



Cornell University
Cooperative Extension

2010 New York Hybrid Corn Grain Performance Trials



Plant Breeding and Genetics 2011-1



Cornell University
Cooperative Extension

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TO: Persons interested in the grain yield performance of corn hybrids in New York

This report includes a summary of our 2010 commercial hybrid corn grain trials. It shows results from ten locations in New York, divided into the following three maturity ranges:

	Base 50 Growing Degree Days	Relative Maturity
Early	1400-1900 GDD	70-90 Days
Medium Early	1900-2500 GDD	85-105 Days
Medium	2300-2700 GDD	100-115 Days

This report is designed to aid seed company representatives, corn growers, and extension educators in evaluating hybrids for yield capacity, stalk and root strength, and maturity in various regions in New York. It also provides information for developing ratings for the Cornell Guide for Integrated Field Crop Management.

While many hybrids included in this report are widely grown, others are new or experimental hybrids. In considering these tables, remember that this data represents only one year. Test results should be considered over several years before final conclusions are valid. Results gathered over several locations are a better guide than results at any one location.

We welcome comments or suggestions for improving this report for your use.

Sincerely yours,

A handwritten signature in blue ink that reads 'Margaret E. Smith'.

Margaret E. Smith
Department Extension Leader

For information on entering hybrids in the 2011 trials, please contact Judy Singer at jls10@cornell.edu or 607-255-5461 or Margaret Smith.

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Building Strong and Vibrant New York Communities

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2010 Growing Conditions

This year saw excellent corn growing conditions in much of the state. Where 2009 had featured below normal heat accumulation, the reverse was true in 2010. Temperatures across the state were generally warmer than the long-term averages from January right through October. Rainfall was variable throughout the season, but tended to be less than normal in May and considerably more than normal in June for much of the state. Most locations received ample rain through flowering time, with somewhat dryer conditions in Chemung (southern tier) and Kingston (southern Hudson Valley). September was dryer than normal, and this combined with generally late first frost dates (all after October 9) made for good grain fill and drying conditions. A heavy rain event on September 30 dropped about 3" of precipitation at Sackets Harbor and Madrid. More rain came on October 1 (1" to 3" at all locations except the westernmost one at Albion). These events pushed rainfall totals up for these two months. The resulting wet soil conditions combined with generally higher than average rainfall through October made for very wet harvest conditions in many areas. The Northern Plateau and St. Lawrence Valley climate divisions saw their wettest October since 1895! Our Madrid location had 12.6" more rain than long term averages for this site – more than 50% above normal! State average yields were excellent at 150 bu/acre – 16 bu/acre above last year's average and 6 bu/acre above the previous record for the state.

It was also a good year for many corn diseases. Gray leaf spot was prevalent in southern tier valleys, prompting farmers to spray many of their fields. A second wave of gray leaf spot appeared in September. Rust, northern leaf blight, and eye spot were common on susceptible varieties at many locations. At harvest time, stalk lodging pressure was generally low and most varieties were standing well.

Testing Procedures

Regional test locations for 2010 are shown on page –iii-. Tests were planted in 1/500 acre plots with three replications per location. All sites except Chazy were machine planted and combine harvested. Each plot's grain weight and grain moisture percentage was measured electronically on the combine. Grain yields were calculated in bu/acre at 15.5% moisture.

Yield Moisture Ratio

We have included a yield to moisture ratio (**Y/M Ratio**), which is the grain yield in bu/acre divided by the percentage grain moisture. Some breeders use this number as an estimate of hybrid efficiency. Hybrids that show high yields and earlier maturity (lower grain moistures) have higher Y/M ratios.

Stalk Lodging

At harvest time, we counted the number of stalks broken (or lodged) below the ear. This number was expressed as a proportion of the total number of plants in the plot (**% Stalk Ldg**).

Early Vigor, Plant Height, Staygreen, and Leaf Disease Ratings

At some locations, we collected data on early vigor, plant height, staygreen, and/or leaf disease severity. These data are all based on rating scales. **Early Vigor** was evaluated at knee-high stage or a bit earlier, with 6 = excellent vigor and 1 = very poor vigor. Stay green (**Stay Grn**) is a measure of how much green leaf area remains on plants in late September or early October; 5 = completely dry plants and 1 = completely green plants. At one site, there were plants for which the tops had died before the rest of the plant. This was rated as **Top Death**, with 3 = all plants and 0 = no plants showing top death. Gray leaf spot (**GLS**, caused by *Cercospora zea-maydis*), **Eyespot** (caused by *Kabatiella zea*), northern leaf blight (**NLB**, caused by *Setosphaeria turcica*) and common **Rust** (caused by *Puccinia sorghi*) each were prevalent at one or more sites, and severity was rated with 5 = completely susceptible (plant dead due to disease) and 0 = very resistant (no disease apparent).

CV, LSD, SD

We use three statistics to evaluate the quality of the data from these experiments. The coefficient of variation (**CV**) is a measure of the amount of uncontrolled variability due to differences in the soil, weather, fertility, etc. Grain yield CVs below 12 are excellent; those under 15 are acceptable. The least significant difference (**LSD**) is computed at the 5% level of probability. This indicates that if a difference between two hybrids is larger than the listed LSD, then the odds are at least 95 to 5 (or 19 to 1) that there is true varietal difference between the hybrids, or, as the statisticians say, the difference between the two hybrids is "significant." Farmers who need businessmen's odds more than statistical precision may consider a 10 bu/acre grain yield difference sufficient to guide a decision in choice of hybrid. The standard deviation (**SD**) is the measure used to determine whether the differences between two hybrids are large enough, given the precision of that experiment, to be significant and probably due to true differences between the hybrids.

**NOTE: TABLES IN THIS PUBLICATION SHOULD NOT BE REPRODUCED
IF ANY PORTION IS OMITTED OR IF ORDER OF DATA IS CHANGED.**

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**2010
Cooperators**

Early Grain Series

Cornell Cooperative Extension			
County	Local Contact	Cooperator	Location
Orleans	Mike Stanyard	Hugh Dudley	Albion
Clinton	CCE – Clinton County	Mike Davis	Chazy
St. Lawrence	Stephen Canner	Jon Greenwood	Madrid
Cayuga	Keith Severson	Steve Nemec	New Hope

Medium Early Grain Series

Cornell Cooperative Extension			
County	Local Contact	Cooperator	Location
Orleans	Mike Stanyard	Hugh Dudley	Albion
Chemung	Janice Degni	Dudley French	Chemung
Cayuga	Keith Severson	Willet Dairy	Lansing
Cayuga	Keith Severson	Steve Nemec	New Hope
Jefferson	Mike Hunter	Ron Robbins	Sackets Harbor

Medium Grain Series

Cornell Cooperative Extension			
County	Local Contact	Cooperator	Location
Livingston	Mike Stanyard	Stokoe Farms	Avon
Chemung	Janice Degni	Dudley French	Chemung
Ulster	CCE-Ulster County	Joe Hasbrouck	Kingston
Monroe	Mike Stanyard	Mark Greene	Pittsford

**Participating Companies
2010 Commercial Hybrid Corn Field Trials**

Company/Brand	Contact for Information	Address & Phone
Channel Bio, LLC	James C. Valent jcvale@monsanto.com	612 E. Dunlop Street PO Box 157 Kentland, IN 47951 Phone: 800-331-7201
Crop Production Service Dyna-Gro Brand	Tom Barber tom.barber@cpsagu.com	1140 Sweet Road East Aurora, NY 14052 Phone: 716-912-5494 Fax: 716-652-1614
Doebler's PA Hybrids, Inc	Doug Messersmith dmesser@doeblers.com	202 Tiadaghton Avenue Jersey Shore, PA 17740 Phone: 570-753-3210 Fax: 570-753-5302
Growmark FS	Mark Guttendorf mguttendorf@growmarkfs.com	308 N.E. Front Street Milford, DE 19963 Phone: 607-842-6330 Fax: call first
Hubner Seed	Matt Willard matt.willard@hubnerseed.com	10280 West SR 28 West Lebanon, IN 47991 Phone: 765-893-4428
Hyland Seeds	Ryan Snobelen rsnobelen@hylandseeds.com	1015 North 51 st Street, Suite E Grand Forks, ND 58203 Phone: 800-265-7403 Fax: 519-676-6800
T A Seeds	Taylor Doebler III taylor@taseeds.com	PO Box 300 Avis, PA 17721 Phone: 570-753-5503 Fax: 570-753-4445

**Table 1. 2010 Early Maturity Hybrids Trial Summary
(Madrid, Albion, New Hope, Chazy)**

Brand	Hybrid	% Yield		% Moisture		Stalk Ldg	Early Vigor*	Stay Grn*
		Bu/A	Mois	Y/M Ratio	ture			
Hyland	HL B32R	232	20.3	11.4	6	5.5	3.8	
Hyland	HL 4227	204	20.4	10.0	3	5.8	3.8	
Hyland	8234	215	20.7	10.4	2	4.7	2.7	
T A Seeds	TA370-11	234	20.8	11.3	4	4.3	2.8	
Doebler's	281XY	214	20.8	10.3	6	4.6	3.8	
Growmark FS	3989VT3	227	20.9	10.9	2	5.5	2.6	
T A Seeds	TA327-20	220	20.9	10.5	2	3.9	2.8	
Hyland	HL CVR48	217	21.1	10.3	2	5.8	2.8	
Cornell	EX0102	211	21.3	9.9	6	4.2	3.8	
Growmark FS	3703VT3	212	21.4	9.9	4	4.0	1.5	
T A Seeds	TA451-11	239	22.2	10.8	4	3.5	2.8	
Doebler's	362GR	228	22.7	10.0	5	4.0	2.4	
Dyna-Gro	51V57	238	24.6	9.7	3	5.4	2.4	
	Mean	222	21.4	10.4	4	4.7	2.9	
	CV	8	5.1					
	LSD	14	0.9					
	SD	17	1.1					

* 2 locations only

Table 2. 2010 Early Maturity Hybrids, Madrid, St. Lawrence County, Northern NY

Brand	Hybrid	Yield Bu/A	% Mois		% Y/M		Stalk Ldg	Early Vigor	Stay Grn	Eye- NLB	spot	Planted:		Harvested:	
			ture	Ratio	Ldg	Vigor						Grn	spot	April 30 2010	Oct 18 2010
Hyland	HL B32R	247	19.1	12.9	1	5.0	3.2	2.0	1.0			86/50			
Hyland	HL 4227	209	19.2	10.9	0	5.8	2.5	3.0	2.0			Growing	Rainfall		
Doebler's	281XY	231	19.4	11.9	2	4.5	2.8	2.0	0.0			Degree Days (Inches)			
Hyland	8234	245	20.0	12.3	0	5.3	2.3	3.0	1.0			2010	Ave.	2010	Ave.
T A Seeds	TA370-11	244	20.0	12.2	0	4.0	2.3	1.0	1.0	May		380	305	2.2	2.8
T A Seeds	TA327-20	238	20.3	11.7	0	4.0	3.0	1.0	1.0	June		465	488	6.5	3.5
Hyland	HL CVR48	231	20.3	11.4	0	6.0	2.9	1.0	1.0	July		687	655	3.6	3.3
Growmark FS	3703VT3	234	20.8	11.3	0	4.0	1.3	1.0	3.0	Aug		620	585	5.6	3.4
T A Seeds	TA451-11	244	20.9	11.7	0	3.5	2.2	1.0	1.0	Sept		361	345	7.9	3.5
Growmark FS	3989VT3	251	21.0	12.0	0	5.7	2.3	0.0	2.0	Oct		113	138	6.8	3.5
Cornell	EX0102	223	21.1	10.6	0	4.3	3.2	2.0	2.0						
Doebler's	362GR	250	21.8	11.5	1	4.0	2.2	2.0	1.0	Total		2626	2516	32.6	20.0
Dyna-Gro	51V57	251	22.5	11.2	0	6.0	2.3	0.0	2.0	% Norm		104		163.1	
										Departure		110		12.6	
	Mean	238	20.5	11.6	0.3	4.8	2.5	1.5	1.4						
	CV	5	5.1												
	LSD	20	1.7												
	SD	12	1.0												

Table 3. 2010 Early Maturity Hybrids, Albion, Orleans County, Western NY

Brand	Hybrid	Yield Bu/A	% Mois		% Y/M		Stalk Ldg	Early Vigor	Stay Grn	Eye- NLB	spot	Planted:		Harvested:	
			ture	Ratio	Ldg	Vigor						Grn	spot	May 1 2010	Oct 19 2010
Cornell	EX0102	183	18.1	10.1	6	4.0	4.5					86/50			
Hyland	HL B32R	230	18.3	12.6	2	6.0	4.5					Growing	Rainfall		
Growmark FS	3989VT3	223	18.3	12.2	1	5.3	2.8					Degree Days (Inches)			
Doebler's	281XY	210	18.3	11.5	2	4.7	4.7					2010	Ave.	2010	Ave.
T A Seeds	TA370-11	226	18.4	12.3	3	4.5	3.3			May		409	337	2.4	3.0
Growmark FS	3703VT3	218	18.5	11.8	0	4.0	1.7			June		539	540	4.6	3.0
T A Seeds	TA327-20	204	18.5	11.0	0	3.8	2.7			July		745	676	4.3	3.1
T A Seeds	TA451-11	252	18.7	13.5	1	3.5	3.3			Aug		670	635	2.6	3.1
Hyland	8234	202	18.7	10.8	0	4.0	3.0			Sept		439	436	3.0	3.6
Doebler's	362GR	222	19.0	11.7	1	4.0	2.7			Oct		170	197	3.1	3.1
Hyland	HL CVR48	202	19.0	10.6	1	5.5	2.8								
Hyland	HL 4227	182	19.1	9.5	1	5.8	5.0			Total		2972	2823	20.0	18.8
Dyna-Gro	51V57	229	20.4	11.2	0	4.8	2.5			% Norm		105		106.3	
										Departure		150		1.2	
	Mean	214	18.7	11.4	1	4.6	3.3								
	CV	7	2.9												
	LSD	26	0.9												
	SD	16	0.5												

Table 4. 2010 Early Maturity Hybrids, New Hope, Cayuga County, Central NY

Brand	Hybrid	Yield Bu/A	% Moisture		% Stalk		Top Rust* Death	Planted: May 3 2010	Harvested: Oct 20 2010
			Mois ture	Y/M Ratio	Y/M Ldg	Stalk Ldg			
Hyland	HL 4227	186	22.0	8.5	0	2.5	1.7	86/50	
T A Seeds	TA370-11	196	22.2	8.8	0	1.0	2.0	Growing	Rainfall
T A Seeds	TA327-20	180	22.3	8.1	0	1.5	2.5	Degree Days (Inches)	
Growmark FS	3989VT3	199	22.4	8.9	0	3.0	2.7	2010 Ave.	2010 Ave.
T A Seeds	TA451-11	208	22.8	9.1	0	3.0	1.0	May	364 291 3.3 3.3
Hyland	8234	196	23.1	8.5	0	3.0	3.0	June	472 471 5.4 4.4
Hyland	HL B32R	206	23.3	8.8	1	2.5	2.7	July	632 580 4.7 4.1
Cornell	EX0102	176	23.3	7.6	0	1.0	1.7	Aug	559 571 6.0 3.7
Hyland	HL CVR48	204	23.4	8.7	0	2.5	0.8	Sept	355 381 3.0 4.2
Doebler's	281XY	195	23.6	8.3	1	2.0	1.0	Oct	129 159 7.3 3.7
Growmark FS	3703VT3	188	25.6	7.3	1	1.5	1.0	Total	2511 2451 29.6 23.4
Doebler's	362GR	178	26.4	6.7	2	3.5	2.0	% Norm	102 126.6
Dyna-Gro	51V57	229	28.6	8.0	0	1.0	1.0	Departure	60 6.2
	Mean	195	23.8	8.3	0.4	2.2	1.8		
	CV	7	4.7						
	LSD	23	1.8						
	SD	14	1.1						

*Reps 1 and 2 only

Table 5. 2010 Early Maturity Hybrids, Chazy, Clinton County, Northern NY

Brand	Hybrid	Yield Bu/A	% Moisture		% Stalk		Planted: May 12 2010	Harvested: Oct 28 2010
			Mois ture	Y/M Ratio	Y/M Ldg	Stalk Ldg		
Hyland	HL B32R	244	20.4	12.0	18		86/50	
Growmark FS	3703VT3	210	20.6	10.2	14		Growing	Rainfall
Hyland	HL 4227	241	21.2	11.4	10		Degree Days (Inches)	
Hyland	8234	217	21.2	10.2	9		2010 Ave.	2010 Ave.
Growmark FS	3989VT3	234	21.7	10.8	8	May	298 258 0.1 2.2	
Hyland	HL CVR48	231	21.8	10.6	9	June	423 427 4.0 3.3	
Doebler's	281XY	221	22.0	10.0	18	July	697 616 2.2 2.6	
T A Seeds	TA327-20	257	22.4	11.5	7	Aug	561 583 5.4 3.4	
T A Seeds	TA370-11	270	22.7	11.9	11	Sept	372 374 2.7 3.0	
Cornell	EX0102	264	22.7	11.6	18	Oct	109 124 6.3 4.3	
Doebler's	362GR	261	23.7	11.0	16	Total	2460 2381 20.8 18.7	
T A Seeds	TA451-11	253	26.4	9.6	13	% Norm	103 110.8	
Dyna-Gro	51V57	243	26.8	9.1	13	Departure	79 2.0	
	Mean	242	22.6	10.8	13			
	CV	11	6.6					
	LSD	41	2.5					
	SD	25	1.5					

**Table 6. 2010 Medium Early Maturity Hybrids Trial Summary
(Lansing, Albion, Chemung, Sackets Harbor)**

Brand	Hybrid	Yield Bu/A	% Moisture		% Stalk Ldg		Early Vigor	Stay Grn
			Mois ture	Y/M Ratio	Stalk Ldg	Early Vigor		
Hubner	H5135VT3	201	18.7	10.7	1	4.3	2.2	
Dyna-Gro	D32RR29	204	18.8	10.9	2	5.5	2.3	
Hyland	8454	203	18.9	10.7	9	5.2	2.8	
Dyna-Gro	54V78	201	18.9	10.6	14	4.9	2.6	
Hubner	H5099VT3	195	18.9	10.3	3	4.3	2.5	
Dyna-Gro	D27GC19	185	18.9	9.8	3	5.7	3.9	
Hyland	HL CVR54	205	19.0	10.8	11	4.9	2.5	
ChannelBio	193-46VT3	199	19.0	10.5	2	5.0	2.8	
Growmark FS	4501VT3	190	19.0	10.0	9	5.6	2.7	
Doebler's	RPM 435HRQ	212	19.3	11.0	3	4.7	2.1	
Growmark FS	4707VT3	204	19.6	10.4	5	4.3	2.9	
ChannelBio	196-06VT3	205	19.8	10.4	4	4.7	2.6	
Hyland	R265	223	19.9	11.2	1	5.3	2.0	
Hyland	CVR68	207	20.0	10.4	6	4.3	2.6	
Doebler's	553GR-B	214	20.1	10.6	3	4.8	2.2	
Growmark FS	5099VT3	209	20.2	10.3	9	4.4	2.5	
Growmark FS	5005VT3	211	20.3	10.4	8	4.5	2.7	
Hyland	CVR74	223	20.7	10.8	1	4.6	2.1	
Growmark FS	5667GT3	227	20.8	10.9	1	5.0	2.2	
T A Seeds	TA531-20	221	20.8	10.6	1	5.3	1.9	
Doebler's	RPM 515HXR	215	20.8	10.3	4	4.8	2.1	
Doebler's	495XY	214	21.0	10.2	2	5.2	2.1	
T A Seeds	TA525-13V	212	21.2	10.0	2	3.6	2.4	
Dyna-Gro	D40SS09	211	21.2	10.0	8	4.0	2.4	
Growmark FS	5595VT3	221	21.5	10.3	5	4.9	2.0	
T A Seeds	TA545-20	231	21.6	10.7	2	5.2	2.0	
	Mean	209	20.0	10.5	5	4.8	2.4	
	CV	8	3.1					
	LSD	13	0.5					
	SD	16	0.6					

Table 7. 2010 Medium Early Maturity Hybrids, Lansing, Cayuga County, Central NY

Brand	Hybrid	Yield Bu/A	%		%		Early Vigor	Stay Grn	Eye- Spot	Planted: May 7 2010	Harvested: Oct 26 2010		
			Mois ture	Y/M Ratio	Stalk Ldg	Stalk Ldg					2010	Ave.	2010
Dyna-Gro	D27GC19	217	22.0	9.9	1	6.0	3.5	2.0		86/50			
Hubner	H5135VT3	227	22.1	10.3	0	4.0	2.0	3.0		Growing	Rainfall		
Hubner	H5099VT3	231	22.2	10.4	0	4.0	2.3	3.0		Degree Days	(Inches)		
Hyland	8454	223	22.2	10.0	5	5.0	3.0	2.0		2010	Ave.	2010	Ave.
Dyna-Gro	D32RR29	239	22.3	10.7	0	5.0	1.8	4.0	May	414	316	2.2	3.1
ChannelBio	193-46VT3	231	22.3	10.4	0	6.0	2.8	4.0	June	521	515	5.2	3.8
Dyna-Gro	54V78	244	22.4	10.9	0	5.0	2.5	2.0	July	694	644	4.3	3.5
Growmark FS	4501VT3	222	22.4	9.9	0	5.0	2.3	2.0	Aug	627	608	5.8	3.2
Hyland	HL CVR54	249	22.6	11.0	0	5.0	2.3	2.0	Sept	382	408	2.6	4.1
Doebler's	RPM 435HRQ	228	23.2	9.8	0	5.0	1.5	3.0	Oct	151	184	5.8	3.3
Growmark FS	4707VT3	230	23.8	9.7	1	4.0	2.5	2.0					
ChannelBio	196-06VT3	232	24.2	9.6	0	5.0	2.5	2.0	Total	2789	2676	26.0	21.0
Hyland	CVR68	247	24.4	10.1	0	4.0	2.2	2.0	% Norm	104		123.4	
Hyland	R265	247	24.4	10.1	0	5.0	1.8	2.0	Departure	113		4.9	
Growmark FS	5099VT3	241	24.5	9.8	0	4.0	2.2	2.0					
Growmark FS	5005VT3	234	24.9	9.4	0	4.0	2.2	2.0					
T A Seeds	TA531-20	252	25.1	10.0	0	5.0	1.3	2.0					
Doebler's	495XY	232	25.5	9.1	0	5.0	1.7	2.0					
Doebler's	RPM 515HXR	251	25.8	9.7	0	5.0	1.7	1.0					
Growmark FS	5667GT3	265	26.1	10.2	0	5.0	1.8	1.0					
T A Seeds	TA525-13V	251	26.3	9.5	0	3.0	2.0	2.0					
Dyna-Gro	D40SS09	239	26.6	9.0	1	3.0	1.8	2.0					
Hyland	CVR74	254	26.9	9.4	0	4.0	1.7	1.0					
Growmark FS	5595VT3	249	27.6	9.0	1	5.0	1.5	2.0					
T A Seeds	TA545-20	255	27.9	9.1	0	5.0	1.5	1.0					
	Mean	240	24.3	9.9	0.4	4.6	2.1	2.1					
	CV	5	4.0										
	LSD	19	1.6										
	SD	12	1.0										

Table 8. 2010 Medium Early Maturity Hybrids, Albion, Orleans County, Western NY

Brand	Hybrid	Yield Bu/A	%		Y/M Ratio	%		Early Vigor	Stay Grn	Planted: May 1 2010	Harvested: Oct 19 2010		
			Mois ture	Stalk Ldg		2010	Ave.				2010	Ave.	
Hubner	H5135VT3	210	18.2	11.5	0	4.7	2.3			86/50			
Dyna-Gro	D27GC19	192	18.3	10.5	2	5.5	4.5			Growing	Rainfall		
Dyna-Gro	54V78	223	18.4	12.1	3	4.8	3.3			Degree Days	(Inches)		
Hubner	H5099VT3	200	18.4	10.9	1	4.7	3.3			2010	Ave.	2010	Ave.
Dyna-Gro	D32RR29	217	18.6	11.7	1	5.3	3.0	May	409	337	2.4	3.0	
Hyland	HL CVR54	230	18.7	12.3	1	5.0	3.2	June	539	540	4.6	3.0	
Hyland	8454	226	18.7	12.1	0	5.0	3.5	July	745	676	4.3	3.1	
Doebler's	RPM 435HRQ	232	18.8	12.3	1	4.5	2.3	Aug	670	635	2.6	3.1	
ChannelBio	193-46VT3	213	18.8	11.3	0	4.8	3.2	Sept	439	436	3.0	3.6	
ChannelBio	196-06VT3	198	18.9	10.5	0	5.0	3.2	Oct	170	197	3.1	3.1	
Growmark FS	4501VT3	200	19.0	10.5	1	5.7	2.8						
Growmark FS	4707VT3	224	19.1	11.7	1	4.3	3.7	Total	2972	2823	20.0	18.8	
Hyland	CVR68	233	19.3	12.1	0	4.3	3.2	% Norm	105		106.3		
Hyland	CVR74	249	19.4	12.8	0	4.7	2.8	Departure	150		1.2		
Hyland	R265	244	19.4	12.6	0	5.0	2.2						
Doebler's	553GR-B	217	19.6	11.1	0	4.5	2.3						
Growmark FS	5005VT3	243	19.9	12.2	1	4.3	3.3						
Growmark FS	5099VT3	232	20.1	11.5	1	4.0	2.5						
Growmark FS	5667GT3	233	20.4	11.4	0	4.7	2.5						
Doebler's	RPM 515HXR	235	21.0	11.2	0	4.3	2.2						
T A Seeds	TA531-20	242	21.4	11.3	0	5.5	1.7						
Dyna-Gro	D40SS09	246	21.5	11.4	0	4.3	2.8						
Growmark FS	5595VT3	243	21.5	11.3	1	4.7	2.7						
T A Seeds	TA545-20	246	21.6	11.4	0	5.0	1.7						
Doebler's	495XY	247	21.8	11.3	2	5.0	2.0						
T A Seeds	TA525-13V	226	22.0	10.3	1	4.0	3.0						
	Mean	227	19.7	11.5	1	4.8	2.8						
	CV	5	3.0										
	LSD	18	1.0										
	SD	11	0.6										

Table 9. 2010 Medium Early Maturity Hybrids, Chemung, Chemung County, Southern Tier NY

Brand	Hybrid	Yield Bu/A	% Moisture		% Stalk Ldg		Early Vigor	Stay Grn	GLS	Planted: May 6 2010	Harvested: Nov 3 2010		
			Mois ture	Y/M Ratio	Stalk Ldg	Early Vigor					Stay Grn	GLS	Degree Days
Hubner	H5135VT3	195	17.6	11.1	0	4.0	2.8	3.7		86/50			
Hyland	8454	208	17.8	11.7	0	5.0	2.8	3.8		Growing		Rainfall	
Dyna-Gro	D32RR29	192	17.8	10.8	0	6.0	2.8	3.5		Degree Days		(Inches)	
Hyland	HL CVR54	213	17.9	11.9	0	5.0	2.7	3.7		2010	Ave.	2010	Ave.
Growmark FS	4501VT3	196	17.9	10.9	1	6.0	3.2	3.7	May	396	349	2.6	3.1
Dyna-Gro	54V78	196	18.0	10.9	2	5.0	2.8	4.0	June	537	534	3.8	4.1
ChannelBio	193-46VT3	194	18.0	10.8	0	5.0	2.8	3.7	July	651	626	2.1	3.5
Dyna-Gro	D27GC19	175	18.0	9.7	1	6.0	4.5	3.3	Aug	613	619	3.1	3.4
Hubner	H5099VT3	190	18.1	10.5	0	4.0	2.5	3.8	Sept	402	417	2.1	3.6
Doebler's	RPM 435HRQ	204	18.2	11.2	0	5.0	2.7	3.5	Oct	186	175	7.7	3.2
Growmark FS	4707VT3	201	18.5	10.9	0	5.0	3.2	3.7					
Hyland	R265	214	18.6	11.5	0	5.0	2.5	3.2	Total	2785	2720	21.4	20.9
ChannelBio	196-06VT3	207	18.7	11.1	0	5.0	2.8	3.5	% Norm	102		102.4	
Growmark FS	5005VT3	211	18.9	11.2	0	5.0	2.8	3.5	Departure	65		0.5	
Hyland	CVR68	217	19.0	11.4	1	5.0	2.8	4.0					
Hyland	CVR74	214	19.0	11.3	0	5.0	2.3	3.5					
Growmark FS	5099VT3	208	19.0	10.9	1	5.0	3.0	3.5					
Doebler's	RPM 515HXR	201	19.0	10.6	2	5.0	2.7	4.2					
Doebler's	495XY	202	19.1	10.6	0	5.0	3.0	4.0					
Doebler's	553GR-B	219	19.2	11.4	0	5.0	2.7	4.0					
Dyna-Gro	D40SS09	212	19.2	11.0	1	4.0	2.7	3.5					
T A Seeds	TA545-20	241	19.3	12.5	1	5.0	2.5	3.8					
Growmark FS	5595VT3	224	19.3	11.6	2	6.0	2.2	3.7					
T A Seeds	TA525-13V	214	19.3	11.1	1	4.0	2.7	3.3					
Growmark FS	5667GT3	217	19.4	11.2	0	5.0	2.7	4.0					
T A Seeds	TA531-20	213	19.4	11.0	1	5.0	2.5	3.7					
	Mean	207	18.6	11.1	1	5.0	2.8	3.7					
	CV		7	1.9									
	LSD		23	0.6									
	SD		14	0.4									

Table 10. 2010 Medium Early Maturity Hybrids, Sackets Harbor, Jefferson County, Northern NY

Brand	Hybrid	Yield Bu/A	%		Stalk Ldg	Early Vigor	Stay Grn	Planted:		Harvested:		
			Mois ture	Y/M Ratio				May 11 2010	Dec 9 2010	2010	Ave.	2010
Dyna-Gro	D32RR29	170	16.7	10.2	8	5.7	1.5	86/50				
Hubner	H5099VT3	158	16.8	9.4	10	4.0	1.7	Growing		Rainfall		
Hyland	8454	156	16.8	9.3	32	5.3	2.0	Degree Days (Inches)				
Hubner	H5135VT3	173	16.9	10.2	3	4.3	1.5	2010	Ave.	2010	Ave.	
Dyna-Gro	54V78	139	16.9	8.2	49	5.0	1.7	May	368	273	1.9	3.1
Hyland	HL CVR54	129	16.9	7.6	44	5.0	1.7	June	446	440	6.1	2.9
ChannelBio	193-46VT3	159	17.0	9.4	8	4.7	2.2	July	667	587	3.5	2.7
T A Seeds	TA525-13V	157	17.0	9.2	7	3.3	1.8	Aug	615	550	2.5	3.2
Growmark FS	4501VT3	143	17.0	8.4	33	6.0	2.3	Sept	391	361	6.7	3.7
Doebler's	RPM 435HRQ	184	17.1	10.8	9	4.3	1.8	Oct	137	153	4.5	3.7
Hyland	R265	188	17.2	10.9	5	5.7	1.5					
Growmark FS	4707VT3	162	17.2	9.4	20	4.5	2.2	Total	2624	2364	25.1	19.2
Dyna-Gro	D27GC19	157	17.2	9.1	7	5.5	3.0	% Norm	111		130.9	
ChannelBio	196-06VT3	183	17.3	10.6	17	4.5	1.8	Departure	260		5.9	
Doebler's	553GR-B	172	17.3	9.9	14	4.7	1.8					
Growmark FS	5005VT3	155	17.3	9.0	31	4.7	2.5					
Growmark FS	5099VT3	153	17.3	8.8	33	4.7	2.3					
Hyland	CVR74	177	17.4	10.2	5	4.7	1.5					
T A Seeds	TA531-20	176	17.4	10.1	4	5.7	2.2					
Doebler's	RPM 515HXR	173	17.4	9.9	14	5.0	1.8					
Growmark FS	5595VT3	168	17.4	9.7	18	4.3	1.7					
Dyna-Gro	D40SS09	145	17.4	8.3	29	3.8	2.2					
Hyland	CVR68	130	17.4	7.5	21	4.0	2.2					
Growmark FS	5667GT3	193	17.5	11.0	4	5.0	1.8					
Doebler's	495XY	173	17.5	9.9	5	5.0	1.7					
T A Seeds	TA545-20	179	17.6	10.2	5	5.3	2.3					
	Mean	164	17.2	9.5	17	4.8	2.0					
	CV	15	1.6									
	LSD	40	0.4									
	SD	25	0.3									

**Table 11. 2010 Medium Maturity Hybrids Trial Summary
(Chemung, Pittsford, Avon, Kingston)**

Brand	Hybrid	Yield Bu/A	%	%	Stalk Ldg	Early Vigor*	Stay Grn	GLS**
			Mois ture	Y/M Ratio				
ChannelBio	201-16VT3P	218	20.9	10.4	2	4.8	4.0	3.8
Dyna-Gro	D44SS49	230	21.2	10.8	1	5.1	2.9	3.6
T A Seeds	TA545-20	240	21.6	11.1	0	5.3	2.8	3.7
T A Seeds	TA590-00	237	21.9	10.8	1	4.6	2.5	3.4
Hubner	H5222VT3	230	22.1	10.4	2	4.7	3.0	3.8
Growmark FS	6296VT3	235	22.8	10.3	2	4.7	3.0	3.3
Hyland	HL B77R	235	22.9	10.3	1	4.8	3.1	3.6
Doebler's	RPM 615HRQ	232	23.2	10.0	1	4.4	2.7	3.3
T A Seeds	TA656-00	231	23.4	9.9	1	4.2	2.6	3.4
T A Seeds	TA657-13VP	241	23.6	10.2	0	4.2	2.5	3.6
	Mean	233	22.4	10.4	1	4.7	2.9	3.6
	CV	8	5.3					
	LSD	14	1.0					
	SD	18	1.2					

* 3 locs only

** 2 locs only

Table 12. 2010 Medium Maturity Hybrids, Chemung, Chemung County, Southern Tier NY

Brand	Hybrid	Yield Bu/A	%		Stalk Ldg	Early Vigor	Stay Grn GLS		Planted: May 6 2010	Harvested: Nov 3 2010			
			Mois ture	Y/M Ratio			Mois ture	Y/M Ratio		Mois ture	Y/M Ratio	Mois ture	Y/M Ratio
ChannelBio	201-16VT3P	217	19.9	10.9	3	5.0	3.2	3.7	86/50				
Dyna-Gro	D44SS49	241	20.0	12.1	1	5.0	2.7	3.7	Growing	Rainfall			
T A Seeds	TA545-20	233	20.1	11.6	0	5.0	3.2	3.8	Degree Days (Inches)				
Hubner	H5222VT3	234	20.6	11.4	2	5.0	2.8	3.7	2010	Ave.	2010	Ave.	
T A Seeds	TA590-00	239	22.0	10.9	0	4.0	2.3	3.5	May	396	349	2.6	3.1
Doebler's	RPM 615HRQ	229	22.1	10.4	0	5.0	2.7	3.5	June	537	534	3.8	4.1
T A Seeds	TA657-13VP	242	22.2	10.9	0	5.0	2.7	3.7	July	651	626	2.1	3.5
Growmark FS	6296VT3	247	22.4	11.0	0	6.0	3.0	3.3	Aug	613	619	3.1	3.4
Hyland	HL B77R	205	23.0	8.9	1	5.0	2.6	3.5	Sept	402	417	2.1	3.6
T A Seeds	TA656-00	233	23.8	9.8	0	4.0	2.2	3.3	Oct	186	175	7.7	3.2
	Mean	232	21.6	10.8	1	4.9	2.7	3.6	Total	2785	2720	21.4	20.9
	CV	5	3.6						% Norm	102		102.4	
	LSD	21	1.3						Departure	65		0.5	
	SD	12	0.8										

Table 13. 2010 Medium Maturity Hybrids, Pittsford, Monroe County, Western NY

Brand	Hybrid	Yield Bu/A	%		Stalk Ldg	Stay Grn	Planted: May 21 2010	Harvested: Nov 11 2010				
			Mois ture	Y/M Ratio				Mois ture	Y/M Ratio	Mois ture	Y/M Ratio	Mois ture
ChannelBio	201-16VT3P	238	21.9	10.9	0	4.7	86/50					
T A Seeds	TA545-20	243	22.0	11.0	0	2.3	Growing	Rainfall				
Hubner	H5222VT3	237	22.1	10.7	0	3.0	Degree Days (Inches)					
Dyna-Gro	D44SS49	250	22.3	11.2	1	2.7	2010	Ave.	2010	Ave.		
T A Seeds	TA590-00	250	22.3	11.2	3	2.5	May	397	314	2.6	2.9	
Doebler's	RPM 615HRQ	243	22.7	10.7	1	2.3	June	512	508	5.9	3.3	
Growmark FS	6296VT3	241	23.1	10.4	0	3.0	July	723	647	5.7	3.3	
Hyland	HL B77R	252	23.4	10.8	1	3.3	Aug	653	606	2.7	3.5	
T A Seeds	TA656-00	225	23.5	9.6	4	2.5	Sept	385	400	3.4	3.4	
T A Seeds	TA657-13VP	274	23.9	11.5	0	2.7	Oct	151	181	3.3	2.7	
	Mean	245	22.7	10.8	1	2.9	Total	2821	2655	23.5	19.1	
	CV	8	2.3				% Norm	106		123.3		
	LSD	34	0.9				Departure	166		4.5		
	SD	20	0.5									

Table 14. 2010 Medium Maturity Hybrids, Avon, Livingston County, Western NY

Brand	Hybrid	Yield Bu/A	% Moisture	% Y/M Ratio	% Stalk Ldg	Early Vigor	Stay Grn		Planted:	Harvested:		
									May 20 2010	Nov 2 2010		
ChannelBio	201-16VT3P	231	23.4	9.9	0	4.0	3.3		86/50			
Dyna-Gro	D44SS49	235	24.3	9.7	0	4.3	3.0		Growing	Rainfall		
T A Seeds	TA590-00	239	24.5	9.8	1	4.7	3.0		Degree Days (Inches)			
T A Seeds	TA656-00	239	24.9	9.6	0	3.7	3.3		2010	Ave.	2010	Ave.
T A Seeds	TA545-20	266	25.1	10.6	1	5.0	2.5	May	397	314	1.9	2.8
Hyland	HL B77R	258	25.2	10.2	0	4.3	2.8	June	539	506	4.8	3.3
Growmark FS	6296VT3	238	25.8	9.2	1	3.8	2.8	July	707	630	4.7	3.4
Doebler's	RPM 615HRQ	244	26.3	9.3	1	4.3	3.7	Aug	645	586	3.6	3.4
Hubner	H5222VT3	257	27.1	9.5	0	4.0	2.5	Sept	387	395	2.6	3.3
T A Seeds	TA657-13VP	237	27.4	8.6	0	4.0	2.0	Oct	158	188	3.9	2.7
	Mean	244	25.4	9.6	0.4	4.2	2.9	Total	2833	2618	21.5	18.9
	CV	8	7.4					% Norm	108		113.5	
	LSD	34	3.2					Departure	215		2.6	
	SD	20	1.9									

Table 15. 2010 Medium Maturity Hybrids, Kingston, Ulster County, Hudson Valley NY

Brand	Hybrid	Yield Bu/A	% Moisture	% Y/M Ratio	% Stalk Ldg	Early Vigor	Stay Grn	GLS	Planted:	Harvested:			
									May 5 2010	Oct 28 2010			
Dyna-Gro	D44SS49	195	18.3	10.7	2	5.5	3.3	3.5	86/50				
ChannelBio	201-16VT3P	188	18.5	10.2	6	5.3	4.8	3.9	Growing	Rainfall			
Hubner	H5222VT3	192	18.7	10.3	7	5.0	3.7	3.8	Degree Days (Inches)				
T A Seeds	TA590-00	221	19.0	11.6	1	5.0	2.3	3.3	2010	Ave.	2010	Ave.	
T A Seeds	TA545-20	216	19.3	11.2	0	5.7	3.0	3.5	May	417	345	2.3	3.7
Growmark FS	6296VT3	215	20.0	10.8	8	4.5	3.0	3.2	June	562	509	2.3	3.8
Hyland	HL B77R	225	20.2	11.1	3	4.8	3.8	3.7	July	699	605	3.5	4.8
T A Seeds	TA657-13VP	211	20.8	10.1	1	3.7	2.5	3.5	Aug	614	579	5.9	4.3
T A Seeds	TA656-00	228	21.4	10.7	1	5.0	2.5	3.5	Sept	479	414	1.6	4.4
Doebler's	RPM 615HRQ	210	21.8	9.6	2	4.3	2.2	3.2	Oct	255	224	7.5	5.1
	Mean	210	19.8	10.6	3	4.9	3.1	3.5	Total	3026	2676	23.0	26.0
	CV	8	5.3						% Norm	113		88.2	
	LSD	29	1.8						Departure	351		-3.1	
	SD	17	1.0										