



2012 Corn Results

Irrigation Research Foundation -- Yuma, CO

Population: 32,500 Planted: 5/7/12
Variety: DKC 56-55 Harvested: 10/18/12

Application Date

5/7/2012 Starter: 15-20-0-2s-.027Zn @ 18gal./acre
3/31/2012 Strip-Till 19-13-0 (Analysis) Applied 10gal @ 4" + 13gal @ 10" 48.3-31.8.0 (actual)
5/29 6/5 Through Sprinkler 32-0-0 7gal/acre

6/14 6/26 7/5 10gal/acre

Applied Water - 18.10"

Herbicide Treatment

4/18/12
Pre Plant Treatment - Degree Xtra @ 2.9 qt./acre Round up @ 32 oz./acre AMS @ 17lbs./100 gal. water and NIS @ 1qt./100 gal. water/acre

6/17/12

Post Plant Treatment Round-up @ 32oz./acre Status @ 5oz./acre AMS @ 17lbs./100 gal. water and NIS @ 1qt./100 gal. water/acre

Insecticide Treatments

7/19/12 Oberon @ 5 oz./

Results

Test

6/6/12 PGS @ 32oz/ac @ V-4
6/11/12 Liquid Calcium at 3gal/ac @ V-6 injected through system
7/13/12 C4 Aerial applied @ 16oz /ac applied at white silk

Control	Moisture/Test Weight	Yield
No Treatments	14.9/59	192.94

Test Results	Moisture/Test Weight	Yield
	14.9/59	243.48

Total Yield Increase for U.S. Ag Products
50.54 bushel acre!

2012 Wheat Results

Irrigation Research Foundation -- Yuma, CO

Circle A - NW qtr Planted: 10/22/11
Plot Size: 4 rows Harvested: 6/27/12
Population: 140#/acre Variety: Bond
10/22/11 Seed treatment: Charter F2 @ 5.4oz/100# + Stamina @ .4oz/100#

Application Date

	Starter:	n/a
	Strip-Till	n/a
10/10/11	Humalfa	@ 5 ton/acre

5/3/12 & 5/14/12 Through Sprinkler 10gal/ 32-0-0 applied

10/10/11 Dry Fertilizer MESZ 12-40-0-10s-1 ZN + 11-52-0 @ 100#/ac

Rainfall from January-June 3.51" Applied Water - 6.14"

Herbicide Treatment

4/16/12 Beyond @ 6oz/acre
4/16/12 2-4-D @ 6oz/acre
4/16/12 NIS @ 1qt/100gal of water
5/18/12 Prosaro @ 6oz/acre

Results

Test
4/13/12 GRO (C4+PGS) @ 64oz/ac @ Green-up
5/3/12 C4 @ 24oz /ac applied at flag leaf stage

Control	Moisture/Test Weight	Yield
No Treatments	9/57	54.02

Test Results	Moisture/Test Weight	Yield
	9/57	78.47

Total Yield Increase for U.S. Ag Products
24.45 bushel acre!

2012 Soybean Results

Irrigation Research Foundation -- Yuma, CO

Population: 220,000 Planted: 5/17/12
Variety: Syngenta S28-B4 Harvested: 9/26/12

Application Date

3/29/12 Strip-Till 19-13-0 (Analysis) actual 48.3-31.8-0 applied @ 4" -10gal and 10" 13gal
5/17/12 Starter: 15-20-0-2s-.027Zn @ 9gal/acre
6/19 6/26 7/5 Through Sprinkler 32-0-0 7gal/acre
4/13/12 Reclaim Soil Detoxifier: 16oz/acre

Applied Water - 15.25"

Herbicide Treatment

5/21/12 Round up @ 32 oz./acre Assure II @ 10z/acre AMS @ 17lbs./100 gal. water and NIS @ 1qt./100 gal. water/acre
7/15/12 Round up @ 32 oz./acre Assure II @ 8z/acre AMS @ 17lbs./100 gal. water and NIS @ 1qt./100 gal. water/acre

Insecticide Treatments

7/20/12 Lanate @ 1pt / acre
8/14/12 Coragen @ 10oz/acre with MSO @ .25%

Results

Test

7/16/12 GRO (C4+PGS) @ 64oz/ac prior to flower
7/16/12 F14 @ 1gal/ac applied prior to flower

Control	Moisture/Test Weight	Yield
No Treatments	13.3/54	81.27

GRO	Moisture/Test Weight	Yield
	13.2/53	91.62

F14	Moisture/Test Weight	Yield
	13.2/56	104.49

Total Yield Increase for U.S. Ag Products
23.22 bushel acre!

2012 Sugar Beets

Irrigation Research Foundation - Yuma, CO

Variety: Hilleshog: 9173RR Cruiser Max/ Tach 20
 Planting date: 4/23/12
 Planting Population: 45,000
 Harvest date: 10/5/12

Fertilizer

Starter Fertilizer: 10-34-0 @ 12.5 gal./acre 4/23/12
Strip-till: Analysis 19-13-0 Actual 48.3-31.8-0 3/28/12
 applied @ 4"- 10gal and 10"- 13gal

Application Dates

Through Sprinkler: 32-0-0 4gal 5/23/12, 5/29/12
 7gal 7/5/12
 10gal 5/18/12, 6/12/12
 4/13/12

Soil Detoxifier: Reclaim @ 1qt/acre
 Applied Water: 14.5"

Herbicide Treatments:

Roundup @ 32oz. Assure II @ 9 oz. AMS @ 17 lbs per 100 gal. of water NIS @ 1qt./100 gal. of water 5/7/12, 6/4/12
 Roundup @ 32oz. Select @ 8oz. AMS @ 17 lbs per 100 gal. of water NIS @ 1qt./100 gal. of water 6/28, 7/11/12

Fungicide/Insecticide:

Quadris @ 15oz/acre 6/19/12
 Lanate @ 1pt/acre 7/20/12
 Coragen @ 5oz/acre 8/4/12, 8/12/12

Application Date

#1 C-4 @ 24oz/ac @ prior canopy + 7/3, 9/24
 C-4 @ 24oz/ac 13 days prior to harvest
 #2 GRO @ 64oz/ac @ prior canopy + 7/3, 9/24
 GRO @ 64oz/ac 13 days prior to harvest
 #3 F-14 @ 1gal/ac @ prior canopy + 7/3, 9/24
 C-4 @ 24oz/ac 13 days prior to harvest
 #4 C-4 @ 24oz/ac @ 4 leaf, 8 leaf, 6/4, 6/8, 7/3, 9/24
 prior to canopy, and 13 days prior to harvest
 #5 F-14 @ 1gal/ac @ 4 leaf, 8 leaf, 6/4, 6/8, 7/3, 9/24
 prior to canopy, and 13 days prior to harvest
 #6 GRO @ 64oz/ac @ 4 leaf, 8 leaf, 6/4, 6/8, 7/3, 9/24
 prior to canopy, and 13 days prior to harvest
 #7 C-4 @ 32oz./ac @ 13 days prior to 9/24/12
 harvest

Harvest Results

Treatment	Average Pop	Average Pop	Average Pop	% of Emergence			Tons per Acre	Sugar %	Pounds of Sugar per acre	Sugar loss to molasses
				1st count 5/17	2nd count 5/14	3rd count 5/21				
#1	30492	33977	31363	62.23%	69.34%	64.01%	31.70	18.12%	11353	1.18
#2	33106	36590	31363	67.56%	74.67%	64.01%	32.00	16.70%	11525	1.51
#3	30492	33977	29621	62.23%	69.34%	60.45%	33.10	16.80%	10961	1.40
#4	38333	41818	33977	78.23%	85.34%	69.34%	31.90	17.36%	11235	1.45
#5	31363	31363	29621	64.01%	64.01%	60.45%	30.80	17.62%	10698	1.43
#6	28750	35719	29621	58.67%	72.90%	60.45%	32.20	17.00%	10794	1.40
#7	33106	35719	33106	67.56%	72.90%	67.56%	32.40	17.02%	10870	1.42
Control	34848	33106	26136	71.12%	67.56%	53.34%	30.80	16.60%	10081	1.28

One Single Application of C4 (test #7)

Improved Yields by 1.6 ton per acre, produced 789 pounds more sugar per acre plus raised the sugar content 0.42% more than the control.

2011 Corn Results

Irrigation Research Foundation -- Yuma, CO

Population: 34,000 Planted: 5/9/11
 Variety: Channel 209-85VT3P Harvested: 11/10/11

Application Date

5/9/2011 Starter: 15-20-0-2s-.027Zn@18gal./acre
 4/5/2011 Strip-Till 9-15-0 (Analysis) Applied 8gal @ 4" + 13gal @ 10"
 6/18/11 Through Sprinkler 32-0-0 10gal/acre
 6/29/11, 7/14/11, 7/19/11

Applied Water - 14.3"

Herbicide Treatment

5/1/11 Degree Xtra @ 2.9 qt./acre Round up @ 32 oz./acre
 6/19/11 Synugize @ 1qt/100 gal of H2O
 6/19/11 Roundup Weathermax @ 32oz / acre
 6/19/11 AMS @ 17lbs./100 gal. /acre
 6/19/11 NIS @ 32oz per 100gal/acre

Results

Test

#1 6/12/11 C4 @ 16oz/ac @V-4
 #2 6/12/11 C4 @ 16oz/ac @V-4
 7/27/11 C4 @ 12oz/ac applied at silk stage aerial application

Control 6/12/11

Control Moisture/Test Weight Yield
No Treatments 16.3/57 198.32

Test #1 Moisture/Test Weight Yield
Test Results 15.9/57 206.21

Test #2 Moisture/Test Weight Yield
Test Results 16.8/58 214.81

One Application of C4 almost 8 Bushel Increase

Two Applications of C4 16+ Bushel Yield Increase

2010 Soybean Results

Irrigation Research Foundation -- Yuma, CO

Population: 225,000 Planted: 6/7/10
 Plot Size: 4 rows / variety Harvested: 9/21/10

Application Date

4/12/10 Strip-Till: 20.5 - 35.8 - 0 - .6s - .2z 10g. @4" / 15g. @10"
 6/7/10 Starter: 30 - 40 - 3 - .6s - .2z 7g/acre
 6/9/10 Through Sprinkler 28-0-5 6gal/acre
 6/18/10 Through Sprinkler 28-0-5 8gal/acre
 7/12/10 Through Sprinkler 28-0-5 10gal/acre

Herbicide Treatment

Round-Up @ 32 oz/ac 4/28/10, 5/31/10, 6/8/10, 7/9/10
 AMS 17#/100 gal 5/31/10, 6/8/10, 7/9/10
 Assure 2 @ 10oz/acre 7/9/10
 Class Act @ .54qt/acre 4/28/10

Results

Test

7/6/10 C4 16oz/acre Prior to Flower

Control Moisture/Test Weight Yield
No Treatments 13.4/55 39.60

Control Moisture/Test Weight Yield
C4 @ 16/oz/ac 9.60/55 51.80

Total Yield Increase for One Application of C4 12.20 bushel acre!