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

☐ Seed Corn ☑ Corn ☐ Soybeans ☐ Wheat ☐Grower J. S. Date 7-21-2014
Field Name/Number TLE
General Appearance Normal
Size Normal
Variance OK
Leaf Color OK
Leaf Color Variance OK
Plant Population OK
Soil Moisture 0-12 55
12+ 50 %AWC

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:
Late pollination early blister
Yellowing of bottom leaves up to leaf 5/6 in
Spot – yellowing general (nitrogen)

Color/ growth normal

☐ Cutworms ☐ Armyworms ☐ Stalk borers ☐ 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 ☐ Diseases ☐ Yellowish
☐ Nematodes ☐ Stunting
**BioEnt – Early Season Survey**

- Grower: TMS
- Date: 7/31/2014
- Field Name/Number: TFR
- General Appearance: OK
- Size: Normal
- Leaf Color: OK
- Vigor: Good
- Stress: Moisture
- Stress-Chlorophyll: None
- Weed Control: Good
- Soil Moisture: 0-12

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

#### Comments:
- Late pollination
- Yellowing on bottom leaves 3-4 in general, spotty (range from 0-4)
- Some with leaf yellowing to leaf 5-6
- Corn between adult < 0.0/Plant

#### Pests and Diseases:
- Cutworms
- Armyworms
- Stalk borers
- 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
- Diseases
- Nematodes
- Purplish
- Yellowish

#### Plant Integrity:
- Annual Grasses AG
- Foxtail F
- Panicum-Fall FP
- Quack grass QG
- Wirestem Muhly WM
- Field Sandbur FS
- Crabgrass CG
- Johnson grass JG
- Shatter cane SCA
- Nutsedge NS
- Winter Annuals WA
- Chickweed CW
- Biennials WB
- Cover Crop CC
- Velvetleaf VL
- Cocklebur CBUR
- Milkweed CM
- Pigweed RRP
- Horsetail HN
- Bindweed -Field FBW
- Bindweed -Hedge HBW
- Smartweed -Penn. PSM
- Smart -Swamp SSM
- Dogbane -Hemp HDB
- Lambsquarter LOU
- 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
- 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
  - Buggystip
  - Stalk bending
  - Twisted whorl
- Doubles
- Density
- OK
- Growth
- Variance
- Plant spacing
- Variance
- Emergence
- Variance
- Soil Temperature
- 2"
**BioEnt – Early Season Survey**

- **Grower**: MSU
- **Date**: 7/16/2014

**Field Name/Number**: 736

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

**Plant Population**: 
- Soil Moisture 0-12: 55-60
- 12+: 55
- %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**: 
- Pollination
- Size Range: Storm 6-8'
- Plants yellowish, color & size variance high.
- Bottom leaves yellowing due to nitrogen general.
- to dry 6-7 in spots.

**Annual Grasses AG**
- Foktail F
- Panicum-Fall FP
- Quack grass QG
- Wirestem Muhly WM
- Field Sandbur FS
- Crabgrass CG
- Johnsonsgrass JG
- Shatercane SCA
- Nutsedge NS
- Winter Annuals WA
- Chickweed CW
- Biannuaals WB
- Cover Crop CC
- Velvetleaf VL
- Cocklebur CBUR
- Milkwkewt CM

**Pigweed RRP**
- Horserettle HN
- Bindweed Field FBW
- Bindweed Hedge HBW
- Smartweed Penn. PSM
- Smart Swamp SSM
- Dogbane Hemp HDB
- Lambsquarter LOU
- 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**: 
- No
- 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**: 
- Ok
- Variance

**Growth**: 
- Variance

**Plant spacing**: 
- Variance

**Emergence**: 
- Variance

**Soil Temperature**: 
- 2°

**Cutworms**
- White Grubs
- Flea Beetles
- Aphids
- Slugs
- Leafhoppers

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

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


Field Name/Number +4 RL

General Appearance [X] Size Mixed Variance 2-7 Leaf Color Mixed Variance High

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

Stress-Chlorophyll: [X] General [X] Spotty
Weed Control: [X] Grasses [X] Broadleaves [X] Perennials

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

Comments:

Pasty field starting to Tassel
Size Variance - 2-7'
Color Variance high
Stand is still open in spots allowing weed development

Annual Grasses AG
Foxtail F
Panicum -Fall FP
Quack grass QG
Wiredt Muhly WM
Field Sandbur FS
Crabgrass CG
Johnsongrass JG
Shathercane SCA
Nutosedge NS
Winter Annuals WA
Chickweed CW
Biannuals WB
Cover Crop CC
Velvetleaf V
Cocklebur CBUR
Milkweed CM

No [X] 1/4" Root [X] Spike PE
Emergence [X] Breaking [X] VC / V1
Nutrient Deficiency [X] Spots [X] General
Soil Compaction:
[ ] General
[ ] Hard [ ] Crusted
Standing Water [ ] Spots [ ] General
Herbicide damage
Physiological Disorder in Corn [X] Yellowish whorl
Buggywip [X] Stalk bending [X] Twisted whorl
Doubles [ ] %
Density
[ ] Variance
Growth [X] Variance
Plant spacing [ ] Variance
Emergence
Soil Temperature 2°

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

Root Damage [X] Insects [X] Purplish
Diseases [X] Yellowish
Nematodes [X] Stunting
BioEnt – Early Season Survey

Grower: MAUL
Date: 7/31/2014

Field Name/Number: 18012
Growth Stage: Neon

General Appearance: Good
Size: Moderate
Variance: Moderate
Leaf Color: OK
Variance: Low

Plant Population: OK
Soil Moisture: 0-12 %AWC
55/60
12+ 55/60

Vigor: Good
Stress: Heat
Stress-Chlorophyll: None
Weed Control: Good

ACTION:
None Required

Comments:
Regrowth 15-30" Range
First flower

No leafhoppers
Few aphids - population low
Insect populations in general low

Germination:

Soil Compaction:
Spots

Nutrient Deficiency:

Herbicide damage

Physiological Disorder in Corn

Doubles

Density:

Growth:

Plant spacing:

Emergence:

Soil Temperature

Cutworms
Armyworms
Stalk borers
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
Purplish
Diseases
Yellowish
Nematodes
Stunting
BioEnt – Early Season Survey  Gary Manley 269-273-7070 or 269-816-1080

Seed Corn ☑ Corn ☐ Soybeans ☐ Wheat ☐ Grower 11364 Date 7/31/2014
Field Name/Number ☐ No Study ☑ Irrigated  Growth Stage ☐
General Appearance ☑ Size ☑ Variance ☑ Leaf Color ☑ Variance ☑
Plant Population ☑ Soil Moisture 0-12 ☑ %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:

Pollination Current
Color/growth good

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<th>Pigweed RRP</th>
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☐ Germination ☐ No ☐ 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 ☐ Emergency 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” |

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<th>White Grubs ☐</th>
<th>Seed Corn Maggots ☐</th>
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<tr>
<td>Armyworms ☐</td>
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<td>Stunting</td>
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</table>
Comments:
Pollination current
Color growth normal.
**BioEnt Agricultural Consulting**  
**BEAN INSECT AND DISEASE REPORT**

**Date:** 4/13/2014  
**Grower:** M6U  
**Field(s):** Organic - Bio Diversity Study  
**Crop Stage:** Flower  
**Plant Height:**  
**Soil Moisture:**  

<table>
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<tr>
<th>Vigor:</th>
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<th>Ok</th>
<th>Poor</th>
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**INSECT SPECIES**  
**LIFE STAGE (ELPA)**  
**EVALUATION**  
**DIST. (S-G)**  
**THRESHOLD**  
**COMMENTS**  

| Worms - misc | larvae | % plt's affected |  
| Japanese Beetle | adults | % leaf damage |  
| Potato Leafhopper | nymphs | # per leaf |  
| Spider Mites | nymphs | % plants affected |  
| Aphids | adults/nymphs | # per leaf |  
| Aphids | Alatoid nymphs | % population |  
| Aphids | Winged adults | % population |  
| Other | larvae | adult |  
| Other | larvae | adult |  
| Natural Enemies | | |  

**DISEASES**  
**PLT/PART Affected (sampled)**  
**Region AFFECTED (range)**  
**EVALUATION % Plt's Aff.**  
**THRESHOLD**  
**DIST. G/S**  
**COMMENTS**  

| Downy Mildew |  
| White Mold |  
| Common Blight |  
| SDS |  
| Charcoal Rot | Spots with short/yellowish plant |  
| Other | Roots show browning death in affected regions |  
| Other |  

**Comments:** Problem Spots in B16 & B19 treatments  
Maybe Brown Stem Rot