***Overview***

*This survey is intended to collect information pertaining to field characteristics and production/yield from soybean fields in the Midwest United States. The survey is broken down into sections, and we ask that you provide as much information as possible. Results from this survey, coupled with environmental variables will be used to analyze and model productivity at a farm-specific scale. All Data Collected for This Survey Are Confidential and Anonymous.* ***Unless Otherwise Specified, All Questions are Pertaining to the 2022 Season****.*

* Qr code

  Description automatically generatedOnce you have completed the survey, please return it by mail using the provided return envelope.
* If you need assistance or have any questions about this, please contact Patrick Copeland by phone (989-817-8570) or email [copel113@msu.edu](mailto:copel113@msu.edu) or Manni Singh [msingh@msu.edu](mailto:msingh@msu.edu)
* If you would rather complete this survey online, use this link: <https://arcg.is/1anP4r> or by using the QR code.

**General Information**

Name: Date:

Email: Phone:

Field Location: Lat. Lon.

Field size (acres): Average Soybean Yield (bu/acre):

**Field Information**

Predominant Soil Type

* Silt loam
* Silty clay
  + Loam
  + Sand
  + Sandy loam
  + Silty Clay Loam
  + Other

Is Your Field Irrigated? □ Yes □ No

Number of irrigation applications:

Total Irrigation Inches:

Drainage Type: □ Artificial □None

Tillage Type:

* Conventional (Chisel, Disk)
* Vertical: Disk
* Ridge
* Field Cultivator
* Strip Till
* No-Till

Last Tillage Pass in 2022: □ Fall □ Spring

Do You Use Cover Crops? □ Yes □ No

List cover crops planted in 2022:

CC Planting Date: CC Termination Date:

Manure Application\* □ Yes □ No

Manure Type: □ Liquid □ Bed Pack

Manure Source: □ Dairy □ Hog □ Poultry □ Other

Manure Rate (Gallons/Acre or Pound/Acre):

Lime Application □ Yes □ No

Type of Lime Applied: □ Pelletized □AgLime □Other

Rate of Lime Application (pounds/acre)?

What was the Cost Per Pound ($/pound)?

Residue Management: □ Removed □ Grazed □ No/None □Other

Occurrence of Soybean Cyst Nematode: □ Yes □ No □ Do not know

Unique Field Characteristics (choose all that apply):

□ Low/High spots □ Flooding □ Dry Knoll/Knob □ Near Woodland □ None □ Other

**Seed Information**

Seed Variety Name: Maturity Group:

Trait:

* Conventional
* RR2X (dicamba/glyphosate)
* GT, RR1, or RR2Y (glyphosate)
* XF (dicamba/glufosinate/glyphosate)
* E3 (glufosinate/glyphosate/2,4-D)
* LLGT27 (glufosinate/glyphosate/isoxaflutole)
* Other

Planting Date: Harvest Date:

Seeding Rate (Seeds/Acre)? Row Spacing (Inches):

Cost Per 140,000 Seeds (unit):

Did You Use Treated Seed: □ Yes □ No

What was the Brand and Mode? (F=Fungicide, I=Insecticide, N=Nematide, B=Biological) *Example: Acceleron Basic (F)*

**Fertilizer Information**

Did You Use a Non-Starter Fertilizer? □ Yes □ No

Non-Starter Fertilizer 1 After Prior Crop

*Specify Formula (N-P-K-S-Zn)*

Non-Starter Fertilizer 1 Rate (lb/acre)

Non-Starter Fertilizer 1 Cost ($/ton)

Non-Starter Fertilizer 2 After Prior Crop

*Specify Formula (N-P-K-S-Zn)*

Non-Starter Fertilizer 2 Rate (lb/acre)

Non-Starter Fertilizer 2 Cost ($/ton)

Did You Use a Starter Fertilizer? □ Yes □ No

Starter Fertilizer 1 *Specify Formula (N-P-K-S-Zn)*

Starter Fertilizer 1 Rate (lb/acre):

Starter Fertilizer 1 Cost ($/ton):

Starter Fertilizer 2 *Specify Formula (N-P-K-S-Zn)*:

Starter Fertilizer 2 Rate (lb/acre):

Starter Fertilizer 2 Cost ($/ton):

**Pesticide Information**

Did you Apply a Pre-Emergence or Post-Emergence Herbicide?: □ Yes □ No

How many herbicide passes did you spray in this SOYBEAN field in 2022? Select the response that best applies.

* Pre Only (1 Pass)
* Post Only (1 Pass)
* Pre followed by Post (2 Passes)
* Pre followed by Post with Layered Residual (2 Passes)
* Post followed by Post (2 Passes)
* Post with Layered Residual followed by Post (2 Passes)
* Post with Layered Residual followed by Post with Layered Residual (2 Passes)
* Pre followed by Two Post Applications (3 Passes)
* Pre followed by Two Post Applications with Layered Residual (3 Passes)
* Other

What Percentage of the SOYBEAN Acres in this Field Were Sprayed by a Custom Applicator in 2022? *Specify 0-100*

Did You Apply a Fungicide? □ Yes □ No

Which Fungicide Did You Apply? (Application 1):

Timing of Application: □ Vegetative □ R1 □ R3 □ R5

Which Fungicide Did You Apply? (Application 2):

Timing of Application: □ Vegetative □ R1 □ R3 □ R5

Did You Apply an Insecticide? □ Yes □ No

Which Insecticide Did You Apply? (Application 1):

Timing of Application: □ Vegetative □ R1 □ R3 □ R5

Which Insecticide Did You Apply? (Application 2):

Timing of Application: □ Vegetative □ R1 □ R3 □ R5

**Production Stressors**

Please rate the overall importance of the specific biological and non-biological stressors. Explanations of categories:

**Minor**: Some damage/presence in the field or in isolated spots but did not lead to a major reduction in yield.

**Major**: Significant damage/presence across the field which has led to major yield reduction.

**Minor and Major**: Several stressors were present which could be classified in both categories.

After selecting the category, please indicate the specific stressor.

Weeds: □ N/A □ Minor □ Major □ Minor and Major

* Burdock
* Common Vetch
* Curly Dock
* Dandelion
* Henbit Dead, Nettle
* Lambs Quarter
* Marestail Horseweed
* Purslane, Ragweed
* Red Root Pigweed
* Thistle, Velvetleaf
* Wild Mustard
* Waterhemp
* Palmer Amaranth
* Dogbane
* Other Weeds

Foliar Disease: □ N/A □ Minor □ Major □ Minor and Major

* Brown Spot/Septoria Leaf Spot
* Frogeye leaf Spot
* Powdery Mildew
* Other Foliar Diseases

Root/Stem Diseases: □ N/A □ Minor □ Major □ Minor and Major

* Brown Stem Rot
* Charcoal Rot
* Seedling Disease/Root Rot
* Sudden Death Syndrome
* Stem Canker
* White Mold
* Other Root/Stem Diseases

Insects: □ N/A □ Minor □ Major □ Minor and Major

* Bean Leaf Beetles
* Grasshoppers
* Green Cloverworms
* Japanese Beetles
* Mexican Bean Beetle
* Silver-Spotted Skipper
* Soybean Aphid
* Stink Bugs
* Soybean Gall Midge
* Other

Please Rate NON-BIOLOGICAL Crop Stressors

|  |  |  |  |
| --- | --- | --- | --- |
|  | Not Observed | Minor | Major |
| Lodging | □ | □ | □ |
| Excess Rain | □ | □ | □ |
| Drought | □ | □ | □ |
| Frost | □ | □ | □ |
| Hail | □ | □ | □ |
| Phytotoxicity | □ | □ | □ |
| Stand | □ | □ | □ |
| Planting | □ | □ | □ |
| Emergence | □ | □ | □ |

*Note. Phytotoxixity: adverse effects on plant growth, physiology, or metabolism caused by a chemical substance, such as high levels of fertilizers, herbicides, heavy metals, or nanoparticles (e.g., drift of herbicide from neighboring crops and similar)*

**Crop History Information**

Previous Crop 2021:

Previous Crop 2020:

Previous Crop 2019:

Previous Crop 2018: