### Comments:

- Pre plant to wet to fill or plant

---

### Weed List

- **Annual Grasses AG**
- **Foxtail F**
- **Panicum -Fall FP**
- **Quack grass QG**
- **Wirestem Muhly WM**
- **Marestail MT**
- **Crabgrass CG**
- **Johnsongrass JG**
- **Shattercane SCA**
- **Nutsedge NS**
- **Winter Annuals WA**
- **Chickweed CW**
- **Biennials WB**
- **Cover Crop CC**
- **Velvetleaf VL**
- **Cocklebur CBUR**
- **Milkweed CM**
- **Annual Grasses AG**
- **Foxtail F**
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- **Quack grass QG**
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- **Velvetleaf VL**
- **Cocklebur CBUR**
- **Milkweed CM**

---

### Germination

- **No**
- **1/4" Root**
- **Spike PE**

### Emergence

- **Breaking**
- **VC / V1**

### Nutrient Deficiency

- **Spots**
- **General**

---

### Soil Compaction

- **Spots**
- **General**
- **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

- **Variance**

### Plant spacing

- **Variance**

### Emergence

- **Variance**

### Soil Temperature

- **2"**

---

### Insects

- **Root Damage**
- **Plants**
- **Insects**
- **Diseases**
- **Yellowish**
- **Nematodes**
- **Stunting**

---

### Diseases

- **Root Damage**
- **Plants**
- **Insects**
- **Diseases**
- **Yellowish**
- **Nematodes**
- **Stunting**

---

### Nematodes

- **Stunting**

---

### Stunting

- **Plants**
- **Insects**
- **Diseases**
- **Yellowish**
- **Nematodes**
- **Stunting**
BioEnt – Early Season Survey  Gary Manley 269-273-7070 or 269-816-1080

Date 5/24/2018

Field Name/Number  HZ  Grower MSN  Growth Stage

General Appearance  Size  Variance  Leaf Color  Variance

Plant Population  Soil Moisture  0-12  12-24  24+  %AWC

ACTION:  None Required

Watch  Yes, see comments

Cutworms  CW  Armyworms  AW  Stalkborers  SB  Wireworms  WW  Spider Mites  SM

White Grubs  WG  Flea Beetles  FB  Aphids  A  Slugs  S  Leafhoppers  LH

Seed Corn Maggots  Foliar Disease-Rust  Foliar Disease-Fungi  Corn Borer-%  Stunted plants

Root Damage  Insects  Purplish  Diseases  Yellowish  Nematodes  Stunting

Comments:

good burn down
scattered grubs
**BioEnt – Early Season Survey**  
**Gary Manley 269-273-7070 or 269-816-1080**

<table>
<thead>
<tr>
<th>Field Name/Number</th>
<th>iRR</th>
<th>Grower</th>
<th>Date 5/24/2018</th>
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**General Appearance**

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<th>Size</th>
<th>Variance</th>
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**Plant Population**

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<th>12-24</th>
<th>24+</th>
<th>%AWC</th>
</tr>
</thead>
</table>

**Vigor:**

- Good
- OK
- Poor

**Stress:**

- Heat
- Moisture
- Nitrogen

**Stress-Chlorophyll:**

- None
- Low
- High

**Weed Control:**

- Good
- OK
- Poor
- Spotty
- Dense Spots
- Grasses
- Broadleaves
- Perennials

**ACTION:**

- None Required
- Watch
- Yes, see comments

**Comments:**

No-Till  
To wet To Plant  
Good weed control

<table>
<thead>
<tr>
<th>Weed</th>
<th>Annual Grasses AG</th>
<th>Pigweed RRP</th>
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<tbody>
<tr>
<td></td>
<td>Foxtail F</td>
<td>Horsenettle HN</td>
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<td>Yellow Rocket YR</td>
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<td>Cocklebur CBUR</td>
<td>Perennials P</td>
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<td>Milkwed CM</td>
<td>pokeweed PW</td>
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<tr>
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<th>General</th>
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<td>Soil Surface:</td>
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<td>Spots</td>
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<td></td>
<td>Standing Water</td>
<td>Small Spots</td>
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<tr>
<td></td>
<td>Herbicide damage</td>
<td>Emergence stress</td>
</tr>
<tr>
<td></td>
<td>Physiological Disorder in Corn</td>
<td>Yellowish whorl</td>
</tr>
<tr>
<td></td>
<td>doubles</td>
<td>Buggywip</td>
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<td></td>
<td>Density</td>
<td>Variance</td>
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<td>Plant spacing</td>
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- Cutworms CW
- Armyworms AW
- Stalkborers SB
- Wireworms WW
- Spider Mites SM
- White Grubs WG
- Seed Corn Maggots
- Foliar Disease-Rust
- Foliar Disease-Fungi
- Corn Borer-%
- Stunted plants

- Root Damage
- Insects
- Plants
- Purplish
- Diseases
- Yellowish
- Nematodes
- Stunting
**BioEnt – Early Season Survey**  
*Gary Manley 269-273-7070 or 269-816-1080* 

<table>
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<th>Field Name/Number</th>
<th>Grower</th>
<th>Growth Stage</th>
<th>Date</th>
<th>Seed Corn</th>
<th>Corn</th>
<th>Soybeans</th>
<th>Wheat</th>
<th>Green Beans</th>
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</table>

**General Appearance** | **Size** | **Variance** | **Leaf Color** | **Variance** |

**Plant Population** | **Soil Moisture** | **0-12** | **12-24** | **24+** | **%AWC** |

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

**Comments:**  
No-Till to wet to plant! Good wet control!

**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

- Grasses  
- Broadleaves  
- Perennials

**ACTION:**
- Annual Grasses AG  
- Foxtail F  
- Panicum -Fall FP  
- Quack grass QG  
- Wirestem Muhly WM  
- Marestaill MT  
- Crabgrass CG  
- Johnsongrass JG  
- Shatercane SCA  
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- Chickweed CW  
- Biannuales WB  
- Cover Crop CC  
- Velvetleaf VL  
- Cocklebur CBUR  
- Milkweed CM  
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- Nightshade -Black BNS  
- Jimsonweed JW  
- Canada Thistle CTH  
- Yellow Rocket YR  
- Perennials P  
- Pokeweed PW

**Soil Temperature:**
- 2"