



ADVANCED AG SYSTEMS'S

Crop Soil News

<http://www.advancedagsys.com/>

November 2010

"It is the crops
that feed the
cows that make
the milk which
creates the
money."

Advanced Ag Systems
Research, Education, Consulting

Cornell Corn Silage Variety Trial 2010 Corn Population - Are You Missing Yield?

In the effort to save on seed costs, some farms are reducing the plants/acre in their stand. The comments often come in regard to the BMR or leafy types that they do best at lower populations. This may not be the most economical move based on an excellent study by Dr. Cox and his staff at Cornell.

As you can see in table #1, planting a leafy hybrid at less than 35,000 seeds/acre gave up \$56 - \$100 of corn silage/acre. The vast majority of the yield is in the stalks and ears, not

Table 1. Planting rate effects on moisture and yield (tons/acre@65% moisture) of two Pioneer, two DeKalb, two leafy, and two brown midrib (BMR) corn silage hybrids, averaged across the 2008 and 2009 growing seasons, at the Aurora Research Farm.

PLANTING RATE Kernels/acre	HYBRIDS							
	Pioneer	DeKalb	Leafy	BMR	Pioneer	DeKalb	Leafy	BMR
	MOISTURE				YIELD tons/acre (65% H ₂ O)			
25,000	67.1	67.9	66.3	69.0	25.3	25.5	23.2	22.2
30,000	66.7	67.9	66.6	68.9	26.0	25.6	24.3	24.0
35,000	66.5	68.1	66.1	68.7	26.6	26.0	25.7	24.8
40,000	67.3	67.9	66.4	69.2	27.6	25.8	25.8	24.8
Avg.	66.9	67.9	66.3	69.0	26.4	25.7	24.8	23.9

the leaves. Optimized population gives the maximum number of stalks and ears for top economic yield. For the BMR types, Dr. Cox found that dropping the population below the 35,000 gave up \$32 - \$104 of corn silage/acre. He did not indicate there was any difference in lodging at the 35,000 seeding rate.

As we are growing dairy forage quality, not just yield, the impact of quality components must also be considered. Looking at these components in table #2 on the next page, you can see that the NDF was slightly higher at the 40,000 rate, there was no difference planting any of the varieties at the recommended 35,000 drop rate. There was NO difference in the digestibility of that NDF regardless of population.

The other factor to consider is the size of the ear, or more importantly, the percentage of the total yield that is starch. Again looking at the table on the next page, there is no difference from 25 through 40,000 seed drop. Thus the recommendation for 35,000 seeds dropped/acre, still is optimum. This is just short of 2.3 acres per bag of 80,000 count. The seed cost may be high but in the big picture, is a small part of the whole corn silage yield component.

If you want the best out of the seed, you would be better served going over your corn

Table 2. Planting rate effects on silage quality, including neutral detergent fiber (NDF), 30-hr NDF digestibility (NDFD), crude protein (CP), and starch of two Pioneer, two DeKalb, two leafy, and two brown midrib (BMR) corn silage hybrids, averaged across the 2008 and 2009 growing seasons, at the Aurora Research Farm.

PLANTING RATE Kernels/acre	HYBRIDS							
	Pioneer	DeKalb	Leafy	BMR	Pioneer	DeKalb	Leafy	BMR
	NDF				NDFD (30 hr)			
25,000	39.8	39.5	40.1	41.3	58.7	58.3	58.7	71.2
30,000	40.8	39.9	41.4	41.1	59.3	57.7	59.1	72.3
35,000	40.9	39.9	40.4	41.1	57.9	57.2	59.6	72.2
40,000	41.4	40.6	42.0	42.5	59.3	57.4	59.5	73.0
Avg.	40.7	39.9	40.9	41.5	58.8	57.6	59.2	72.2
	CP				STARCH			
25,000	8.9	8.6	8.8	8.8	33.3	34.6	34.6	33.3
30,000	8.5	8.3	8.6	8.6	34.2	34.6	34.5	32.1
35,000	8.3	8.3	8.4	8.5	33.9	34.9	34.8	32.6
40,000	8.2	8.1	8.2	8.4	33.8	34.7	34.0	
Avg.	8.5	8.3	8.5	8.6	33.8	34.7	34.5	

planter to optimize seed placement. Finger type planters need to be calibrated each year for large acreage and at least every other year for small, to determine that everything is working correctly. Utilizing in furrow seed firmers assure more accurate placement of the seeds. You invest a tremendous amount of money growing a key energy crop for your animals, don't let the planter issues rob you of your profit.

If you want to really save money, get a soil test based on Cornell Recommends. What little you could save by skimming on seed cost is thrown away many times over in "insurance" fertilizer. With the tremendous recycling of phosphorous and potassium in manure and the fact that 2/3 of your fertilizer comes in on the grain truck, there is money on the table that you can pick up with a soil test. For many farms the soil test means swapping out the old, high rate fertilizer augers for low rate ones that can apply fertilizer more accurately and uniformly at low rates. Many farms that have done it have paid for the change in one year.

In the same vein, fields that are not getting regular manure will be mined and that shortage made up with the correct fertilizer. The only way to know what fertilizer to use is a soil sample.

Cornell 2010 Corn Silage Yield Trials

On the next couple of pages are the results of the Cornell University corn silage variety trial by Dr. Cox and Dr Cherney. This gives you an unbiased look at what varieties to consider. Note: the Aurora data shows a range of moistures. This is due to a chopper breakdown (sound familiar) in the middle of harvest.

Sincerely,

Thomas Kilcer,
Certified Crop Advisor

172 Sunnyside Rd
Kinderhook, NY
12106

Tel: 518-421-2132

tfk1@cornell.edu

The Helping
Hand
to Better
Agriculture



A couple of items to consider. We had mechanical problems with the chopper at Aurora so all maturity groups were harvested on different days over about a 3 week period-so it is not good to compare across maturity groups at Aurora. The other three sites were harvested on the same day. Sackets was a tad early (wetter in moisture than actual physiological development because we harvested 4 days after a 3-inch rainfall so some rehydration occurred). We got Groveland Station just right but we were late getting to Madrid because of the aforementioned mechanical problems with the chopper that put us back a week (unfortunately the week of 90 degree days the week before Labor Day and we were losing a ½ point or more of moisture per day-and then another 3 days off for Labor Day weekend

When I average yields or milk yield across hybrid maturity groups, I throw out the BMR hybrids in making the average-if one maturity group has 3 BMRs (106-110 hybrids) and the other has no BMRs (111-115 hybrids), then not a valid comparison so I throw out the BMRs and average again.

So again, no averaging at Aurora and be careful if BMRs (you can pick them out by their NDFD values) are in a hybrid maturity group at the other three sites.

Dr. Bill Cox, Cornell University.

Aurora, NY, 2010									
Brand/ Company	Hybrid	Silage		30 hour			Milk2006	Milk2006	
		Yield tons @65	Moisture %DM	NDF %DM	NDFD %	CP %DM	Starch %DM	Milk/ton lbs/ton	Milk Yield lbs/acre
95 to 100-d RM									
Dyna-Gro	D39QN29	26.2	64.9	39.7	61.2	8.9	35.0	3578	32889
Mycogen	TMF 2L53	27.3	66.3	44.2	58.3	7.8	31.6	3366	32215
TA Seeds	TA 477-08	25.0	62.4	35.9	57.9	7.9	38.4	3533	30794
TA Seeds	TA 489-00F	25.3	63.7	41.3	59.5	8.0	33.5	3469	30626
TA Seeds	TA 501-12	25.8	66.9	42.4	56.3	8.0	32.9	3371	30484
Hyland	HL STV50	24.0	63.0	43.2	66.0	7.7	33.8	3608	30325
Doebler's	495XY	25.0	64.3	39.9	57.1	7.6	35.7	3457	30175
Dairyland	HiDF 3195-Q	23.6	64.6	39.2	57.6	7.9	35.2	3499	28886
LIICA	1900 F/RR/HTX	24.2	65.6	41.1	55.1	7.6	34.3	3354	28427
Hyland	HL CVR64	22.9	63.1	36.9	56.4	8.5	37.9	3537	28279
Average		24.9	64.5	40.4	58.5	8.0	34.8	3477	30310
101 to 105-d RM									
Growmark FS	5667 GT3	27.0	64.8	38.1	56.8	7.7	36.7	3508	33080
Master's Choice	530	27.1	67.6	40.4	56.3	7.8	34.7	3442	32647
TA Seeds	TA 557-00F	26.9	62.1	43.7	59.0	8.0	32.1	3410	32089
NK	N49J-3000GT	26.2	65.0	40.4	59.0	7.5	35.8	3488	32004
Pioneer	P0125HR	26.0	64.8	37.1	56.1	7.8	37.6	3513	31954
Hyland	HL SR59	28.0	65.9	43.9	54.3	7.8	30.2	3233	31674
Hyland	HL B77R	26.1	67.2	42.4	57.6	8.0	32.8	3396	30998
Dekalb	DKC 5259	25.4	65.9	38.7	56.8	8.0	35.8	3489	30951
Garst	86T82-3000GT	25.4	65.5	40.3	58.5	7.6	34.6	3454	30701
TA Seeds	TA 545-20	25.4	65.9	40.3	56.8	7.6	35.2	3430	30528
Pioneer	P0115XR	25.2	65.6	39.1	55.1	7.8	36.0	3443	30389
Doebler's	558BMB	23.0	55.9	37.9	69.3	7.7	38.0	3743	30100
Pioneer	35F40	24.7	67.4	40.6	57.8	7.9	34.1	3428	29645
Pioneer	36V53	23.8	66.0	38.5	58.3	8.1	35.8	3535	29366
Dairyland	St-9703Q	24.1	67.0	40.3	54.2	7.6	35.2	3370	28371
Doebler's	553GRB	22.6	65.7	37.7	57.5	7.7	36.8	3538	27902
Dyna-Gro	V4592VTNS	22.3	66.9	39.7	59.0	9.3	31.8	3500	27337
Channel	201-16VT3P	22.7	66.1	40.9	53.9	7.6	33.5	3357	26590
TA Seeds	TA 525-13V	22.0	66.4	42.2	54.5	7.8	33.1	3310	25416
Average		24.9	65.4	40.1	57.4	7.9	34.7	3452	30091

Groveland Station, NY, 2010									
Brand/ Company		Silage		30 hour			Milk2006	Milk2006	
Hybrid	Yield	Moisture	NDF	NDFD	CP	Starch	Milk/ton	Milk Yield	
	tons @65	%DM	%DM	%	%DM	%DM	lbs/ton	lbs/acre	
95 to 100-d RM									
Dyna-Gro	D39QN29	28.9	62.1	33.5	62.2	9.5	40.5	3672	37201
Mycogen	TMF 2L53	29.0	64.5	38.5	59.9	8.4	36.4	3461	35097
TA Seeds	TA 477-08	26.9	62.1	34.9	61.4	8.5	40.7	3618	33970
Hyland	HL STV50	27.4	62.9	37.4	60.4	8.1	38.3	3517	33760
LICA	1900 F/RR/HTX	27.7	63.8	35.9	57.5	8.2	39.5	3458	33529
TA Seeds	TA 501-12	25.5	65.9	36.3	59.4	8.5	37.5	3519	31438
Doebler's	495XY	22.1	61.8	35.0	60.7	8.4	40.0	3595	27826
Dairyland	HiDF 3195-Q	21.7	63.7	35.7	62.7	9.1	38.9	3608	27338
TA Seeds	TA 489-00F	21.4	63.1	37.2	61.0	9.1	35.8	3500	26178
Hyland	HL CVR64	20.8	63.4	36.0	58.2	10.0	35.0	3448	25057
Average		25.1	63.3	36.0	60.4	8.8	38.3	3539	31139
101 to 105-d RM									
NK	N49J-3000GT	30.2	60.2	35.2	62.0	7.8	41.8	3593	37966
Hyland	HL SR59	30.8	65.7	38.3	59.2	8.4	35.6	3435	37105
Garst	86T82-3000GT	29.1	62.1	34.2	60.3	7.9	40.3	3588	36582
Doebler's	553GRB	28.5	62.0	33.3	60.4	8.0	41.2	3617	36049
Pioneer	35F40	28.2	65.0	35.8	60.3	8.4	39.2	3531	34792
Pioneer	36V53	28.2	63.2	38.1	62.8	8.2	38.9	3525	34761
Master's Choice	530	28.0	67.0	35.5	58.3	8.4	38.9	3524	34444
Dekalb	DKC 5259	27.1	61.6	35.5	60.6	8.0	40.7	3563	33704
Pioneer	P0125HR	27.0	63.0	34.7	60.4	8.3	39.8	3561	33640
TA Seeds	TA 545-20	26.9	63.5	35.1	60.5	8.1	38.7	3558	33531
Channel	201-16VT3P	27.5	62.2	37.4	58.4	7.8	38.3	3452	33203
Hyland	HL B77R	27.6	67.7	38.3	57.9	8.5	34.5	3408	32973
Growmark FS	5667 GT3	26.2	64.2	35.2	60.0	8.2	38.6	3512	32187
Dyna-Gro	V4592VTNS	24.9	66.1	34.1	62.8	9.7	37.0	3635	31654
Pioneer	P0115XR	24.4	63.9	35.4	61.1	8.6	38.8	3558	30414
TA Seeds	TA 557-00F	24.5	62.0	37.1	61.3	9.1	35.7	3529	30249
Dairyland	St-9703Q	24.0	65.1	36.1	58.1	8.5	37.9	3489	29267
TA Seeds	TA 525-13V	21.8	66.4	38.7	59.2	8.5	37.2	3431	26111
Doebler's	558BMB	19.1	64.6	38.4	72.8	8.8	34.3	3691	24627
Average		26.5	64.0	36.1	60.9	8.4	38.3	3537	32803

Groveland Station, NY, 2010 (page 2)									
Brand/ Company	Hybrid	Silage		30 hour			Milk2006 Milk2006		
		Yield	Moisture	NDF	dNDF	CP	Starch	Milk/ton	Milk Yield
		tons @65	%DM	%DM	%	%DM	%DM	lbs/ton	lbs/acre
106 to 110-d RM									
Channel	209-77VT3	30.5	64.3	35.5	58.9	8.6	39.1	3510	37388
Pioneer	P1011XR	29.9	67.6	38.9	60.8	9.2	33.4	3436	35985
Dekalb	DKC 59-64	30.2	66.0	37.8	56.2	7.8	37.9	3384	35762
Dekalb	DKC 58-83	28.8	65.0	36.3	59.9	8.5	37.7	3525	35488
Channel	210-61VT3	29.0	66.1	38.6	59.1	8.7	35.4	3441	34899
Garst	85V88-3000GT	28.7	64.6	36.6	56.9	7.8	38.8	3440	34575
Dyna-Gro	V4884HTXRNS	27.6	68.9	36.1	60.6	9.4	35.8	3538	34131
Wolf River Valley	2114 HX	28.2	68.0	41.5	62.1	8.8	32.1	3407	33590
Mycogen	F2F 622	25.5	68.3	41.2	71.5	8.8	31.8	3640	32539
LICA	1084L HX	27.2	67.8	41.4	61.5	8.4	32.3	3374	32096
LICA	21SG15	27.4	68.1	41.1	56.8	8.6	32.3	3319	31879
TA Seeds	TA 565-18	26.2	65.6	37.5	59.8	8.1	36.5	3469	31852
TA Seeds	TA 575-19	25.9	66.4	37.6	58.9	8.3	37.3	3497	31734
Doebler's	611XY	24.8	65.4	37.3	60.4	8.4	37.2	3499	30340
Mycogen	F2F 665	24.1	68.4	40.9	70.3	8.9	30.5	3558	30060
Dekalb	DKC 57-50	24.9	64.2	37.7	58.5	8.1	38.3	3448	30060
Doebler's	608BMC	22.9	68.8	37.0	69.4	8.7	34.5	3607	28836
Average		27.2	66.7	38.4	61.3	8.5	35.3	3476	33012
111 to 115-d RM									
Dyna-Gro	V5294HTXRNS	31.1	68.5	35.2	59.9	8.8	37.1	3581	38960
Dekalb	DKC 67-88	33.3	68.2	41.9	59.7	8.7	32.1	3339	38912
Dekalb	DKC 63-84	30.5	66.4	36.7	59.5	8.6	37.7	3502	37375
Channel	214-14VT3P	30.2	67.1	37.6	57.7	8.8	36.1	3437	36331
Growmark FS	7007 GT	29.0	67.1	38.4	63.1	9.0	36.6	3522	35817
Pioneer	P1173HR	29.1	68.2	37.4	61.2	8.4	37.8	3516	35777
TA Seeds	TA 657-13VP	29.4	65.6	36.7	57.0	8.4	38.7	3476	35709
Dekalb	DKC 61-69	28.7	65.9	36.6	58.3	8.6	38.4	3491	35071
TA Seeds	TA 700-11	25.0	67.6	38.5	62.3	8.5	35.5	3504	30678
LICA	22S17	25.5	70.0	42.0	58.8	8.9	30.1	3245	28979
TA Seeds	TA 689-00F	24.1	67.9	41.7	57.0	8.7	32.2	3277	27643
RPM	615HRQ	21.4	68.0	40.7	61.1	9.1	31.6	3397	25416
Average		28.1	67.5	38.6	59.6	8.7	35.3	3440	33889
LSD 0.10		2.28	1.35	2.02	1.31	0.42	1.90	78	3061
Overall Mean		26.8	65.4	37.3	60.6	8.6	36.8	3499	32802

Madrid, NY, 2010		Silage		30 hour				Milk2006	Milk2006
Brand/ Company	Hybrid	Yield tons_65	Moisture %DM	NDF %DM	NDFD %	CP %DM	Starch %DM	Milk/ton lbs/ton	Milk Yield lbs/acre
85 to 90-d RM									
LICA	87S9	27.3	57.1	39.2	54.7	7.7	37.2	3446	33039
Hyland	HL SR35	27.0	57.5	40.4	55.5	7.8	36.3	3434	32383
Hyland	HL B24R	25.7	58.3	38.0	56.2	7.7	38.8	3559	31984
Master's Choice	480	25.7	55.1	36.3	54.0	7.5	40.8	3560	31916
TA Seeds	TA 290-11	25.5	54.8	37.7	54.2	7.3	40.1	3520	31441
Dairyland	ST-9789	24.8	60.2	34.4	54.3	7.7	42.8	3605	31230
RPM	435 HRQ	25.3	60.3	36.7	52.6	7.9	38.4	3515	31151
Dekalb	DKC 38-89	24.7	57.8	34.7	51.5	7.3	42.2	3543	30661
Dairyland	ST-7985	23.8	57.1	36.9	53.0	7.0	41.7	3498	29049
Pioneer	P8906HR	22.5	55.3	37.4	55.8	7.4	40.9	3540	27797
Doebler's	281 XY	22.7	60.1	38.0	52.0	7.1	39.6	3458	27410
LICA	1890 F	22.0	55.9	36.9	54.0	7.4	40.6	3498	26856
Dekalb	DKC 36-34	21.1	56.9	35.4	54.2	7.8	42.0	3581	26381
Average		24.4	57.4	37.1	54.0	7.5	40.1	3520	30100
91 to 95-d RM									
Dairyland	HiDF 3195-Q	35.2	51.6	37.6	55.0	7.6	38.9	3522	43428
Doebler's	478SL	30.9	59.4	40.7	56.3	7.7	34.8	3473	37502
Hyland	H9407BRC	30.4	58.2	37.4	54.6	7.5	37.5	3507	37321
LICA	946 LRR	30.1	58.6	40.5	55.5	7.1	35.9	3451	36278
Dekalb	DKC 45-52	30.1	56.3	36.8	51.4	7.3	40.7	3432	36136
Dyna-Gro	34VN19	28.8	60.3	36.3	54.8	8.1	39.3	3565	35919
Mycogen	F2F 383	28.3	55.2	36.1	55.0	7.9	40.7	3569	35329
Croplan	DS95RB	28.0	60.7	36.9	57.1	7.9	38.8	3579	35087
NK	N34N-3000GT	28.4	59.2	36.3	52.1	7.6	40.3	3496	34712
NK	N29T-3000GT	27.7	59.2	34.2	51.6	7.5	42.2	3550	34379
Mycogen	TMF 2L418	27.6	58.1	37.9	55.1	7.4	38.9	3498	33815
TA Seeds	TA 451-19	26.8	59.7	34.2	53.2	7.7	42.5	3585	33589
TA Seeds	TA 370-11	27.2	55.5	35.3	50.2	7.0	42.2	3477	33129
Croplan	3514 VT3	26.4	58.7	37.5	56.6	7.5	40.5	3560	32884
Hyland	HL B42R	26.0	59.5	38.0	52.2	7.6	40.9	3435	31249
Hyland	HL B40R	24.6	58.1	38.4	60.7	7.9	36.2	3602	30970
Pioneer	38H08	25.1	58.8	38.3	56.7	7.3	39.4	3521	30913
Pioneer	P9512XR	25.1	58.3	38.6	53.3	7.6	38.6	3473	30501
TA Seeds	TA 327-20	23.1	57.7	38.2	56.8	7.0	40.1	3527	28489
Doebler's	491BMB	21.7	59.4	35.4	70.9	7.9	38.2	3715	28163
Average		27.6	58.1	37.2	55.5	7.6	39.3	3527	33990
96 to 100-d RM									
Growmark FS	5288VT3	32.6	54.8	38.0	53.5	7.7	38.3	3481	39762
Wolf River Valley	2702 L	32.4	55.9	40.6	57.1	7.5	35.3	3496	39630
Doebler's	495XY	28.2	60.1	37.2	54.9	7.4	40.3	3531	34804
Wolf River Valley	2596 LRR	27.2	59.7	37.9	57.9	7.3	39.0	3590	34215
RPM	515HXR	27.7	61.1	39.9	55.6	7.8	40.2	3476	33612
Croplan	3724 VT3	26.8	60.8	37.7	54.7	7.4	39.9	3486	32685
Average		29.1	58.7	38.5	55.6	7.5	38.8	3510	35784
LSD 0.10		2.65	3.82	2.39	2.30	0.40	2.33	92	3414
Overall Mean		26.8	58.0	37.4	55.0	7.5	39.5	3522	32969

Sackets Harbor, NY, 2010		Silage			30 hour			Milk2006	Milk2006
Brand/ Company	Hybrid	Yield tons_65	Moisture %DM	NDF %DM	NDFD %	CP %DM	Starch %DM	Milk/ton lbs/ton	Milk Yield lbs/acre
85 to 90-d RM									
LICA	87S9	27.7	69.2	42.1	59.3	8.7	33.1	3395	32968
Hyland	HL SR35	26.4	70.5	42.3	58.8	9.1	32.9	3373	31191
Dairyland	ST-7985	25.9	68.8	40.4	54.6	8.3	35.9	3333	30170
Master's Choice	480	24.9	70.1	40.4	56.1	8.8	34.4	3383	29446
TA Seeds	TA 290-11	24.1	68.7	41.0	58.3	8.7	35.3	3416	28787
Pioneer	P8906HR	23.8	66.9	41.4	58.7	9.0	33.8	3403	28298
Dairyland	ST-9789	23.1	70.5	39.5	58.3	9.1	34.8	3418	27538
Dekalb	DKC 38-89	22.7	71.1	39.5	57.5	9.0	34.1	3399	27028
RPM	435 HRQ	22.9	71.5	42.0	55.7	8.8	31.7	3318	26579
Hyland	HL B24R	23.2	69.6	42.8	55.8	8.5	31.1	3270	26530
Doebler's	281 XY	21.8	68.6	40.1	57.6	8.7	35.3	3409	26038
LICA	1890 F	20.6	70.7	41.8	60.0	8.7	33.9	3392	24443
Dekalb	DKC 36-34	18.9	69.3	41.8	57.0	9.6	30.5	3304	21805
Average		23.5	69.6	41.2	57.5	8.8	33.6	3370	27755
91 to 95-d RM									
LICA	946 LRR	26.2	69.7	43.0	62.1	8.1	33.6	3442	31606
Croplan	DS95RB	24.6	70.4	41.9	61.4	9.0	32.5	3427	29442
TA Seeds	TA 451-19	24.8	70.0	39.2	55.8	9.0	35.1	3381	29374
Mycogen	TMF 2L418	24.4	71.5	42.7	58.4	8.7	30.1	3325	28396
Doebler's	478SL	23.9	71.1	43.2	60.3	8.4	31.3	3385	28298
NK	N34N-3000GT	24.4	70.9	43.1	56.0	8.4	32.1	3261	27881
Pioneer	38H08	23.9	67.7	41.1	56.5	8.0	34.7	3336	27822
Pioneer	P9512XR	24.5	68.6	43.2	53.5	8.1	32.0	3231	27639
Croplan	3514 VT3	22.8	71.4	40.6	59.5	8.7	33.6	3417	27308
Mycogen	F2F 383	21.3	72.2	44.7	74.5	8.9	29.1	3650	27181
Dekalb	DKC 45-52	23.4	71.8	42.1	57.0	8.7	32.6	3297	26989
Dairyland	HiDF 3195-Q	23.7	71.8	44.5	56.5	8.7	31.1	3246	26875
TA Seeds	TA 327-20	22.4	68.4	40.3	57.1	8.4	36.1	3392	26599
NK	N29T-3000GT	22.4	70.7	39.2	54.6	8.5	35.4	3374	26366
TA Seeds	TA 370-11	21.9	70.7	39.6	53.2	8.4	34.6	3323	25399
Doebler's	491BMB	19.6	72.3	40.0	74.5	8.9	32.3	3691	25324
Hyland	HL B42R	22.2	71.9	41.8	54.1	9.6	31.1	3246	25171
Dyna-Gro	34VN19	20.9	73.6	41.7	59.1	9.3	31.7	3391	24778
Hyland	HL B40R	20.8	70.2	41.0	57.1	9.2	32.3	3352	24335
Hyland	H9407BRC	20.4	71.7	43.2	57.8	8.6	30.9	3324	23650
Average		22.9	70.8	41.8	58.9	8.7	32.6	3374	27021
96 to 100-d RM									
Wolf River Valley	2596 LRR	26.8	69.9	43.1	63.1	8.6	33.0	3454	32390
Growmark FS	5288VT3	25.7	70.8	40.9	57.5	8.6	32.7	3385	30397
Wolf River Valley	2702 L	24.6	71.6	42.5	58.7	8.7	30.6	3369	29039
Croplan	3724 VT3	22.6	73.1	40.6	56.9	9.0	32.6	3333	26452
RPM	515HXR	22.8	72.1	44.4	56.9	8.3	30.5	3260	25977
Doebler's	495XY	21.6	70.4	42.5	57.6	8.4	32.5	3315	24957
Average		24.0	71.3	42.3	58.4	8.6	32.0	3353	28202
LSD 0.10		2.51	1.45	1.96	1.61	0.41	1.87	91	3145
Overall Mean		23.3	70.5	41.7	58.4	8.7	32.8	3370	27448