

Northeast Research & Extension Center

2008 BAS 800H Corn Pre Tank Mix Optimization - Medium Soil

Trial ID: 09 08 BASC92BCornTankM Protocol ID: 08 BAS C92B Corn TankM
Location: Concord, NE Study Director: Stevan Knezevic
Investigator: Stevan Knezevic

General Trial Information

Study Director: Stevan Knezevic
Investigator: Stevan Knezevic

Trial Location

City: Concord
State/Prov.: NE
Postal Code: 68728
Country: USA

Cooperator/Landowner

Cooperator: Haskell Agricultural Laboratory Country: USA
Organization: University of Nebraska Phone No: 402-584-2261
Address 1: 57905 866 RD Fax No: 402-584-3859
City: Concord
State/Prov: NE
Postal Code: 68728

Crop Description

Crop 1: ZEAMX Zea mays Corn
Variety: Pioneer 35F40 HX1 RR2 LL
BBCH Scale: BCOR Planting Date: 06-07-08
Planting Method: seeded Rate, Unit: 24503 s/a
Depth, Unit: 2 in
Row Spacing, Unit: 30 in
Harvest Date: 11-18-08 Harvest Equipment: Gleaner K
Harvested Width, Unit: 7.5 ft Harvested Length, Unit: 27.5 ft
% Standard Moisture: 15.5 Moisture Meter: Almaco
Weighing Equipment: Almaco

Site and Design

Plot Width, Unit: 10 FT Site Type: FIELD
Plot Length, Unit: 30 FT Tillage Type: NO-TILL
Replications: 3 Study Design: Randomized Complete Block

Maintenance

Table with 10 columns: No., Date, Maintenance Treatment Name, Form Conc, Form Unit, Form Type, Rate, Rate Unit, Tank Mix. Contains 2 rows of maintenance data.

Soil Description

% Sand: 18 % OM: 3.4 Texture: SILT LOAM
% Silt: 62 pH: 6.6
% Clay: 20 CEC: 17.8 Fert. Level: EXCELLENT
Analyzed By: Midwest Labs

Application Description

Table with 2 columns: Field, Value. Contains application details such as Application Date (06-07-08), Time of Day (4.30 pm), Application Method (spray), etc.

Crop Stage At Each Application

	A
Crop 1 Code, BBCH Scale:	ZEAMX BCOR

Application Equipment

	A
Appl. Equipment:	backpack
Operating Pressure, Unit:	20 psi
Nozzle Type:	Turbo Tee
Nozzle Size:	11003
Nozzle Spacing, Unit:	20 IN
Boom Length, Unit:	10 FT
Boom Height, Unit:	12 IN
Ground Speed, Unit:	2.7 MPH
Carrier:	WATER
Spray Volume, Unit:	20 GPA
Mix Size, Unit:	1.8 Liters
Propellant:	co2

Trt No Treatment Application Comment  
 16 Balance Flexx was used as an add on treatment. However, 1.5 oz would be equivalent to 0.75 oz of Balance Pro. (product rates)

Date By Deviations  
 06-07-08 js Plot 103 and 107 deleted  
 Reasons: Plot 103 spray was applied on plot 107 and then 107 was sprayed also.

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 Location: Concord, NE Study Director: Stevan Knezevic  
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Description	Corn, field	Corn, field	Corn, field	Corn, field	Corn, field	Corn, field	Corn, field	Corn, field	Green foxtail	Green foxtail				
Rating Date	11-18-08	11-18-08	11-18-08	11-18-08	11-18-08	11-18-08	07-08-08	08-05-08	07-08-08	08-05-08				
Rating Data Type	Yield	Moisture	Plot wt.	Plot width	Plot length	Stunting	Stunting	Control	Control	Control				
Rating Unit	bu/A	Percent	lb	ft	ft	Percent	Percent	Percent	Percent	Percent				
Days After First/Last Applic.	164 164	164 164	164 164	164 164	164 164	31 31	59 59	31 31	59 59	31 31				
Trt-Eval Interval	164 DA-A	164 DA-A	164 DA-A	164 DA-A	164 DA-A	31 DA-A	59 DA-A	31 DA-A	59 DA-A	31 DA-A				
Plant-Eval Interval	164 DP-1	164 DP-1	164 DP-1	164 DP-1	164 DP-1	31 DP-1	59 DP-1	31 DP-1	59 DP-1	31 DP-1				
Trt No.	Treatment Name	Rate	Other Rate	Other Rate	Growth Stage									
1	Nontreated Check					208.8 a	19.8 a	58.4 a	7.5 a	27.5 a	0.0 a	0.0 a	0.0 d	0.0 d
2	BAS 80004H	2.5 oz/a	62.5 g a/ha		PRE	205.7 a	19.9 a	57.5 a	7.5 a	27.5 a	0.0 a	0.0 a	31.7 c	58.3 c
3	BAS 80004H OUTLOOK	2.5 oz/a 10.9 oz/a	62.5 g a/ha 573 g a/ha		PRE PRE	200.0 a	20.5 a	56.4 a	7.5 a	27.5 a	2.5 a	0.0 a	99.0 a	99.0 a
4	BAS 78102H	13 oz/a	635 g a/ha		PRE	205.4 a	20.4 a	57.8 a	7.5 a	27.5 a	4.0 a	0.0 a	99.0 a	98.3 a
5	BAS 80004H BALANCE PRO	2.5 oz/a 1.51 oz/a	62.5 g a/ha 53 g a/ha		PRE PRE	226.2 a	20.2 a	63.5 a	7.5 a	27.5 a	1.0 a	0.0 a	94.3 a	89.7 ab
6	BAS 80004H Harness	2.5 oz/a 24 oz/a	62.5 g a/ha 1470 g a/ha		PRE PRE	211.4 a	19.7 a	59.0 a	7.5 a	27.5 a	2.3 a	0.0 a	99.0 a	99.0 a
7	BAS 80004H Dual II Magnum	2.5 oz/a 14 oz/a	62.5 g a/ha 940 g a/ha		PRE PRE	207.8 a	20.2 a	58.3 a	7.5 a	27.5 a	0.0 a	0.0 a	99.0 a	99.0 a
8	BAS 80004H PROWL H2O	2.5 oz/a 32 oz/a	62.5 g a/ha 1060 g a/ha		PRE PRE	210.3 a	20.1 a	59.0 a	7.5 a	27.5 a	0.7 a	0.0 a	95.7 a	94.7 a
9	BAS 80004H Guardzman MAX	2.5 oz/a 40 oz/a	62.5 g a/ha 1750 g a/ha		PRE PRE	210.8 a	19.9 a	59.0 a	7.5 a	27.5 a	0.0 a	0.0 a	99.0 a	99.0 a
10	BAS 80004H Harness Xtra	2.5 oz/a 38.4 oz/a	62.5 g a/ha 2020 g a/ha		PRE PRE	206.3 a	19.9 a	57.7 a	7.5 a	27.5 a	2.3 a	0.0 a	99.0 a	99.0 a
11	BAS 80004H BICEP II Magnum	2.5 oz/a 34 oz/a	62.5 g a/ha 1640 g a/ha		PRE PRE	201.7 a	20.5 a	56.8 a	7.5 a	27.5 a	1.7 a	0.0 a	99.0 a	99.0 a
12	BALANCE PRO	1.51 oz/a	53 g a/ha		PRE	199.9 a	20.0 a	56.0 a	7.5 a	27.5 a	0.0 a	0.0 a	92.3 a	89.7 ab
13	Guardzman MAX	40 oz/a	1750 g a/ha		PRE	210.0 a	20.2 a	59.0 a	7.5 a	27.5 a	0.0 a	0.0 a	99.0 a	99.0 a
14	Harness Xtra	38.4 oz/a	2020 g a/ha		PRE	207.0 a	20.3 a	58.2 a	7.5 a	27.5 a	4.0 a	0.0 a	98.0 a	93.0 ab
15	BICEP II Magnum	34 oz/a	1640 g a/ha		PRE	212.0 a	19.9 a	59.3 a	7.5 a	27.5 a	0.0 a	0.0 a	96.0 a	97.7 a
16	BAS 80004H Balance Flexx (1/2 rate)	2.5 oz/a 1.51 oz/a	62.5 g a/ha		PRE PRE	213.8 a	19.8 a	59.7 a	7.5 a	27.5 a	0.0 a	0.0 a	80.0 b	81.7 b
LSD (P=.05)						17.98	0.89	4.80	0.00	0.00	3.47	0.00	11.04	12.37
Standard Deviation						10.75	0.53	2.87	0.00	0.00	2.07	0.00	6.60	7.40
CV						5.15	2.65	4.91	0.0	0.0	179.38	0.0	7.65	8.48
Grand Mean						208.57	20.08	58.47	7.5	27.5	1.16	0.0	86.25	87.25
Replicate F						3.536	2.224	3.929	0.000	0.000	0.548	0.000	1.981	0.638
Replicate Prob(F)						0.0427	0.1269	0.0313	1.0000	1.0000	0.5839	1.0000	0.1568	0.5357
Treatment F						1.024	0.624	1.062	0.000	0.000	1.486	0.000	55.916	35.722
Treatment Prob(F)						0.4612	0.8304	0.4293	1.0000	1.0000	0.1772	1.0000	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)  
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

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Description		Green foxtail	Velvetleaf	Velvetleaf	Velvetleaf	Waterhemp	Waterhemp	Waterhemp
Rating Date	Rating Data Type	08-05-08	07-08-08	08-05-08	08-05-08	07-08-08	08-05-08	08-05-08
Rating Unit	Days After First/Last Applic.	Density	Control	Control	Density	Control	Control	Density
Trt-Eval Interval	Plant-Eval Interval	m2 RunCH	Percent	Percent	m2 RunCH	Percent	Percent	m2 RunCH
		59 59	31 31	59 59	59 59	31 31	59 59	59 59
		59 DA-A	31 DA-A	59 DA-A	59 DA-A	31 DA-A	59 DA-A	59 DA-A
		59 DP-1	31 DP-1	59 DP-1	59 DP-1	31 DP-1	59 DP-1	59 DP-1
Trt No.	Treatment Name	Rate	Other Rate	Other Rate	Growth Stage			
1	Nontreated Check					11.7 a	0.0 c	0.0 c
2	BAS 80004H	2.5 oz/a	62.5 g a/ha		PRE	11.7 a	94.3 a	96.0 a
3	BAS 80004H OUTLOOK	2.5 oz/a 10.9 oz/a	62.5 g a/ha 573 g a/ha		PRE	2.0 a	99.0 a	99.0 a
4	BAS 78102H	13 oz/a	635 g a/ha		PRE	4.7 a	99.0 a	99.0 a
5	BAS 80004H BALANCE PRO	2.5 oz/a 1.51 oz/a	62.5 g a/ha 53 g a/ha		PRE	7.7 a	99.0 a	99.0 a
6	BAS 80004H Harness	2.5 oz/a 24 oz/a	62.5 g a/ha 1470 g a/ha		PRE	8.7 a	99.0 a	99.0 a
7	BAS 80004H Dual II Magnum	2.5 oz/a 14 oz/a	62.5 g a/ha 940 g a/ha		PRE	5.0 a	99.0 a	99.0 a
8	BAS 80004H PROWL H2O	2.5 oz/a 32 oz/a	62.5 g a/ha 1060 g a/ha		PRE	10.0 a	99.0 a	99.0 a
9	BAS 80004H Guardman MAX	2.5 oz/a 40 oz/a	62.5 g a/ha 1750 g a/ha		PRE	4.0 a	99.0 a	99.0 a
10	BAS 80004H Harness Xtra	2.5 oz/a 38.4 oz/a	62.5 g a/ha 2020 g a/ha		PRE	3.7 a	99.0 a	99.0 a
11	BAS 80004H BICEP II Magnum	2.5 oz/a 34 oz/a	62.5 g a/ha 1640 g a/ha		PRE	4.3 a	99.0 a	99.0 a
12	BALANCE PRO	1.51 oz/a	53 g a/ha		PRE	5.3 a	99.0 a	99.0 a
13	Guardman MAX	40 oz/a	1750 g a/ha		PRE	4.3 a	88.0 b	88.0 b
14	Harness Xtra	38.4 oz/a	2020 g a/ha		PRE	6.7 a	99.0 a	94.7 a
15	BICEP II Magnum	34 oz/a	1640 g a/ha		PRE	7.7 a	99.0 a	99.0 a
16	BAS 80004H Balance Flexx (1/2 rate)	2.5 oz/a 1.51 oz/a	62.5 g a/ha		PRE	8.0 a	99.0 a	99.0 a
LSD (P=.05)						8.96	6.33	5.94
Standard Deviation						5.35	3.79	3.55
CV						81.25	4.12	3.88
Grand Mean						6.58	91.83	91.67
Replicate F						9.905	0.803	1.398
Replicate Prob(F)						0.0006	0.4579	0.2638
Treatment F						0.882	127.191	144.040
Treatment Prob(F)						0.5902	0.0001	0.0001
						0.00	0.00	0.00
						10.15	6.07	12.02
						6.74	8.07	7.19
						90.06	89.14	71.68
						1.0	1.0	5.64
						0.251	1.558	1.469
						0.7797	0.2283	0.2479
						47.878	33.746	1.264
						0.0001	0.0001	0.2888

Means followed by same letter do not significantly differ (P=.05, LSD)  
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<b>Additional Treatment Information</b>
<b>Rate Unit</b>
OZ/A = Ounces Product per Acre (Metric=ML-G/HA)O
<b>Other Rate Unit</b>
G A/HA = Grams Active Ingredient per Hectare