

# Colorado Corn Growers Assn.

## Limited Water, Population, Root Development & Nitrogen Corn Study

Irrigation Research Foundation -- Yuma, CO Circle A

Plot Size: 4 rows/variety

Planting Date: 5/10/11

Planting Population: 31,500/26,500/21,500

Harvest Date: 11/9/11

**Strip-Till:** 21-36-0 applied 8 gal. @ 4" and 13 gal. @ 10"

**Starter:** 30-40-0-4s - .053zn @ 18 gal.

**Through Sprinkler:** 32-0-0 @

### Application Dates

4/5/11

5/10/11

dates & amounts listed on nitrogen graph

### Herbicide Treatments

Degree Xtra @ 2.9qt.

Round-Up Weather Max @ 32. oz./acre

AMS 17 lbs. per 100 gal. water

NIS 32 oz. per 100 gal. water

5/1/11

5/1/11 6/25/11

5/1/11

5/1/11

**Rainfall during growing season: 7.77"**

Root Type/Variety/Maturity	Wet Block		Dry Block	
	31,500 pop. 147.26 applied "N"	26,500 pop. 147.26 applied "N"	21,500 pop. 122.46 applied "N"	26,500 pop. 122.46 applied "N"
Type 3/ 6286SS / 113	197.60	191.58	170.51	187.38
Type 3 / 2A551 / 104	213.85	218.45	198.61	163.41
Type 3/ 2544 / 105	198.02	204.88	183.00	180.86
Type 2/ 35F44 / 105	213.93	211.71	199.52	200.44
Type 1/ 209-85VT3 / 109	212.58	214.54	176.49	175.18
Type 1/ 55-44 / 105	211.06	212.23	180.51	177.62
Type 1/ 7T630 / 110	201.98	208.57	168.45	166.44
Type 2/ 8254 / 106	219.03	193.28	170.19	168.60
<b>Total Averages</b>	<b>208.31</b>	<b>192.43</b>	<b>170.35</b>	<b>177.99</b>

Yields Adjusted to 15.5% Moisture

### Application dates of Nitrogen

Wet Block 13.75" of applied water			Dry Block 7.18" of applied water		
Strip-Till	18 lbs. "N"	4/5/11	Strip-Till	18 lbs. "N"	4/5/11
Planter 2x2	20 lbs. "N"	5/10/11	Planter 2x2	20 lbs. "N"	5/10/11
Thru System	24.8 lbs. "N"	6/9/11/ 6/20/11/ 6/29/11/ 7/16/11	Thru System	24.8 lbs. "N"	6/9/11 6/20/11 7/16/11
Total applied: 147.26 lbs. nitrogen "N"			Total applied: 122.46 lbs. nitrogen "N"		