# **Purdue Weed Science**

Trial ID: 20S-MGS-CORN-12

2020 Shieldex Visibility Protocol Location: Lafayette Trial Year: 2020

Protocol ID: Project ID: Investigator (Creator): Dr. Bill Johnson Study Director: Chuck Foresman Sponsor Contact: Jay Turner

**General Trial Information** 

Study Director: Chuck Foresman

Title: Professor Investigator: Dr. Bill Johnson

Trial Status: E established

ARM Trial Created On: 7/23/2020

Conducted Under GLP: No Conducted Under GEP: No

### Objectives:

1

Contacts

Role: STYDIR study director Study Director: Chuck Foresman Role: INVEST investigator

Investigator: Dr. Bill Johnson Title: Professor

Organization: Purdue University

Address 1: 915 W. State Street

United States E-mail: wgj@purdue.edu afayette, IN Postal Code: 47907 Country: USA City: West Lafayette, IN Role: SPONSR sponsor

Sponsor: Jay Turner

Site and Design

Treated Plot Width: 6.67 FT Treated Plot Length: 25 FT

Treated Plot Area: 166.75 FT2 Treatments: 6

Replications: 4 Study Design: RACOBL Randomized Complete Block (RCB)

Notes							
Context	Date	Ву	Notes				
STATUS	7/23/2020	Dr. Bill Johnson	Automatically added by ARM: Trial Status updated to 'S' during trial creation.				
STATUS	7/23/2020	Dr. Bill Johnson	Automatically added by ARM: Trial Status updated to 'E' when Rating Date entered.				

#### Instructions:

- Crop response 7,14,21 DAT (days after treatment) 1
- 2 Weed control 7, 14, 28, 42 DAT
- 3 Add 1% v/v COC to all treatments
- Use local field corn variety and record
- 5 No crop yield required
- 6 Provide weather information relevant to trial site
- Please provide photos of any crop injury observed
- 8 Please provide photos of weed control at 28DAT if possible
- 9 Please return results in both ARM \*.dat and PDF format by September 1.

#### (20S-MGS-CORN-12) ARM 2022.2 **Purdue Weed Science**

## 2020 Shieldex Visibility Protocol

Trial Year: 2020

Location: Lafayette
Investigator (Creator): Dr. Bill Johnson
Study Director: Chuck Foresman
Sponsor Contact: Jay Turner Trial ID: 20S-MGS-CORN-12 Protocol ID: Project ID:

Pest Type					
Pest Scientific Name					
Pest Name   Rating Date   7/13/2020   7/					
Rating Date   7/13/2020   7/20/2020   7/					
Rating Unit/Min/Max					
Number of Subsamples					
Data Entry Date   Rating Timing   Rate   Appl   10 DAT   10 DAT   17 DAT		1	1	1	1
Rating Timing	Assessed By				
Trt Treatment   Rate   Appl   Appl					
No. Name	Rating Timing	10 DAT	10 DAT	17 DAT	17 DAT
1 SHIELDEX		1	2	3	4
AATREX	No. Name Rate Unit Cod	е			
PRIME OIL		93.3 abc	88.3 a	92.5 ab	93.3 a
2 SHIELDEX					
AATREX	PRIME OIL 1 % V/V B				
PRIME OIL		94.5 ab	88.3 a	93.5 ab	90.0 a
3 SHIELDEX					
AATREX 2 LB AI/A B PRIME OIL 1 % V/V B					
PRIME OIL		95.0 a	87.5 a	95.0 a	90.0 a
4 LAUDIS         3 FL OZ/A B         92.3 bc         65.0 b         90.0 bc         30.0 b           AATREX         0.5 LB AI/A B         PRIME OIL         1 % V/V B         91.3 c         62.5 b         86.3 c         35.0 b           5 IMPACT         1 FL OZ/A B AATREX         0.5 LB AI/A B PRIME OIL         90.0 0.0         0.0         0.0         0.0           LSD P=.05         2.62         5.47         4.32         11.63					
AATREX					
PRIME OIL         1 % V/V         B           5 IMPACT         1 FL OZ/A B         91.3 c         62.5 b         86.3 c         35.0 b           AATREX         0.5 LB AI/A B         PRIME OIL         1 % V/V B         0.0         0.0         0.0         0.0           LSD P=.05         2.62         5.47         4.32         11.63         1.70         2.74         2.80         5.82           CV         1.82         3.5         3.06         8.6         8.6           Grand Mean         93.25         78.33         91.45         67.67           Levene's Prob(F)         0.932         0.537         0.903         0.365           Rank X2               P(Rank X2)                Skewness^A         0.1123         -0.3161         -0.2635         0.5032           Kurtosis^A         -1.1578         -0.1129         1.2816         -0.439           Replicate F         5.366         0.889         4.694         0.934           Replicate Prob(F)         0.0142         0.4591         0.0216         0.4433           Treatment F         3.329 <td></td> <td>92.3 bc</td> <td>65.0 b</td> <td>90.0 bc</td> <td>30.0 b</td>		92.3 bc	65.0 b	90.0 bc	30.0 b
5 IMPACT         1 FL OZ/A B AATREX         91.3 c         62.5 b         86.3 c         35.0 b           AATREX O.5 LB AI/A B PRIME OIL         1 % V/V B         0.0         0.0         0.0         0.0           LSD P=.05         2.62         5.47         4.32         11.63           Standard Deviation         1.70         2.74         2.80         5.82           CV         1.82         3.5         3.06         8.6           Grand Mean         93.25         78.33         91.45         67.67           Levene's Prob(F)         0.932         0.537         0.903         0.365           Levene's Prob(F)         0.472         0.713         0.487         0.827           Rank X2               P(Rank X2)               Skewness^A         0.1123         -0.3161         -0.2635         0.5032           Kurtosis'         -1.1578         -0.1129         1.2816         -0.439           Replicate F         5.366         0.889         4.694         0.934           Replicate Prob(F)         0.0142         0.4591         0.0216         0.4433 <t< td=""><td></td><td></td><td></td><td></td><td></td></t<>					
AATREX 0.5 LB Al/A B PRIME OIL 1 % V/V B  6 UNTREATED 0.0 0.0 0.0  LSD P=.05 2.62 5.47 4.32 11.63 Standard Deviation 1.70 2.74 2.80 5.82 CV 1.82 3.5 3.06 8.6 Grand Mean 93.25 78.33 91.45 67.67 Levene's F^\ 0.932 0.537 0.903 0.365 Levene's Prob(F) 0.472 0.713 0.487 0.827 Rank X2		04.0	20.51	22.2	05.01
PRIME OIL         1 % V/V         B           6 UNTREATED         0.0         0.0         0.0           LSD P=.05         2.62         5.47         4.32         11.63           Standard Deviation         1.70         2.74         2.80         5.82           CV         1.82         3.5         3.06         8.6           Grand Mean         93.25         78.33         91.45         67.67           Levene's F^         0.932         0.537         0.903         0.365           Levene's Prob(F)         0.472         0.713         0.487         0.827           Rank X2                P(Rank X2) <td< td=""><td></td><td>91.3 c</td><td>62.5 b</td><td>86.3 c</td><td>35.0 b</td></td<>		91.3 c	62.5 b	86.3 c	35.0 b
6 UNTREATED         0.0         0.0         0.0         0.0           LSD P=.05         2.62         5.47         4.32         11.63           Standard Deviation         1.70         2.74         2.80         5.82           CV         1.82         3.5         3.06         8.6           Grand Mean         93.25         78.33         91.45         67.67           Levene's F^         0.932         0.537         0.903         0.365           Levene's Prob(F)         0.472         0.713         0.487         0.827           Rank X2                P(Rank X2) </td <td></td> <td></td> <td></td> <td></td> <td></td>					
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Standard Deviation         1.70         2.74         2.80         5.82           CV         1.82         3.5         3.06         8.6           Grand Mean         93.25         78.33         91.45         67.67           Levene's F^         0.932         0.537         0.903         0.365           Levene's Prob(F)         0.472         0.713         0.487         0.827           Rank X2                P(Rank X2) <td< td=""><td></td><td></td><td></td><td></td><td></td></td<>					
CV     1.82     3.5     3.06     8.6       Grand Mean     93.25     78.33     91.45     67.67       Levene's F^     0.932     0.537     0.903     0.365       Levene's Prob(F)     0.472     0.713     0.487     0.827       Rank X2           P(Rank X2)           Skewness^A     0.1123     -0.3161     -0.2635     0.5032       Kurtosis^A     -1.1578     -0.1129     1.2816     -0.439       Replicate F     5.366     0.889     4.694     0.934       Replicate Prob(F)     0.0142     0.4591     0.0216     0.4433       Treatment F     3.329     71.250     5.994     91.672					
Grand Mean     93.25     78.33     91.45     67.67       Levene's F^     0.932     0.537     0.903     0.365       Levene's Prob(F)     0.472     0.713     0.487     0.827       Rank X2           P(Rank X2)           Skewness^     0.1123     -0.3161     -0.2635     0.5032       Kurtosis^     -1.1578     -0.1129     1.2816     -0.439       Replicate F     5.366     0.889     4.694     0.934       Replicate Prob(F)     0.0142     0.4591     0.0216     0.4433       Treatment F     3.329     71.250     5.994     91.672					
Levene's F^     0.932     0.537     0.903     0.365       Levene's Prob(F)     0.472     0.713     0.487     0.827       Rank X2           P(Rank X2)           Skewness^     0.1123     -0.3161     -0.2635     0.5032       Kurtosis^     -1.1578     -0.1129     1.2816     -0.439       Replicate F     5.366     0.889     4.694     0.934       Replicate Prob(F)     0.0142     0.4591     0.0216     0.4433       Treatment F     3.329     71.250     5.994     91.672					
Levene's Prob(F)     0.472     0.713     0.487     0.827       Rank X2     .     .     .     .     .       P(Rank X2)     .     .     .     .     .       Skewness^     0.1123     -0.3161     -0.2635     0.5032       Kurtosis^     -1.1578     -0.1129     1.2816     -0.439       Replicate F     5.366     0.889     4.694     0.934       Replicate Prob(F)     0.0142     0.4591     0.0216     0.4433       Treatment F     3.329     71.250     5.994     91.672					
Rank X2       . </td <td></td> <td></td> <td></td> <td></td> <td></td>					
Skewness <sup>x</sup> 0.1123     -0.3161     -0.2635     0.5032       Kurtosis <sup>x</sup> -1.1578     -0.1129     1.2816     -0.439       Replicate F     5.366     0.889     4.694     0.934       Replicate Prob(F)     0.0142     0.4591     0.0216     0.4433       Treatment F     3.329     71.250     5.994     91.672					
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Replicate Prob(F)         0.0142         0.4591         0.0216         0.4433           Treatment F         3.329         71.250         5.994         91.672	Renlicate F	5 366	0.880	4 604	0 034
Treatment F 3.329 71.250 5.994 91.672					
	Treatment Prob(F)	0.0472	0.0001	0.0069	0.0001

Pest Type
W, Weed = Weed or volunteer crop
Pest Code
AMATA, Amaranthus rudis, waterhemp, common = US
ABUTH, Abutilon theophrasti, velvetleaf = US
Rating Unit/Min/Max
, 0, 100 = 0-1 index/scale