**BioEnt – Early Season Survey**

**Grower:** JMSY  
**Date:** 09/29/2017

### Field Name/Number

- **General Appearance:** Good  
- **Size:** Normal

### Plant Population

- **Soil Moisture 0-12:** 60/65
- **Soil Moisture 12+:** 12+/60/65  
- **%AWC:**

**Stress:**

- Heat  
- Moisture  
- Nitrogen  
- General  
- Spotty

**Stress-Chlorophyll:**

- None  
- Low  
- High

**Weed Control:**

- Good  
- OK  
- Poor  
- Spotty  
- Dense Spots

- Grasses  
- Broadleaves  
- Perennials

**Vigor:**

- Good  
- OK  
- Poor  
- General  
- Spotty

**ACTION:**

- None Required  
- Watch  
- Yes, see comments

**Comments:**

- Uniform in size & color.

- Growth/development

---

**Vegetation:**

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

**Disease:**

- Root Damage  
- Plants  
- Purplish  
- Yellowish  
- Stunting

**Other Issues:**

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

---

**Germination:**

- No  
- 1/4" Root  
- Spike PE

**Emergence:**

- Breaking  
- VC / V1

**Nutrient Deficiency:**

- Spots  
- General

**Soil Compaction:**

- Spots  
- General  
- Hard  
- Crusted

**Soil Surface:**

- 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:**

- Good  
- Variance

**Plant spacing:**

- Variance

**Emergence:**

- Variance

**Soil Temperature:**

- 2°
**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>724</td>
<td>MSU</td>
<td>4/29/2017</td>
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<table>
<thead>
<tr>
<th>General Appearance</th>
<th>Size</th>
<th>Variance</th>
<th>Leaf Color</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
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<table>
<thead>
<tr>
<th>Plant Population</th>
<th>Soil Moisture 0-12</th>
<th>Moisture Variance</th>
<th>%AWC</th>
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<tbody>
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<table>
<thead>
<tr>
<th>Vigor:</th>
<th>Good</th>
<th>OK</th>
<th>Poor</th>
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<thead>
<tr>
<th>Stress:</th>
<th>Heat</th>
<th>Moisture</th>
<th>Nitrogen</th>
<th>General</th>
<th>Spotty</th>
</tr>
</thead>
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<thead>
<tr>
<th>Stress-Chlorophyll:</th>
<th>None</th>
<th>Low</th>
<th>High</th>
<th>General</th>
<th>Spotty</th>
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<thead>
<tr>
<th>Weed Control:</th>
<th>Good</th>
<th>OK</th>
<th>Poor</th>
<th>Spotty</th>
<th>Dense Spots</th>
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<table>
<thead>
<tr>
<th>Grasses</th>
<th>Broadleaves</th>
<th>Perennials</th>
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</tbody>
</table>

**ACTION:**

- None Required
- Watch
- Yes, see comments

**Comments:**

- Uniformity of color/growth good.
- 2018 16 - 20" Range

**Weeds and Pests:**

- Annual Grasses AG
- Foxtail F
- Panicum -Fall FP
- Quack grass QG
- Wirestem Muhly WM
- Field Sandburs FS
- Crabgrass CG
- Johnsonsgrass JG
- Shytercane SCA
- Nutsedge NS
- Winter Annuals WA
- Chickweed CW
- Biennials WB
- Cover Crop CC
- Velvetleaf VL
- Cocklebur CBUR
- Milkwheal CM
- White Grubs
- Flea Beetles
- Aphids
- Slugs
- Leaf hoppers
- Stalkborers
- Wireworms
- Spider mites
- Cutworms
- Armyworms
- Seed Corn Maggots
- Foliar Disease-Rust
- Foliar Disease-Fungi
- Corn Borer-%
- Root Damage
- Insects
- Plants
- Purplish
- Diseases
- Yellowish
- Nematodes
- Stunting

**Growth Stage:**

- V

**Date:**

- 01

**Variance:**

- 6

**Soil Moisture 0-12:**

- 60/65

**%AWC:**

- 12 + 60/65
BioEnt – Early Season Survey

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

□ Seed Corn □ Corn □ Soybeans □ Wheat □ ___________ Grower Msy ___________ Date 6/29/2017

Field Name/Number ___________

General Appearance ___________ Size ___________ Variance ___________

Plant Population ___________ Soil Moisture 0-12 ___________ 12+ ___________ %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:

J 7/17 12-16" color/growth uniformity good
Small weeds VL, LQU and GRAG (mostly in row) 2 1" mostly.

□ Annual Grasses AG
□ Foxtail F
□ Panicum -Fall FP
□ Quack grass QG
□ Wirestem Muhly WM
□ Field Sandbur FS
□ Crabgrass CG
□ Johnsongrass JG
□ Shatercane SCA
□ Nutseed NS
□ Winter Annuals WA
□ Chickweed CW
□ Biannials 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: □ 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 □ White Grubs □ Seed Corn Maggots
□ Armyworms □ Flea Beetles □ Foliar Disease-Rust
□ Stalkborers □ Aphids □ Foliar Disease-Fungi
□ Wireworms □ Slugs □ Corn Borer-%
□ Spider mites □ Leathoppers □ Stunted plants
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:

Grasses emerging in general NOT VL Common
Grasses from VE to 3" Range

N

W

S

E

Seed Corn □ Corn □ Soybeans □ Wheat □ Grower: MSU Date: 6/9/2017
Field Name/Number: TYR • 1st
General Appearance □ Size 2"-6" □ Variance □ Leaf Color □ Variance □ %AWC □ 0-12 □ 12+

Plant Population □ Soil Moisture 0-12 □ 65

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

Comments:

Grasses emerging in general NOT VL Common
Grasses from VE to 3" Range

N

W

S

E

Seed Corn □ Corn □ Soybeans □ Wheat □ Grower: MSU Date: 6/9/2017
Field Name/Number: TYR • 1st
General Appearance □ Size 2"-6" □ Variance □ Leaf Color □ Variance □ %AWC □ 0-12 □ 12+

Plant Population □ Soil Moisture 0-12 □ 65

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

Comments:

Grasses emerging in general NOT VL Common
Grasses from VE to 3" Range

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E

Seed Corn □ Corn □ Soybeans □ Wheat □ Grower: MSU Date: 6/9/2017
Field Name/Number: TYR • 1st
General Appearance □ Size 2"-6" □ Variance □ Leaf Color □ Variance □ %AWC □ 0-12 □ 12+

Plant Population □ Soil Moisture 0-12 □ 65

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

Comments:

Grasses emerging in general NOT VL Common
Grasses from VE to 3" Range

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Seed Corn □ Corn □ Soybeans □ Wheat □ Grower: MSU Date: 6/9/2017
Field Name/Number: TYR • 1st
General Appearance □ Size 2"-6" □ Variance □ Leaf Color □ Variance □ %AWC □ 0-12 □ 12+

Plant Population □ Soil Moisture 0-12 □ 65

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

Comments:

Grasses emerging in general NOT VL Common
Grasses from VE to 3" Range

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Seed Corn □ Corn □ Soybeans □ Wheat □ Grower: MSU Date: 6/9/2017
Field Name/Number: TYR • 1st
General Appearance □ Size 2"-6" □ Variance □ Leaf Color □ Variance □ %AWC □ 0-12 □ 12+

Plant Population □ Soil Moisture 0-12 □ 65

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

Comments:

Grasses emerging in general NOT VL Common
Grasses from VE to 3" Range

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Seed Corn □ Corn □ Soybeans □ Wheat □ Grower: MSU Date: 6/9/2017
Field Name/Number: TYR • 1st
General Appearance □ Size 2"-6" □ Variance □ Leaf Color □ Variance □ %AWC □ 0-12 □ 12+

Plant Population □ Soil Moisture 0-12 □ 65

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

Comments:

Grasses emerging in general NOT VL Common
Grasses from VE to 3" Range

N

W

S

E

Seed Corn □ Corn □ Soybeans □ Wheat □ Grower: MSU Date: 6/9/2017
Field Name/Number: TYR • 1st
General Appearance □ Size 2"-6" □ Variance □ Leaf Color □ Variance □ %AWC □ 0-12 □ 12+

Plant Population □ Soil Moisture 0-12 □ 65

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

Comments:

Grasses emerging in general NOT VL Common
Grasses from VE to 3" Range

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Seed Corn □ Corn □ Soybeans □ Wheat □ Grower: MSU Date: 6/9/2017
Field Name/Number: TYR • 1st
General Appearance □ Size 2"-6" □ Variance □ Leaf Color □ Variance □ %AWC □ 0-12 □ 12+

Plant Population □ Soil Moisture 0-12 □ 65

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

Comments:

Grasses emerging in general NOT VL Common
Grasses from VE to 3" Range

N

W

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

☐ Seed Corn ☐ Corn ☐ Soybeans ☐ Wheat ☐ Alfalfa Grower ☐ MSU Date 6/29/2017

Field Name/Number

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

Comments:

Leaf blight 0.3/5 sweeps

Regrowth 4-12-14" few scattered flowers

Growth/Color normal.

ACTION:

☐ None Required
☐ Watch
☐ Yes, see comments

Annual Grasses AG
Foxtail F
Panicum - Fall FP
Quack grass QG
Wirestem Muhly WM
Field Sandbur FS
Crabgrass CG
Johnsongrass JG
Shatercane SCA
Nutsedge NS
Winter Annuals WA
Chickweed CW
Biannuals 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 ☐ 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 ______%AWC

Cutworms ☐ Armyworms ☐ Stalkborers ☐ Wireworms ☐ Spider mites
White Grubs ☐ Flea Beetles ☐ Aphids ☐ Slugs ☐ Leafhoppers
Seed Corn Maggots ☐ Foliar Disease - Rust ☐ Foliar Disease - Fungi
Corn Borer-%________
Stunted plants

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

N
W
E
S
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  □

Growth Stage:  4" --  -

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

Comments:

Cutworms  □  White Grubs  □  Seed Corn Maggots  □
Armyworms  □  Flea Beetles  □  Foliar Disease-Rust  □
Stalkborers  □  Aphids  □  Foliar Disease-Fungi  □
Wireworms  □  Slugs  □  Corn Borer-%  □
Spider mites  □  Leafhoppers  □  Stunted plants

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

Field Name/Number: Non-Inv. Seed N Study  
Grower: MSU  
Date: 6/20/2017  

General Appearance: OK  
Size: Normal  
Variance: OK  
Leaf Color: OK  

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

Comments:  
24-30”  

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

- Annual Grasses AG
- Foxtail F
- Panicum -Fall FP
- Quack grass QQ
- Wirestem Muhly WM
- Field Sandbur FS
- Crabgrass CG
- Johnsongrass JG
- Shattercane SCA
- Nutsedge NS
- Winter Annuals WA
- Chickweed CW
- Biennials WB
- Cover Crop CC
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- Cocklebur CBUR
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- 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
- Variance
- Plant spacing
- Variance
- Emergence
- Variance
- Soil Temperature
- 2”

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