### BioEnt – Early Season Survey

**Date:** 7/19/2018

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

#### Field Name/Number:
- **R6**

#### Grower:
- **MSU**

#### Growth Stage:
- **R2**

#### General Appearance:
- **Size**: OK
- **Variance**: Good

#### Plant Population:
- **Soil Moisture**: 0-12
- **%AWC**: 60

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

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

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

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

#### ACTION:
- **None Required**

- **Watch**

- **Yes, see comments**

#### Comments:

12-14” R2

Top 4” with a little moisture, day deeper.

W...Conditions dry. Plant good.

#### Emergence:
- **No**

#### Nutrient Deficiency:
- **Spot**
- **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**

#### Plants:
- **Purplish**

#### Diseases:
- **Yellowish**

#### Nematodes:
- **Stunting**

#### Cutworms CW
- **White Grubs WG**
- **Seed Corn Maggots**

#### Armyworms AW
- **Flea Beetles FB**
- **Foliar Disease-Rust**

#### Stalkborers SB
- **Aphids A**
- **Foliar Disease-Fungi**

#### Wireworms WW
- **Slugs S**
- **Corn Borer-%**

#### Spider Mites SM
- **Leathoppers LH**
- **Stunted plants**

#### Grasses
- **Annual Grasses AG**
- **Pigweed RRP**

#### Broadleaves
- **Pigweed RRP**
- **Horsenettle HN**
- **Foliar Disease-Rust**

#### Perennials
- **Pokeweed PW**

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

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

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

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

#### ACTION:
- **None Required**

- **Watch**

- **Yes, see comments**

#### Comments:

12-14” R2

Top 4” with a little moisture, day deeper.

W...Conditions dry. Plant good.

#### Emergence:
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#### 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**

#### Plants:
- **Purplish**

#### Diseases:
- **Yellowish**

#### Nematodes:
- **Stunting**

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

**Date:** 7/19/2018

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

#### Field Name/Number:
- **R6**

#### Grower:
- **MSU**

#### Growth Stage:
- **R2**

#### General Appearance:
- **Size**: OK
- **Variance**: Good

#### Plant Population:
- **Soil Moisture**: 0-12
- **%AWC**: 60

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

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

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

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

#### ACTION:
- **None Required**

- **Watch**

- **Yes, see comments**

#### Comments:

12-14” R2

Top 4” with a little moisture, day deeper.

W...Conditions dry. Plant good.

#### Emergence:
- **No**

#### Nutrient Deficiency:
- **Spot**
- **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**

#### Plants:
- **Purplish**

#### Diseases:
- **Yellowish**

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

Field Name/Number: 42KL  Grower: MSY  Growth Stage: RZ
General Appearance: Size: OK  Variance: Good  Leaf Color: Good  Variance: Good
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:

"12-14" Range, RZ"

General Appearance:

Seeds Corn ❑ Corn ❑ Soybeans ❑ Wheat ❑ Green Beans

Dry conditions, but plants look ok -

ACTION:

Germination: ❑ No  ❑ 1/4" Root  ❑ Spike PE
Emergence: ❑ Breaking  ❑ VC / V1
Nutrient Deficiency: ❑ No  ❑ Spots  ❑ General

Seed Compaction: ❑ No  ❑ Spots  ❑ General  ❑ Soil Surface:
❑ Spots  ❑ General  ❑ Hard  ❑ Crusted
Standing Water: ❑ No  ❑ Small Spots  ❑ Large Spots
Herbicide damage: ❑ No  ❑ Emergence stress
Physiological Disorder in Corn: ❑ No  ❑ Yellowish whorl
❑ Buggywip  ❑ Stalk bending  ❑ Twisted whorl

Doubles: ❑ No  ❑ %
Density: ❑ Variance
Growth: ❑ Good  ❑ Variance: Good
Plant spacing: ❑ Variance
Emergence: ❑ Variance
Soil Temperature: ❑ 2"

ROOT DAMAGE:
❑ Root Damage  ❑ Insects  ❑ Plants
❑ Insects  ❑ Diseases  ❑ Purple
❑ Diseases  ❑ Yellowish  ❑ Nematodes
❑ Nematodes  ❑ Stunting

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

12-14’ P2

Plants:
- 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

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

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

8” Range 14/5

Good weed control - low level scattered Ragweed.
BioEnt – Early Season Survey
Gary Manley 269-273-7070 or 269-816-1080

☐ Seed Corn ☐ Corn ☐ Soybeans ☐ Wheat ☐ Green Beans

Field Name/Number: TARP  Grower: MSU  Growth Stage: 


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:

Old Alfalfa sprayed/Clean of Weed and Alfalfa Switch grass not planted.

☐ 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
☒ Velveteaf VL
☒ Cocklebur CBUR
☒ Milkweed CM

☐ 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
☒ Velveteaf VL
☒ Cocklebur CBUR
☒ Milkweed CM

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

Germination: ☐ No ☐ 1/4” Root ☐ Spike PE
Emergence: ☐ Breaking ☐ VC / V1
Nutrient Deficiency: ☐ Breaking ☐ VC / V1
Soil Compaction: ☐ Spots ☐ General
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

### Survey Information
- **Field Name/Number:** [Blank]
- **Grower:** [Blank]
- **Growth Stage:** R2
- **Date:** 7/19/2018
- **Seed Corn**
- **Corn**
- **Soybeans**
- **Wheat**
- **Green Beans**

### General Appearance
- **Size:** OK
- **Variance:** 0
- **Leaf Color:** 0
- **Variance:** 0
- **Soil Moisture:** 0-12
- **%AWC:** 40-85
- **12-24:** 25-90
- **24+:** 0-5

### 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
- "N Irrigation study. Irrigated"
- "14-18" Range R2"
- "N Growth/development Good"

### Additional Observations
- **Annual Grasses AG**
- **Foxtail F**
- **Panicum -Fall FP**
- **Quack grass QG**
- **Wirestern 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**
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- **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**

### Growth Stages
- **Germination**
- **Emergence**
- **Nutrient Deficiency**
- **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**
- **Growth**
- **Plant spacing**
- **Emergence**
- **Soil Temperature**

### Pest and Disease Observations
- **Cutworms CW**
- **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**
- **Diseases**
- **Yellowish**
- **Nematodes**
- **Stunting**
BioEnt – Early Season Survey  Gary Manley 269-273-7070 or 269-816-1080

☐ Seed Corn ☐ Corn ☐ Soybeans ☐ Wheat ☐ Green Beans  Date 7/19/2015

Field Name/Number  Grower  WSU  Growth Stage E2

General Appearance  OK  Size  OK  Variance  Good  Leaf Color  Good  Variance  Good

Plant Population  Soil Moisture 0-12  60  12-24  55  24+  %AWC

Vigor:  X 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:  N Irrigation study  non-Irrigated

12-14’ R2

Condition dry, but plants look 4’.

☐ Cutworms CW  ☐ White Grubs WG  ☐ Seed Corn Maggots
☐ Armyworms AW  ☐ Flea Beetles FB  ☐ Foliar Disease-Rust
☐ Stalkborers SB  ☐ Aphids A  ☐ Foliar Disease-Fung
☐ Wireworms WW  ☐ Slugs S  ☐ Corn Borer-%
☐ Spider Mites SM  ☐ Leafhoppers LH  ☐ Stunted plants

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

Insects:

Growth:

Soil Compaction:

Soil Surface:

S

W

E

N

ACTION:

None Required

Watch

Yes, see comments

Insects:

Growth:

Soil Compaction:

Soil Surface:

S

W

E

N

ACTION:

None Required

Watch

Yes, see comments

Insects:

Growth:

Soil Compaction:

Soil Surface:

S

W

E

N

ACTION:

None Required

Watch

Yes, see comments

Insects:

Growth:

Soil Compaction:

Soil Surface:

S

W

E

N

ACTION:

None Required

Watch

Yes, see comments

Insects:

Growth:

Soil Compaction:

Soil Surface:

S

W

E

N

ACTION:

None Required

Watch

Yes, see comments

Insects:

Growth:

Soil Compaction:

Soil Surface:

S

W

E

N

ACTION:

None Required

Watch

Yes, see comments

Insects:

Growth:

Soil Compaction:

Soil Surface:

S

W

E

N