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

<table>
<thead>
<tr>
<th>Field Name/Number</th>
<th>Grower</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1R1</td>
<td>MsY</td>
<td>5/10/2018</td>
</tr>
</tbody>
</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:

- Tilled fall 2017
- Clean/good
- Planted Soybeans at 110,000 to 130,000/acre

### 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

### Weed Control:

- 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
- 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

### 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
  - Buggewip
  - Stalk bending
  - Twisted whorl

### Drought:

- %

### Density:

- Variance

### Growth:

- Variance

### Plant Spacing:

- Variance

### Emergence:

- Variance

### Soil Temperature:

- 2

### Root Damage:

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

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

**Field Name/Number**  
**Grower**

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

**Plant Population**  
**Soil Moisture 0-12**

**Vigor:**
- Good
- OK
- Poor

**Stress:**
- Heat
- Moisture
- Nitrogen

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

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

<table>
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<th>OK</th>
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<td>Moisture</td>
<td>Nitrogen</td>
<td>General</td>
<td>Spotty</td>
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<tr>
<td>Stress-Chlorophyll:</td>
<td>None</td>
<td>Low</td>
<td>High</td>
<td>General</td>
<td>Spotty</td>
</tr>
<tr>
<td>Weed Control:</td>
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<td>OK</td>
<td>Poor</td>
<td>Spotty</td>
<td>Dense Spots</td>
</tr>
</tbody>
</table>

**Comments:**

- Sprayed 5-8-18
- Burn down early die back
- Mostly clean

- **Annual Grasses AG**
- **Foxtail F**
- **Panicum -Fall FP**
- **Quack grass QQ**
- **Wirestern Muhly WM**
- **Marestail MT**
- **Crabgrass CG**
- **Johnsongrass JG**
- **Shatercane SCA**
- **Nutsedge NS**
- **Winter Annuals WA**
- **Chickweed CW**
- **Biannuals WB**
- **Cover Crop CC**
- **Velvetleaf VL**
- **Cocklebur CBUR**
- **Milkwed CM**
- **Pigweed RRP**
- **Horsenettle HN**
- **Bindweed -Field FBW**
- **Bindweed -Hedge HBW**
- **Smartweed -Penn. PSM**
- **Smart -Swamp SSM**
- **Dogbane -Hemp HDB**
- **Lambquarter 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
- Buggywip
- Stalk bending
- Twisted whorl

**Doubles:**
- %

**Density:**
- Variance

**Growth:**
- Variance

**Plant spacing:**
- Variance

**Emergence:**
- Variance

**Soil Temperature:**
- 2"
### BioEnt – Early Season Survey

**Date:** 5/10/2018

- **Field Name/Number:** 4321
- **Grower:** M.S.
- **Growth Stage:**

#### General Appearance
- **Size:** Variance
- **Leaf Color:** Variance

#### Plant Population
- **Soil Moisture:** 0-12
- **%AWC:**

#### Vigor
- **General:** Spotty
- **Spotty:**
- **Spotty:**

#### Stress
- **General:** Spotty
- **Spotty:**

#### Stress-Chlorophyll
- **None:** Low
- **Low:** High

#### Weed Control
- **O Good:** OK
- **O Poor:** Spotty
- **O Spotty:**
- **O Dense Spots:**

### Comments:

- Filled 5/9/18
- Clean
- Plant Beams at 110,000 - 120,000/ACRE

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

### Weeds
- **Annual Grasses:** AG
- **Foxtail:** F
- **Panicum -Fall:** FP
- **Quack grass:** QG
- **Wiresmern Muhly:** WM
- **Marestail:** MT
- **Crabgrass:** CG
- **Johnsongrass:** JG
- **Shatercane:** SCA
- **Nutsedge:** NS
- **Winter Annuals:** WA
- **Chickweed:** CW
- **Biannals:** WB
- **Cover Crop:** CC
- **Velvetleaf:** VL
- **Cocklebur:** CBUR
- **Milkweed:** CM
- **Annual Grasses:** AG
- **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
- **Possipewd PW

### Other
- **Germination:**
- **Emergence:**
- **Nutrient Deficiency:**
- **Soil Compaction:**
- **Standing Water:**
- **Herbicide damage:**
- **Physiological Disorder in Corn:**
- **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

Date 5/10/2018

Field Name/Number F3R1 Grower MCH

General Appearance...

Plant Population...

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

Comments:

tilted 5-8-18

Clean

Plant Beans at
110,000 - 120,000 / Acre

□ 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

□ Pigweed RRP
□ Horsenettle HN
□ Bindweed - Field FBW
□ Bindweed - Hedge HBW
□ Smartweed - Penn. PSM
□ Smart - Swamp SSM
□ Dogbane - Hemp HDB
□ Lamb'squarter LQU
□ Ragweed CRAG
□ Ragweed - Giant GRAG
□ Dock - Curly CD
□ Nightshade - Black BNS
□ Jimsonweed JW
□ Canada Thistle CTH
□ Yellow Rocket YR
□ Perennials P
□ Pokeweed PW

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

□ 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

□ Pigweed RRP
□ Horsenettle HN
□ Bindweed - Field FBW
□ Bindweed - Hedge HBW
□ Smartweed - Penn. PSM
□ Smart - Swamp SSM
□ Dogbane - Hemp HDB
□ Lamb'squarter 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: □ 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”

□ Root Damage □ Plants
□ Insects □ Purplish
□ Diseases □ Yellowish
□ Nematodes □ Stunting

□ Cutworms CW
□ White Grubs WG
□ Seed Corn Maggots
□ Root Damage
□ Armyworms AW
□ Flea Beetles FB
□ Foliar Disease-Rust
□ Insects
□ Stalkborers SB
□ Aphids A
□ Foliar Disease-Fungi
□ Diseases
□ Wireworms WW
□ Slugs S
□ Corn Borer-%__
□ Nematodes
□ Spider Mites SM
□ Leafhoppers LH
□ Stunted plants
<table>
<thead>
<tr>
<th>Field Name/Number: TR-1</th>
<th>Grower: MSU</th>
<th>Growth Stage: Alfalfa</th>
<th>Date: 5/10/2018</th>
</tr>
</thead>
</table>

**General Appearance**
- Size: 
- Variance: 
- Leaf Color: 
- Variance: 

**Plant Population**
- Soil Moisture: 0-12
- 12-24
- 24+

**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:**
- Alfalfa spray
- May 6-16
- Starting to die back

**Comments:**
- 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

**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°

**ROOT DAMAGE**
- Insects
- Diseases
- Nematodes
- Stunting

**PLANTS**
- Purplish
- Yellowish
**BioEnt – Early Season Survey**  
Gary Manley 269-273-7070 or 269-816-1080

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

**Field Name/Number**  
**Grower**  
**Growth Stage**

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

**Plant Population**  
**Soil Moisture**

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<th>Stress-Chlorophyll:</th>
<th>None</th>
<th>Low</th>
<th>High</th>
<th>General</th>
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</tbody>
</table>

**Comments:**

Sprayed 5-6-18  
mostly clean  
early die back  
Plant 110,000/120,000 Acre

**ACTION:**

- None Required
- Watch
- Yes, see comments

- **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**

- **Pigweed RRP**
- **Horsenettle HN**
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- **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:**

- **Spots**
- **General**
  - **Hard**
  - **Crusted**

- **Standing Water**
- **Small Spots**
- **Large Spots**

- **Herbicide damage**
- **Emergence stress**

- **Physiological Disorder in Corn**
- **Yellowish whorl**

- **Buggwip**
- **Stalk bending**
- **Twisted whorl**

- **Doubles ________ %**
- **Density ________ Variance ________**
- **Growth ________ Variance ________**
- **Plant spacing ________ Variance ________**
- **Emergence ________ Variance ________**
- **Soil Temperature 2°**

- **Root Damage**
- **Plants**

- **Insects**
- **Diseases**
- **Yellowish**
- **Nematodes**
- **Stunting**
**BioEnt – Early Season Survey**

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

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

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<th>Soil Moisture</th>
<th>Leaf Color</th>
<th>Variance</th>
<th>Soil Temperature</th>
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<td></td>
<td></td>
<td></td>
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<td>24+</td>
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</tbody>
</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

**Comments:**

- Non-Irrigated
- May 8-18 Sprayed

**Comments:**

- Mostly Clean
  - Early die back.

**Plant Soybeans**

- 110,000 ACRE

**Date:** 5/10 2018

**Comments:**

- Watch
- Yes, see comments

**ACTION:**

- None Required
- Watch

**Comments:**

- Non-Irrigated
- May 8-18 Sprayed

- Mostly Clean
  - Early die back.

**Plants**

- Insects
- Purplish

- Diseases
- Yellowish

- Nematodes
- Stunting