**BioEnt – Early Season Survey**

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

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

**Field Name/Number:** TIL

**Grower:** May

**Growth Stage:** Pollination

**General Appearance:**
- 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:**
- To dry to probe in soil
- Bottom leaves turning yellow and wilting
- Pollination Active, silks/Tassel 100%
- Plant leaves withering during

**Date:** 7-27-201

**Leaf Color:**
- Good
- Poor
- General
- Spotty

**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:**
- To dry to probe in soil
- Bottom leaves turning yellow and wilting
- Pollination Active, silks/Tassel 100%
- Plant leaves withering during

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

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

**Nutrient Deficiency:**
- Spots
- General

**Soil Compaction:**
- Spots
- General
- Hard
- Crusted

**Standing Water:**
- Spots
- General
- 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:**
- Cutworms CW
- Armyworms AW
- Stalkborers SB
- Wireworms WW
- Spider Mites SM

**Grass:**
- White Grubs WG
- Flea Beetles FB
- Aphids A
- Slugs S
- Leafhoppers LH

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

**Root Damage:**
- Insects
- Diseases
- Nematodes
- Stunting
### BioEnt – Early Season Survey

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

<table>
<thead>
<tr>
<th>Field Name/Number</th>
<th>Y2RC</th>
<th>Grower</th>
<th>MCD</th>
<th>Growth Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Appearance</td>
<td>Size</td>
<td>Variance</td>
<td>Leaf Color</td>
<td>Variance</td>
</tr>
<tr>
<td>Plant Population</td>
<td>Soil Moisture</td>
<td>0-12</td>
<td>12-24</td>
<td>24+</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
- [ ] Dense Spots
- [ ] Grasses
- [ ] Broadleaves
- [ ] Perennials

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

### Comments:
- Plant leaves wilting during daylight
- Dry spots showing deep moisture stress
- Silk/tassel 100%

#### 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
- [ ] Purplish

#### Plants
- [ ] Diseases
- [ ] Yellowish

#### Nematodes
- [ ] Stunting

- [ ] 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
### Comments:
- To dry & probe
- Bottom leaves starting to yellow due to dry soil
- Pollination Active
- Silk / Tassel 100%
- Leaves wilting during day time

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

### Weed Control:
- Good
- OK
- Poor
- Spotty
- Dense Spots
- Grasses
- Broadleaves
- Perennials

### Vigor:
- Good
- OK
- Poor
- General
- Spotty

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

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

### Soil Compaction:
- Ti

### Soil Surface:
- 0 Spots
- 0 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"
Germination
No 0 1/4" Root
Spike PE
Emergence
Breaking
VC / V1
Nutrient Deficiency
Spots
General
Soil Compaction:
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
Growth
Plant spacing
Emergence
Soil Temperature 2"

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
Plants
Purplish
Diseases
Yellowish
Nematodes
Stunting

ACTION:
None Required
Watch
Yes, see comments

Comments:
Grasses/Redroot Pigweed dense
in row-
Corn 4-5' Running in good
spots - 16-20" in poor
spots
Bottom leaf yellowing

Germination
No 0 1/4" Root
Spike PE
Emergence
Breaking
VC / V1
Nutrient Deficiency
Spots
General
Soil Compaction:
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
Growth
Plant spacing
Emergence
Soil Temperature 2"

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

Date: 7/27/2017

Seed Corn  Corn  Soybeans  Wheat  Green Beans

Field Name/Number:  TRL  Grower:  ALKATLA  MSU

Growth Stage:  Early

General Appearance:  Mid

Plant Population:  Soil Moisture 0-12

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:

Regrowth 6” H  

Very dry conditions

Some spots showing yellowing and die back due to dry conditions.

ACTION:

None Required  Watch  Yes, see comments

Annual Grasses AG  Pigweed RRP

Foxtail F  Horsetail 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

Shatercane 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  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°

Cutworms CW  Root Damage

White Grubs WG  Plants

Flea Beetles FB  Purplish

Aphids A  Diseases

Slugs S  Yellowish

Leafhoppers LH  Nematodes

Stunted plants

Rev. 2814
BioEnt – Early Season Survey  Gary Manley 269-273-7070 or 269-816-1080

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

Field Name/Number Irrigated Grower

General Appearance Size:

Plant Population Soil Moisture 0-12 75 12-24 75/80 24+ 80 %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:

date pollination  4/9 90% done
som in blister stage
Disease level very low.

☐ 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
☐ Shatercane 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
☐ Milkweed CM ☐ 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”

ROOT DAMAGE:

☐ Root Damage ☐ Plants

Insects ☐ Purplish

Diseases ☐ Yellowish

Nematodes ☐ Stunting

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
**BioEnt – Early Season Survey**

**Date:** 7/27/2017

- **Field Name/Number:** [Non-Technical]
- **Grower:** [Non-Technical]
- **Growth Stage:** Pollination
- **Vigor:** Good
- **Leaf Color:** General
- **Stress:** Heat
- **Stress-Chlorophyll:** General
- **Weed Control:** Good
- **Comments:**

  Plants showing wilting during day time. Bottom leaves wilting & yellowing. Moisture stress is affecting growth & development.

- **General Appearance:**
  - [Non-Technical]
- **Plant Population:** General
  - [Non-Technical]
- **Plant spacing:** Variance
  - [Non-Technical]
- **Soil Moisture:** 0-12
  - [Non-Technical]
- **Nutrient Deficiency:** Spots
  - [Non-Technical]
- **Soil Compaction:**
  - [Non-Technical]
- **Heat:**
  - [Non-Technical]
- **Nitrogen:** General
  - [Non-Technical]
- **Spotty:** [Non-Technical]
- **Dense Spots:** [Non-Technical]
- **Grasses:** [Non-Technical]
- **Broadleaves:** [Non-Technical]
- **Perennials:** [Non-Technical]

<table>
<thead>
<tr>
<th>ACTION:</th>
</tr>
</thead>
<tbody>
<tr>
<td>None Required</td>
</tr>
<tr>
<td>Watch</td>
</tr>
<tr>
<td>Yes, see comments</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weed Control:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
</tr>
<tr>
<td>OK</td>
</tr>
<tr>
<td>Poor</td>
</tr>
<tr>
<td>Spotty</td>
</tr>
<tr>
<td>Dense Spots</td>
</tr>
</tbody>
</table>

- **Soil Surface:** General
  - [Non-Technical]
- **Soil Temperature:** 2"
  - [Non-Technical]
- **Nutrient Deficiency:** Spots
  - [Non-Technical]
- **Soil Compaction:**
  - [Non-Technical]
- **Standing Water:** Small Spots
  - [Non-Technical]
- **Herbicide damage:** Emergence stress
  - [Non-Technical]
- **Physiological Disorder in Corn:** Yellowish whorl
  - [Non-Technical]
- **Emergence:** Breaking
  - [Non-Technical]
- **Plant spacing:** Variance
  - [Non-Technical]
- **Emergence:** Variance
  - [Non-Technical]
- **Soil Moisture:** 12-24
  - [Non-Technical]
- **Nutrient Deficiency:** Spots
  - [Non-Technical]
- **Soil Compaction:**
  - [Non-Technical]
- **Standing Water:** Small Spots
  - [Non-Technical]
- **Herbicide damage:** Emergence stress
  - [Non-Technical]
- **Physiological Disorder in Corn:** Yellowish whorl
  - [Non-Technical]
- **Emergence:** Breaking
  - [Non-Technical]
- **Plant spacing:** Variance
  - [Non-Technical]
- **Emergence:** Variance
  - [Non-Technical]
- **Soil Moisture:** 24+
  - [Non-Technical]
- **Nutrient Deficiency:** Spots
  - [Non-Technical]
- **Soil Compaction:**
  - [Non-Technical]
- **Standing Water:** Small Spots
  - [Non-Technical]
- **Herbicide damage:** Emergence stress
  - [Non-Technical]
- **Physiological Disorder in Corn:** Yellowish whorl
  - [Non-Technical]
- **Emergence:** Breaking
  - [Non-Technical]
- **Plant spacing:** Variance
  - [Non-Technical]
- **Emergence:** Variance
  - [Non-Technical]
- **Soil Moisture:** %AWC
  - [Non-Technical]

- **Annual Grasses AG**
- **Foxtail F**
- **Panicum - Fall FP**
- **Quack grass QG**
- **Wirestern Muhly WM**
- **Marestail MT**
- **Crabgrass CG**
- **Shatercane SCA**
- **Nutsedge NS**
- **Winter Annuals WA**
- **Chickweed CW**
- **Bermsilted Silt**
- **Aphids A**
- **Wireworms WW**
- **Spider Mites SM**
- **Cocklebur CBUR**
- **Milkweed CM**
- **Perennials P**
- **Pokeweed PW**

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

**Comments:**

Plants showing wilting during day time. Bottom leaves wilting & yellowing. Moisture stress is affecting growth & development.