Cornell University
Cooperative Extension

2011 New York Hybrid Corn Grain Performance Trials

Plant Breeding and Genetics 2012-1

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 2011 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,

Margaret E. Smith
Department Extension Leader

For information on entering hybrids in the 2012 trials, please contact Judy Singer at jls10@cornell.edu or 607-255-5461 or Margaret Smith.

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2011 Growing Conditions

The 2011 growing season in New York was characterized by dramatic weather events. Most counties in the state were declared disaster areas by USDA at one or more times during the growing season. Rain, flooding, and cool temperatures during planting and the early part of the growing season precipitated USDA disaster declarations for 32 of New York's 56 counties. Six central New York counties were declared disaster areas due to excessive heat and drought in July and August (Ontario, Schuyler, Seneca, Steuben, Wayne, and Yates). State average precipitation for August was the highest on record (since 1895). Twenty-four eastern New York counties were declared disaster areas due to the effects of hurricane Irene in late August and/or tropical storm Lee in early September (Albany, Broome, Chemung, Clinton, Columbia, Cortland, Delaware, Dutchess, Essex, Greene, Herkimer, Lewis, Montgomery, Otsego, Putnam, Saratoga, Schenectady, Schoharie, Sullivan, Tioga, Tompkins, Ulster, Washington, and Westchester). Several sites had severe root lodging due to these storms. State average grain yield was 133 bu/A – down from the record 2010 yield of 150 bu/A but still the 4th highest average grain yield on record. State average corn grain yields since 2003 have all been greater than 120 bu/A, while previous years all had yields below 114 bu/A.

The wet weather from August through the fall created a favorable environment for many corn leaf diseases. Gray leaf spot was prevalent in southern tier valleys, but came in a bit later than it had in 2010. Northern and anthracnose leaf blights and eyespot were present at several locations, and Stewart's wilt, rust, and northern corn leaf spot in a few places as well. Corn borer pressure was generally low.

Testing Procedures

Regional test locations for 2011 are shown on page –iii-. Tests were planted in 1/500 acre plots with three replications per location. All sites were machine planted and all except Chazy were 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 and Root 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**). We also counted plants leaning over from the base at more than a 45˚ angle as root lodged, and then expressed this number as a proportion of the total

number of plants in the plot (**% Root Ldg**). At Chazy, root lodging from Hurricane Irene was so severe in early September that it was rated as a score (**Root Ldg Score**), with 0 = no lodging to 5 = completely lodged.

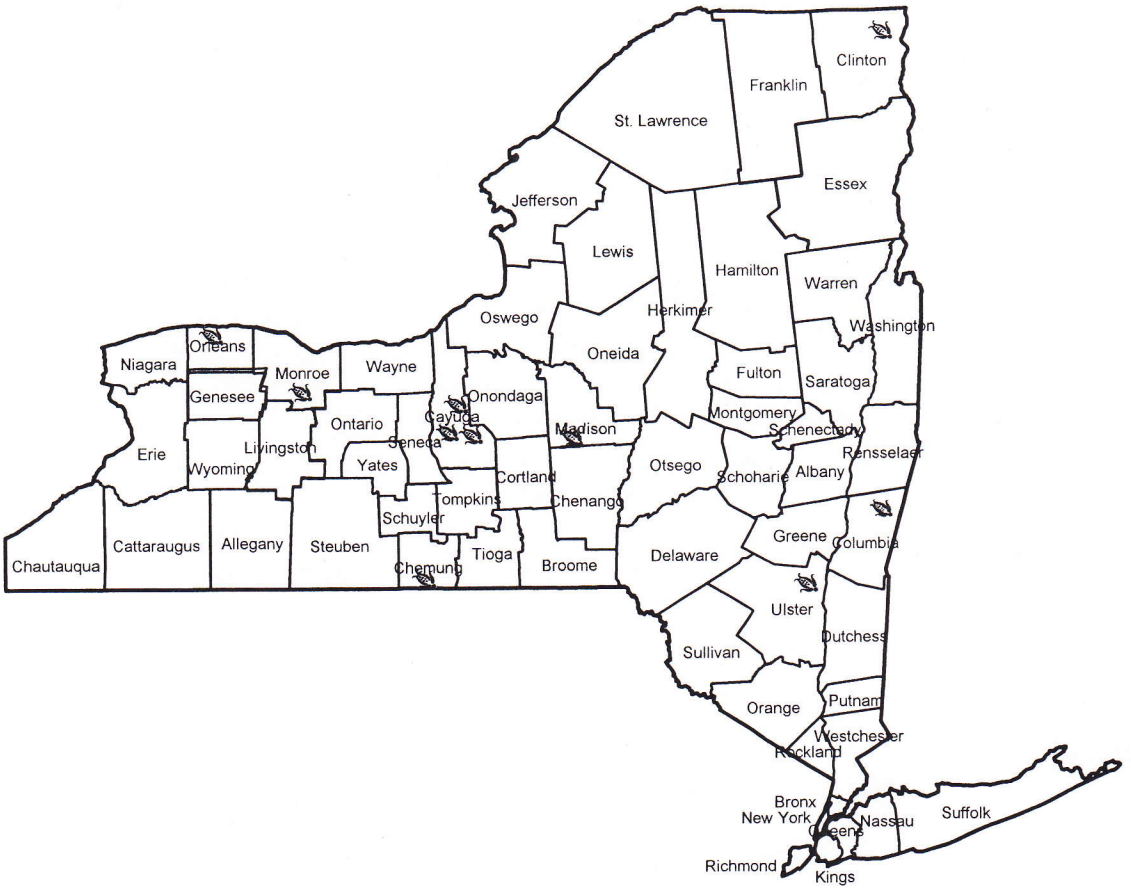
Early Vigor, Staygreen, Top Death, and Leaf Disease Ratings

Data were collected on these traits only at some locations, based on rating scales. **Early Vigor** was evaluated at knee-high stage or a bit earlier, with 5 = 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 5 = all plants showing top death and 0 = no plants showing it. Gray leaf spot (**GLS**, caused by *Cercospora zeae-maydis*), northern leaf blight (**NLB**, caused by *Setosphaeria turcica*), and general disease presence (**General Disease**, meaning several different leaf diseases were all present) each were prevalent at one or more sites, and severity was rated with 5 = completely susceptible (plant dead due to disease) and 0 = 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 around 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.

2011 Trial Locations



2011
Cooperators

Early Grain Series

County	Cornell Cooperative Extension Local Contact	Cooperator	Location
Orleans	Mike Stanyard	Hugh Dudley	Albion
Clinton	Peter Hagar	Mike Davis	Chazy
Madison	Kathryn Evans	Shawn Bossard	Morrisville
Cayuga	Keith Severson	Steve Nemec	New Hope

Medium Early Grain Series

County	Cornell Cooperative Extension 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
Columbia	Mick Bessire	Tom Kilcer	Valatie

Medium Grain Series

County	Cornell Cooperative Extension Local Contact	Cooperator	Location
Cayuga	Keith Severson	Paul Stachowski	Aurora
Chemung	Janice Degni	Dudley French	Chemung
Ulster	Teresa Rusinek	Joe Hasbrouck	Kingston
Monroe	Mike Stanyard	Mark Greene	Pittsford

Participating Companies
2011 Commercial Hybrid Corn Field Trials

Company/Brand	Contact for Information	Address & Phone
Albert Lea Seed Viking Brand	Matt Leavitt matt@alseed.com	1414 West Main PO Box 127 Albert Lea, MN 56007 Phone: 800-352-5247 Website: www.alseed.com
Channel Bio, LLC	James C. Valent jcvale@monsanto.com	612 E. Dunlop Street PO Box 157 Kentland, IN 47951 Phone: 800-331-7201
Croplan Genetics	Perry Denton pwdenton@landolakes.com	30 Franklin Street Lyons, NY 14489 Phone: 585-259-9170 Fax: 651-234-8479
Crop Production Services 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
Hyland Seeds	Jorge Acevedo jacevedo@hylandseeds.com	1015 North 51st Street, Suite E Grand Forks, ND 58203 Phone: 800-265-7403 Fax: 519-676-6800
King's Agriseeds Inc Masters Choice Brand	Dave Wilson davidwilson@kingsagriseeds.com	60 North Ronks Road, Suite K Rinks, PA 17572 Phone: 717-682-1679 Fax: 717-687-4331
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. 2011 Early Maturity Hybrids Trial Summary
(Albion, Chazy, New Hope, Morrisville)

Brand	Hybrid	Yield Bu/A	% Moisture	Y/M Ratio	% Stalk Ldg	% Root Ldg*	Early Vigor*	Stay Grn*	Top Death**
Hyland	8166	179	20.9	8.6	3	0	4.1	3.6	4.8
Channel Bio	185-80VT3P	197	21.8	9.0	2	0	3.8	3.1	4.2
T A Seeds	TA 290-31	193	21.9	8.8	1	3	4.6	4.1	4.2
Hyland	HL B32R	210	22.2	9.5	0	8	3.4	3.4	3.6
Growmark FS	3989VT3	209	22.5	9.3	1	0	4.2	3.1	3.7
Hyland	8234	190	22.9	8.3	0	2	3.8	3.0	4.9
Doebler's	329GRQ	211	22.9	9.2	3	5	3.4	2.7	3.2
T A Seeds	TA 370-11	205	23.3	8.8	1	4	3.1	2.6	3.3
Growmark FS	4212VP3	209	23.8	8.8	1	0	3.7	3.1	2.5
Growmark FS	3808VT3	209	23.8	8.8	1	1	3.3	3.1	4.4
Growmark FS	4217XRR	214	23.8	9.0	2	0	3.7	3.0	2.3
Doebler's	RPM ®269HRQ™	201	23.8	8.5	1	1	3.5	3.1	3.0
T A Seeds	TA 451-20	217	24.0	9.1	1	0	3.2	2.8	2.3
	MEAN	204	22.9	8.9	1	2	3.7	3.1	3.6
	S.D.	12	1.0						
	C.V.	6	4.3						
	LSD(.05)	9	0.8						

* 3 locations only
** 2 locations only

Table 2. 2011 Early Maturity Hybrids, Albion, Orleans County, Western NY

Brand	Hybrid	Yield Bu/A	% Moisture	Y/M Ratio	% Stalk Ldg	% Root Ldg	Early Vigor	Stay Grn	Top Death
Hyland	8166	198	19.7	10.1	8	0	3.7	3.2	5.0
Hyland	HL B32R	226	19.7	11.5	0	0	2.8	2.5	3.3
Hyland	8234	210	19.7	10.7	0	0	3.7	2.2	4.8
T A Seeds	TA 290-31	212	19.8	10.7	1	0	4.3	3.3	3.3
Channel Bio	185-80VT3P	229	19.9	11.5	0	0	3.7	2.2	4.3
Growmark FS	4217XRR	244	20.0	12.2	4	0	4.0	1.8	1.7
Doebler's	RPM ®269HRQ™	238	20.0	11.9	1	0	3.5	2.2	2.7
Growmark FS	4212VP3	235	20.3	11.6	1	0	3.0	1.8	2.3
Growmark FS	3989VT3	237	20.4	11.6	0	0	4.3	1.8	3.7
T A Seeds	TA 451-20	239	20.7	11.6	0	0	3.2	1.5	1.0
Doebler's	329GRQ	234	20.9	11.2	2	0	2.7	1.5	2.3
T A Seeds	TA 370-11	237	20.9	11.3	1	0	2.2	2.2	3.0
Growmark FS	3808VT3	228	21.1	10.8	0	0	3.5	1.8	4.3
	MEAN	228	20.2	11.3	1	0	3.4	2.2	3.2
	S.D.	12	0.3						
	C.V.	5	1.4						
	LSD(.05)	20	0.5						

Planted: May 12 2011 **Harvested:** Oct 25 2011

	86/50 Growing Degree Days		Rainfall (inches)	
	2011	**Ave.**	**2011**	**Ave.**
May	350	332	6.1	3.0
June	537	523	2.4	3.6
July	768	661	1.4	2.6
Aug	655	619	4.5	3.2
Sept	454	420	1.9	3.7
Oct	186	197	3.2	2.8
Total	2950	2752	19.5	18.8
% Norm	107		103.6	
Departure	198		0.7	

Excellent yielding site despite some deer damage.

Table 3. 2011 Early Maturity Hybrids, Chazy, Clinton County, Northern NY

Brand	Hybrid	Yield Bu/A	% Moisture	Y/M Ratio	% Stalk Ldg	Root Ldg Score
Hyland	8166	171	22.7	7.5	4	0.0
Channel Bio	185-80VT3P	168	24.2	7.0	5	2.2
T A Seeds	TA 290-31	171	25.0	6.9	5	3.7
Hyland	HL B32R	195	25.2	7.8	1	2.7
Doebler's	329GRQ	180	25.7	7.0	7	3.3
Growmark FS	3989VT3	190	25.8	7.4	3	0.0
T A Seeds	TA 370-11	184	26.6	6.9	3	1.5
Growmark FS	3808VT3	192	27.6	7.0	2	0.0
Growmark FS	4217XRR	193	28.1	6.9	3	0.7
T A Seeds	TA 451-20	206	28.3	7.3	0	1.8
Hyland	8234	179	28.7	6.3	2	1.3
Doebler's	RPM ®269HRQ™	162	29.3	5.5	2	3.7
Growmark FS	4212VP3	187	30.5	6.1	2	1.0
	MEAN	183	26.7	6.9	3	1.7
	S.D.	10	1.6			
	C.V.	6	6.2			
	LSD(.05)	17	2.7			

Planted: May 12 2011 **Harvested:** Oct 25 2011

	86/50 Growing Degree Days		Rainfall (Inches)	
	2011	**Ave.**	**2011**	**Ave.**
May	267	283	5.2	2.5
June	471	447	1.1	2.9
July	665	681	0.8	2.4
Aug	584	573	9.6	3.9
Sept	495	434	2.0	2.9
Oct	31	70	0.2	3.9
Total	2513	2487	19.0	18.5
% Norm	101		102.5	
Departure	26		0.5	

Severe root lodging as a result of Hurricane Irene was rated in early September (0 = no lodging, 5 = completely lodged)
This rating was done prior to Tropical Storm Lee, which would have added to root and stalk lodging totals.

Table 4. 2011 Early Maturity Hybrids, New Hope, Cayuga County, Central NY

Brand	Hybrid	Yield Bu/A	% Moisture	Y/M Ratio	% Stalk Ldg	% Root Ldg	Early Vigor	Stay Grn	Top Death
Hyland	8166	172	21.5	8.0	2	0	5.0	3.0	4.7
Hyland	8234	205	21.9	9.4	0	0	4.3	3.0	5.0
T A Seeds	TA 290-31	208	22.3	9.3	0	1	5.0	4.3	5.0
Hyland	HL B32R	221	22.4	9.9	0	1	4.3	3.5	3.8
Channel Bio	185-80VT3P	209	22.8	9.2	0	0	4.7	2.7	4.0
Growmark FS	4212VP3	226	22.8	9.9	0	0	5.0	2.5	2.7
Growmark FS	3989VT3	219	23.0	9.5	0	0	5.0	2.3	3.7
Doebler's	329GRQ	234	23.1	10.1	1	2	4.0	2.8	4.0
Doebler's	RPM ®269HRQ™	226	24.2	9.4	0	0	4.0	2.8	3.3
Growmark FS	3808VT3	222	24.6	9.0	0	0	4.0	2.7	4.5
T A Seeds	TA 451-20	233	25.0	9.3	0	1	3.7	2.8	3.7
Growmark FS	4217XRR	228	25.4	9.0	1	0	4.3	2.5	2.8
	MEAN	217	23.3	9.3	0	0	4.4	2.9	3.9
	S.D.	13	1.1						
	C.V.	6	4.7						
	LSD(.05)	22	1.9						

Planted: May 23 2011 **Harvested:** Nov 1 2011

	86/50 Growing Degree Days		Rainfall (Inches)	
	2011	**Ave.**	**2011**	**Ave.**
May	329	295	4.7	3.3
June	472	471	3.0	4.6
July	629	584	1.2	3.9
Aug	522	566	4.6	3.6
Sept	394	382	8.7	4.4
Oct	155	159	4.4	3.5
Total	2501	2456	26.6	23.3
% Norm	102		114.3	
Departure	45		3.3	

Excellent yielding site. At harvest, plants appeared to have been frozen while green leaf tissue was still present.

Table 5. 2011 Early Maturity Hybrids, Morrisville, Madison County, Central NY

Brand	Hybrid	Yield Bu/A	% Moisture	Y/M Ratio	% Stalk Ldg	% Root Ldg	Early Vigor	Stay Grn
Hyland	8166	174	19.6	8.9	0	0	3.5	4.5
Channel Bio	185-80VT3P	180	20.4	8.9	2	0	3.0	4.3
T A Seeds	TA 290-31	181	20.5	8.9	0	9	4.5	4.5
Growmark FS	3989VT3	191	20.7	9.2	0	1	3.2	5.0
Hyland	8234	166	21.3	7.8	0	7	3.5	3.8
Growmark FS	4212VP3	187	21.3	8.7	0	1	3.2	4.8
Hyland	HL B32R	196	21.5	9.1	1	31	3.2	4.2
Growmark FS	4217XRR	192	21.7	8.9	1	0	2.7	4.7
Doebler's	RPM ®269HRQ™	180	21.8	8.3	0	4	3.0	4.2
Growmark FS	3808VT3	195	21.8	8.9	0	3	2.3	4.8
T A Seeds	TA 370-11	179	21.9	8.2	1	16	3.3	3.0
Doebler's	329GRQ	197	22.0	9.0	1	17	3.7	3.8
T A Seeds	TA 451-20	190	22.0	8.6	2	1	2.7	4.0
	MEAN	185	21.3	8.7	1	7	3.2	4.3
	S.D.	13	0.4					
	C.V.	7	2.0					
	LSD(.05)	22	0.7					

Planted: May 13 2011 **Harvested:** Oct 31 2011

	86/50 Growing Degree Days		Rainfall (Inches)	
	2011	**Ave.**	**2011**	**Ave.**
May	297	264	3.5	4.2
June	387	428	3.4	4.2
July	566	531	1.0	3.5
Aug	461	504	6.1	3.3
Sept	348	337	9.3	4.5
Oct	126	133	2.3	3.6
Total	2186	2197	25.6	23.3
% Norm	99		109.8	
Departure	-11		2.3	

Very high rainfall in August and September led to considerable disease pressure. Top death was prevalent, with all varieties rating between 4 and 5. Leaf diseases present included northern leaf blight, anthracnose leaf blight, eyepot, and northern corn leaf spot.

Table 6. 2011 Medium Early Maturity Hybrids Trial Summary
(Chemung, New Hope, Albion, Valatie, Lansing)

Brand	Hybrid	Yield Bu/A	% Moisture	Y/M Ratio	% Stalk Ldg	% Root Ldg	Early Vigor	Stay Grn	Top Death*
Albert Lea Seed	Viking 20-90N	176	20.6	8.5	6	0	3.8	3.6	3.9
Channel Bio	190-95VT3P	198	20.7	9.6	0	1	3.6	2.7	3.4
Hyland	8454	200	21.3	9.4	0	1	3.9	3.0	3.0
Growmark FS	4501VT3	192	21.4	9.0	1	1	4.0	3.0	4.1
T A Seeds	TA 451-20	198	21.5	9.2	0	2	3.4	2.8	3.1
Hyland	8386	196	21.5	9.1	0	1	3.9	2.6	4.0
Dyna-Gro	D31VP31	188	21.5	8.7	1	0	3.5	2.9	3.7
Dyna-Gro	D35RR40	193	21.6	8.9	2	1	3.7	2.8	3.8
Hyland	8377	188	21.9	8.6	1	1	4.2	3.7	4.2
Doebler's	495XY	199	22.1	9.0	4	1	3.9	2.5	2.9
King's Agriseeds	Masters Choice 493	193	22.3	8.7	1	2	3.4	2.7	3.7
Croplan Genetics	4022RR	195	22.5	8.7	1	1	3.6	2.5	3.5
Hyland	HL 4424	206	22.6	9.1	1	0	3.5	2.7	3.0
T A Seeds	TA 477-31	215	22.7	9.5	0	1	3.7	2.5	2.7
Dyna-Gro	D37VP71	191	22.7	8.4	1	1	4.1	2.7	2.9
Croplan Genetics	3514VT3	200	22.7	8.8	0	0	4.1	2.8	3.5
Channel Bio	196-06VT3P	193	22.8	8.5	0	0	3.6	3.0	4.1
Croplan Genetics	421VT3	201	22.8	8.8	0	0	3.1	2.6	3.4
Channel Bio	197-32VT3P	209	22.8	9.2	1	0	4.1	2.4	2.7
Growmark FS	4811GT3	205	23.0	8.9	1	1	3.6	2.4	2.9
Growmark FS	4707VT3	203	23.0	8.8	0	3	3.8	2.6	2.9
Channel Bio	197-67VT3P	202	23.1	8.8	0	1	3.9	2.5	3.2
Growmark FS	5005VT3	202	23.2	8.7	1	2	4.1	2.6	2.4
Growmark FS	5099VT3	204	23.3	8.7	0	2	3.6	2.5	2.6
Hyland	HL R265	202	23.4	8.6	0	0	3.7	2.4	2.9
Albert Lea Seed	Viking 60-01N	210	23.8	8.8	2	0	4.1	2.5	3.6
Doebler's	RPM® 472XRR™	217	23.8	9.1	1	2	3.4	2.3	3.3
Doebler's	459GRQ	200	24.4	8.2	1	1	3.6	2.4	2.2
Dyna-Gro	D40SS09	204	24.4	8.4	1	2	3.5	2.2	1.8
Croplan Genetics	4338SS	217	24.5	8.9	0	0	3.8	2.0	2.6
T A Seeds	TA 545-20	224	24.8	9.0	0	0	3.8	2.3	2.3
Growmark FS	5667GT3	219	25.1	8.8	0	0	4.1	2.4	1.4
Albert Lea Seed	Viking 57-07N	217	25.3	8.6	2	1	3.8	2.6	2.6
	MEAN	202	22.8	8.8	1	1	3.7	2.6	3.1
	S.D.	17	0.7						
	C.V.	8	3.3						
	LSD(.05)	12	0.5						

* 3 locations only

Table 7. 2011 Medium Early Maturity Hybrids, Chemung, Chemung County, Southern Tier NY

Brand	Hybrid	Yield Bu/A	% Moisture	Y/M Ratio	% Stalk Ldg	% Root Ldg	Early Vigor	Stay Grn	NLB	GLS
Channel Bio	190-95VT3P	196	20.3	9.7	0	0	3.8	3.0	1.0	3.5
Hyland	8454	204	20.5	9.9	0	0	4.5	3.5	3.3	3.5
T A Seeds	TA 451-20	188	20.6	9.1	0	1	4.0	2.5	2.0	2.8
Albert Lea Seed	Viking 20-90N	185	20.7	8.9	1	0	4.3	4.0	3.3	3.0
Dyna-Gro	D31VP31	201	20.9	9.6	0	0	4.3	2.5	1.7	2.3
Channel Bio	197-32VT3P	223	21.1	10.6	0	0	4.7	2.7	2.3	3.2
Growmark FS	4501VT3	198	21.1	9.4	0	0	4.8	3.0	3.3	3.2
Dyna-Gro	D35RR40	208	21.3	9.8	0	0	4.5	2.7	3.0	2.5
King's Agriseeds	Masters Choice 493	187	21.3	8.8	0	1	3.0	2.8	2.8	2.8
Hyland	HL 4424	209	21.4	9.8	0	1	3.8	2.8	2.7	3.2
T A Seeds	TA 477-31	227	21.4	10.6	0	1	4.5	2.8	1.3	2.8
Channel Bio	197-67VT3P	222	21.4	10.3	0	0	4.8	2.8	2.0	3.5
Growmark FS	5005VT3	213	21.5	9.9	0	0	4.7	2.7	1.8	3.3
Hyland	8377	200	21.6	9.2	0	1	4.8	3.7	1.8	4.0
Croplan Genetics	4022RR	204	21.7	9.4	1	0	4.2	2.5	1.0	3.0
Dyna-Gro	D37VP71	212	21.9	9.7	1	1	4.7	3.0	1.7	3.5
Croplan Genetics	3514VT3	196	22.0	8.9	0	0	4.7	2.5	1.0	3.2
Hyland	8386	191	22.0	8.7	0	0	4.2	3.0	2.0	2.8
Doebler's	RPM® 472XRR™	210	22.0	9.5	0	2	4.5	2.7	3.0	3.5
Growmark FS	5099VT3	200	22.1	9.0	0	0	4.0	2.8	0.7	3.3
Channel Bio	196-06VT3P	210	22.2	9.4	0	0	4.3	3.2	2.3	2.7
Croplan Genetics	421VT3	186	22.2	8.4	0	0	3.3	2.8	2.7	3.0
Doebler's	459GRQ	208	22.4	9.3	0	0	4.3	2.5	3.0	3.2
Doebler's	495XY	215	22.5	9.6	0	0	5.0	2.5	3.0	3.2
Growmark FS	4707VT3	202	22.5	9.0	0	0	4.5	2.7	1.5	2.7
Growmark FS	4811GT3	209	22.5	9.3	0	1	4.2	2.5	3.0	3.0
Albert Lea Seed	Viking 60-01N	220	22.6	9.7	0	0	4.5	2.5	1.0	3.3
T A Seeds	TA 545-20	215	22.7	9.5	0	0	4.7	3.0	1.7	3.5
Croplan Genetics	4338SS	221	22.7	9.7	0	0	4.3	2.0	3.3	2.5
Growmark FS	5667GT3	217	22.7	9.6	0	0	4.8	2.8	1.0	3.5
Hyland	HL R265	203	22.7	8.9	0	0	3.8	2.8	1.7	3.5
Dyna-Gro	D40SS09	220	23.3	9.4	0	1	4.7	2.2	2.3	2.7
Albert Lea Seed	Viking 57-07N	222	24.0	9.2	0	0	4.0	2.0	0.5	2.3
	MEAN	207	21.9	9.4	0	0	4.3	2.8	2.1	3.1
	S.D.	10	0.7							
	C.V.	5	3.3							
	LSD(.05)	17	1.2							

Planted: May 6 2011 **Harvested:** Nov 3 2011

86/50 Growing Degree Days

Rainfall (Inches)

	2011	Ave.	2011	Ave.
May	366	351	6.0	3.0
June	531	534	2.5	4.1
July	681	631	0.8	3.4
Aug	583	616	5.9	3.5
Sept	460	420	10.0	4.2
Oct	190	176	3.8	3.5
Total	2811	2727	29.0	21.6
% Norm	103		134.2	
Departure	84		7.4	

High yield potential site with less gray leaf spot than last year and little lodging despite high September rainfall.

Table 8. 2011 Medium Early Maturity Hybrids, New Hope, Cayuga County, Central NY

Brand	Hybrid	Yield Bu/A	% Moisture	Y/M Ratio	% Stalk Ldg	% Root Ldg	Early Vigor	Stay Grn	Top Death
Channel Bio	190-95VT3P	210	23.7	8.9	0	0	4.3	2.2	2.7
Hyland	8386	215	23.9	9.0	0	0	5.0	2.5	3.4
Growmark FS	4501VT3	201	24.1	8.4	0	1	5.0	2.8	4.2
Hyland	8377	228	24.2	9.4	1	0	5.0	2.8	3.8
T A Seeds	TA 451-20	240	24.4	9.8	0	3	3.7	2.5	3.7
Hyland	8454	218	24.6	8.9	0	0	4.7	2.7	3.0
Hyland	HL 4424	227	25.0	9.1	0	0	3.7	2.8	3.9
Dyna-Gro	D35RR40	240	25.2	9.5	2	0	5.0	2.2	3.5
Croplan Genetics	421VT3	227	25.4	8.9	0	0	3.5	2.5	4.2
Dyna-Gro	D31VP31	224	25.8	8.7	0	0	4.5	2.8	3.5
Hyland	HL R265	237	25.9	9.1	0	0	4.7	2.3	3.2
Growmark FS	4811GT3	228	26.1	8.8	0	1	3.3	2.7	3.2
Croplan Genetics	4022RR	230	26.1	8.8	1	0	4.3	2.2	2.7
T A Seeds	TA 477-31	229	26.2	8.7	0	0	4.7	2.3	2.3
King's Agriseeds	Masters Choice 493	191	26.3	7.3	0	0	3.5	3.0	4.2
Channel Bio	196-06VT3P	240	26.5	9.0	0	0	4.3	2.3	3.7
Croplan Genetics	3514VT3	220	26.7	8.2	0	0	5.0	2.5	2.7
Growmark FS	5099VT3	227	27.0	8.4	0	1	4.3	2.3	3.2
Growmark FS	4707VT3	232	27.0	8.6	0	0	4.3	2.2	3.0
Doebler's	RPM® 472XRR™	249	27.1	9.2	0	0	4.7	1.8	2.0
Channel Bio	197-32VT3P	233	27.5	8.4	0	0	4.7	2.2	2.5
Growmark FS	5005VT3	238	27.6	8.6	0	0	4.8	2.3	2.5
Channel Bio	197-67VT3P	235	27.7	8.5	0	0	4.7	2.2	2.7
T A Seeds	TA 545-20	255	28.0	9.1	0	0	4.8	2.3	1.7
Dyna-Gro	D40SS09	239	28.6	8.4	0	0	4.8	2.3	2.2
Growmark FS	5667GT3	236	28.7	8.2	0	0	4.5	2.0	1.2
Doebler's	459GRQ	235	28.7	8.2	0	0	4.0	2.2	2.2
Croplan Genetics	4338SS	247	28.7	8.6	0	1	4.7	1.7	2.2
Albert Lea Seed	Viking 57-07N	243	29.8	8.2	1	0	4.7	2.0	1.5
	MEAN	230	26.4	8.7	0	0	4.5	2.4	2.9
	S.D.	14	0.9						
	C.V.	6	3.4						
	LSD(.05)	23	1.5						

Planted: May 23 2011
Harvested: Nov 1 2011

86/50 Growing Degree Days

Rainfall (Inches)

	2011	**Ave.**	**2011**	**Ave.**
May	329	295	4.7	3.3
June	472	471	3.0	4.6
July	629	584	1.2	3.9
Aug	522	566	4.6	3.6
Sept	394	382	8.7	4.4
Oct	155	159	4.4	3.5
Total	2501	2456	26.6	23.3
% Norm	102		114.3	
Departure	45		3.3	

Excellent yielding site. At harvest, plants appeared to have been frozen while green leaf tissue was still present.

Table 9. 2011 Medium Early Maturity Hybrids, Albion, Orleans County, Western NY

Brand	Hybrid	Yield Bu/A	% Moisture	Y/M Ratio	% Stalk Ldg	% Root Ldg	Early Vigor	Stay Grn	Top Death
Albert Lea Seed	Viking 20-90N	198	20.1	9.9	10	0	3.7	3.5	4.3
Dyna-Gro	D35RR40	212	20.3	10.4	6	0	3.3	2.3	3.0
Channel Bio	190-95VT3P	224	20.3	11.0	0	0	2.8	2.5	3.0
Hyland	8454	234	20.4	11.5	0	0	4.0	2.7	2.7
T A Seeds	TA 451-20	217	20.4	10.6	1	0	3.2	2.8	3.3
Dyna-Gro	D31VP31	194	20.6	9.4	1	0	3.0	2.5	3.7
Growmark FS	4501VT3	235	20.6	11.4	1	0	4.5	3.5	4.3
Channel Bio	197-67VT3P	223	20.7	10.8	0	0	4.2	2.7	3.7
Hyland	8386	232	20.9	11.1	1	**0**	3.8	2.2	4.0
Croplan Genetics	4022RR	217	20.9	10.3	3	0	4.0	2.8	4.0
Croplan Genetics	3514VT3	235	21.1	11.1	0	0	4.0	2.8	3.3
Growmark FS	5005VT3	235	21.2	11.1	0	0	4.2	2.8	3.0
Channel Bio	197-32VT3P	247	21.3	11.6	1	0	4.5	2.0	3.0
Hyland	HL 4424	234	21.3	11.0	1	0	3.7	1.3	1.0
Croplan Genetics	421VT3	228	21.5	10.6	0	0	3.0	3.0	4.3
Hyland	8377	217	21.6	10.0	1	**0**	4.3	3.3	4.3
Growmark FS	4811GT3	231	21.6	10.7	0	0	3.8	1.7	1.0
Doebler's	RPM® 472XRR™	236	21.7	10.9	2	0	3.2	1.8	3.0
Dyna-Gro	D37VP71	220	21.8	10.1	4	0	3.7	2.8	3.0
Growmark FS	4707VT3	228	21.8	10.4	0	0	3.5	2.8	2.7
King's Agriseeds	Masters Choice 493	228	21.9	10.4	1	0	3.0	2.2	4.0
Channel Bio	196-06VT3P	222	22.0	10.1	0	0	3.7	3.0	4.0
T A Seeds	TA 477-31	244	22.0	11.1	1	0	3.8	1.7	1.0
Doebler's	459GRQ	221	22.1	10.0	1	0	3.3	2.2	1.7
Growmark FS	5099VT3	238	22.2	10.7	1	0	3.8	2.8	3.0
Albert Lea Seed	Viking 60-01N	220	22.2	9.9	2	0	4.2	2.3	3.3
Hyland	HL R265	231	22.3	10.4	1	**0**	3.7	1.7	2.7
Croplan Genetics	4338SS	245	22.3	11.0	0	0	3.7	1.2	1.0
Doebler's	495XY	236	22.5	10.5	1	0	4.0	2.2	3.0
Growmark FS	5667GT3	250	22.5	11.1	0	0	4.2	1.8	0.3
T A Seeds	TA 545-20	258	22.7	11.4	1	0	3.8	1.3	0.7
Dyna-Gro	D40SS09	231	22.9	10.1	2	0	3.5	2.5	1.7
Albert Lea Seed	Viking 57-07N	245	23.5	10.4	6	0	4.3	2.0	1.0
	MEAN	229	21.6	10.6	1	0	3.7	2.4	2.8
	S.D.	16	0.6						
	C.V.	7	2.6						
	LSD(.05)	26	0.9						

Planted: May 12 2011 **Harvested:** Oct 25 2011

86/50 Growing Degree Days

	2011	**Ave.**	Rainfall (Inches) **2011**	**Ave.**
May	350	332	6.1	3.0
June	537	523	2.4	3.6
July	768	661	1.4	2.6
Aug	655	619	4.5	3.2
Sept	454	420	1.9	3.7
Oct	186	197	3.2	2.8
Total	2950	2752	19.5	18.8
% Norm	107		103.6	
Departure	198		0.7	

Excellent yielding site despite some deer damage.

Table 10. 2011 Medium Early Maturity Hybrids, Valatie, Columbia County, Eastern NY

Brand	Hybrid	Yield Bu/A	% Moisture	Y/M Ratio	% Stalk Ldg	% Root Ldg	Early Vigor	Stay Grn	Top Death	General Disease
Dyna-Gro	D35RR40	129	18.3	7.1	3	6	2.2	4.3	5.0	4.0
Hyland	8454	157	19.1	8.2	0	4	1.8	3.5	3.3	3.8
Hyland	8386	164	19.2	8.6	1	7	2.5	2.8	4.7	2.8
Dyna-Gro	D31VP31	153	19.2	8.0	0	1	2.3	3.7	4.0	4.0
Albert Lea Seed	Viking 20-90N	168	19.3	8.7	2	2	2.3	3.8	4.2	3.7
Channel Bio	190-95VT3P	166	19.4	8.6	0	5	2.3	3.3	4.7	3.5
Growmark FS	4501VT3	144	19.5	7.4	3	2	2.5	3.3	4.8	3.7
Hyland	8377	137	19.7	7.0	3	5	2.2	4.5	4.5	4.2
Dyna-Gro	D37VP71	142	19.8	7.2	0	3	2.5	3.0	3.7	2.8
King's Agriseeds	Masters Choice 493	166	20.0	8.3	6	3	2.5	3.5	4.8	3.8
Channel Bio	196-06VT3P	117	20.0	5.8	0	0	2.2	3.7	4.7	3.5
T A Seeds	TA 451-20	163	20.2	8.1	2	7	1.8	3.0	4.3	3.5
Croplan Genetics	3514VT3	156	20.3	7.7	2	0	2.5	3.3	3.8	3.5
T A Seeds	TA 477-31	180	20.3	8.8	1	2	2.3	3.0	3.0	3.5
Croplan Genetics	4022RR	139	20.4	6.8	1	6	1.8	2.8	3.5	2.8
Croplan Genetics	421VT3	174	20.5	8.5	0	1	1.3	2.8	3.3	2.8
Doebler's	495XY	155	20.6	7.5	4	5	2.2	3.2	3.5	3.3
Channel Bio	197-32VT3P	151	20.7	7.3	1	0	2.2	2.7	2.5	3.0
Hyland	HL R265	146	20.8	7.0	0	2	2.5	2.8	2.8	3.2
Growmark FS	5005VT3	149	20.8	7.2	5	9	2.5	2.8	3.2	3.0
Growmark FS	4811GT3	162	21.0	7.7	4	2	2.0	2.8	4.7	3.2
Albert Lea Seed	Viking 60-01N	171	21.0	8.2	1	0	3.0	3.0	4.3	3.2
Channel Bio	197-67VT3P	143	21.1	6.8	1	3	2.3	2.8	3.2	3.2
Growmark FS	4707VT3	162	21.1	7.7	2	16	2.2	2.5	3.5	2.7
Hyland	HL 4424	150	21.2	7.1	1	1	2.3	3.5	4.2	3.5
Growmark FS	5099VT3	163	21.3	7.6	1	11	2.0	2.5	3.3	3.0
Albert Lea Seed	Viking 57-07N	168	21.6	7.8	4	3	1.8	3.2	2.7	3.2
Doebler's	RPM® 472XRR™	172	22.3	7.7	1	6	2.0	2.8	3.3	3.0
Croplan Genetics	4338SS	166	22.7	7.3	0	2	1.8	2.0	2.5	2.5
T A Seeds	TA 545-20	176	22.7	7.7	0	0	2.5	2.5	2.0	3.0
Dyna-Gro	D40SS09	163	22.8	7.2	0	8	1.3	2.0	1.7	2.7
Doebler's	459GRQ	149	22.8	6.6	3	2	2.0	2.7	3.0	3.0
Growmark FS	5667GT3	183	23.2	7.9	1	2	2.2	2.3	1.2	2.8
	MEAN	157	20.7	7.6	2	4	2.2	3.0	3.6	3.2
	S.D.	19	0.7							
	C.V.	12	3.2							
	LSD(.05)	31	1.1							

	Planted: June 7 2011		Harvested: Nov 17 2011	
	86/50 Growing Degree Days		Rainfall (Inches)	
	2011	**Ave.**	**2011**	**Ave.**
May	491	333	3.6	4.3
June	528	495	6.1	4.3
July	725	628	0.1	3.9
Aug	530	590	6.1	4.4
Sept	501	388	2.6	3.3
Oct	222	186	2.7	3.3
Total	2997	2620	21.1	23.5
% Norm	114		89.9	
Departure	377		-2.4	

A gravelly field that had uneven emergence due to heavy rains in May and June, then stress due to drought in July. This resulted in somewhat higher variability at this site.

Table 11. 2011 Medium Early Maturity Hybrids, Lansing, Cayuga County, Central NY

Brand	Hybrid	Yield Bu/A	% Moisture	Y/M Ratio	% Stalk Ldg	% Root Ldg	Early Vigor	Stay Grn
Channel Bio	190-95VT3P	192	19.7	9.8	0	0	4.7	2.6
Albert Lea Seed	Viking 20-90N	136	20.8	6.5	17	0	3.7	4.0
Dyna-Gro	D31VP31	170	21.2	8.0	2	0	3.5	2.8
Hyland	8386	180	21.5	8.3	0	0	4.2	2.5
T A Seeds	TA 451-20	180	21.8	8.2	0	0	3.0	3.3
King's Agriseeds	Masters Choice 493	192	21.8	8.8	1	4	3.7	3.5
Growmark FS	4501VT3	181	21.9	8.3	1	0	5.0	2.6
Hyland	8454	190	22.0	8.6	0	0	4.3	2.7
Hyland	8377	160	22.2	7.2	0	0	4.8	4.0
Growmark FS	4707VT3	191	22.7	8.4	0	0	3.8	2.7
Dyna-Gro	D35RR40	176	22.9	7.7	1	0	3.5	2.3
Channel Bio	196-06VT3P	174	23.0	7.6	0	0	3.5	2.8
Croplan Genetics	4022RR	186	23.3	8.0	0	0	3.7	2.0
T A Seeds	TA 477-31	196	23.5	8.3	0	0	4.2	2.2
Channel Bio	197-32VT3P	193	23.6	8.2	2	0	4.7	2.3
Growmark FS	4811GT3	193	23.6	8.2	2	0	3.5	2.5
Croplan Genetics	3514VT3	196	23.7	8.3	0	0	4.3	2.8
Dyna-Gro	D37VP71	164	23.9	6.9	1	0	4.7	2.5
Hyland	HL 4424	208	24.0	8.7	1	0	4.0	2.8
Growmark FS	5099VT3	193	24.2	8.0	0	0	3.3	2.2
Channel Bio	197-67VT3P	188	24.4	7.7	0	0	3.5	2.0
Croplan Genetics	421VT3	189	24.4	7.7	0	0	3.5	2.3
Dyna-Gro	D40SS09	170	24.6	6.9	1	0	3.8	2.3
Growmark FS	5005VT3	176	24.7	7.1	0	0	4.8	2.5
Doebler's	495XY	193	24.8	7.8	0	0	3.8	2.2
Hyland	HL R265	194	25.3	7.7	0	0	3.7	2.3
Doebler's	RPM® 472XRR™	216	25.8	8.4	0	0	3.8	1.8
Albert Lea Seed	Viking 60-01N	206	25.8	8.0	0	0	4.0	2.8
Doebler's	459GRQ	185	25.8	7.2	0	1	3.5	2.6
Croplan Genetics	4338SS	207	26.0	7.9	0	0	4.2	1.8
Albert Lea Seed	Viking 57-07N	207	27.7	7.5	0	1	4.2	2.0
T A Seeds	TA 545-20	216	27.9	7.7	0	0	4.5	2.3
Growmark FS	5667GT3	211	28.2	7.5	0	0	4.3	2.5
	MEAN	188	23.8	7.9	1	0	4.0	2.6
	S.D.	24	0.9					
	C.V.	13	3.7					
	LSD(.05)	40	1.5					

Planted: June 1 2011

Harvested: Nov 4-5 2011

86/50 Growing Degree Days / Rainfall (Inches)

	2011	**Ave.**	**2011**	**Ave.**
May	341	315	3.6	3.2
June	514	498	2.8	4.1
July	706	632	0.9	3.3
Aug	590	591	4.2	3.6
Sept	441	389	5.9	4.2
Oct	166	179	3.8	3.2
Total	2758	2613	21.1	21.6
% Norm	106		97.5	
Departure	145		-0.5	

A good site. July was dry but otherwise it had fewer problems with excessive rain early and late in the growing season compared to many other areas.

Table 12. 2011 Medium Maturity Hybrids Trial Summary
(Chemung, Pittsford, Aurora, Kingston)

Brand	Hybrid	Yield Bu/A	% Moisture	Y/M Ratio	% Stalk Ldg	% Root Ldg	Early Vigor*	Stay Grn*	GLS**
Doebler's	RPM® 515HXR™	186	22.0	8.5	1	3	4.5	3.4	3.3
Dyna-Gro	D43QV30	175	22.4	7.8	2	21	4.7	3.0	2.9
Doebler's	529GRV	183	22.6	8.1	1	21	4.7	2.9	3.3
Channel Bio	202-32STX	188	22.7	8.3	4	1	4.0	3.1	2.9
Doebler's	554GRQ	184	22.7	8.1	4	6	4.7	3.3	3.5
T A Seeds	TA 545-20	191	23.1	8.3	2	8	4.4	3.3	3.4
T A Seeds	TA 565-20	199	23.4	8.5	3	6	4.7	3.1	3.7
Dyna-Gro	D45Q50	211	23.8	8.9	3	10	5.0	3.1	3.3
T A Seeds	TA 587-22DP	178	24.0	7.4	3	10	4.1	3.3	3.0
Hyland	8677	166	24.2	6.9	6	7	4.5	3.0	2.7
Doebler's	RPM® 634HRQ™	185	24.6	7.5	4	7	4.2	2.6	3.3
Hyland	HL B77R	180	24.8	7.2	3	5	3.6	2.9	2.8
T A Seeds	TA 657-13V	191	24.9	7.7	5	9	4.0	2.9	3.2
Channel Bio	211-99VT3P	195	25.0	7.8	3	9	3.9	2.8	3.4
	MEAN	187	23.6	7.9	3	9	4.3	3.1	3.2
	S.D.	20	1.0						
	C.V.	11	4.3						
	LSD(.05)	16	0.8						

* 3 locations only
** 2 locations only

Table 13. 2011 Medium Maturity Hybrids, Chemung, Chemung County, Southern Tier NY

Brand	Hybrid	Yield Bu/A	% Moisture	Y/M Ratio	% Stalk Ldg	% Root Ldg	Early Vigor	Stay Grn	NLB	GLS
Dyna-Gro	D43QV30	201	23.8	8.5	0	0	5.0	2.2	3.5	1.8
Doebler's	529GRV	202	23.9	8.5	0	0	4.8	2.3	3.2	2.3
Doebler's	RPM® 515HXR™	210	24.4	8.6	1	0	4.5	2.8	2.8	2.8
T A Seeds	TA 565-20	223	24.8	9.0	0	0	4.0	2.5	3.0	3.3
Doebler's	554GRQ	202	24.9	8.1	0	0	4.7	2.5	3.7	2.7
T A Seeds	TA 545-20	211	25.2	8.4	0	0	4.3	2.7	3.3	3.0
Channel Bio	202-32STX	220	25.5	8.6	0	0	4.0	2.3	3.0	2.2
Dyna-Gro	D45Q50	229	26.4	8.7	0	0	5.0	2.5	3.0	3.0
Doebler's	RPM® 634HRQ™	220	26.8	8.2	0	0	4.7	2.2	3.2	2.8
T A Seeds	TA 587-22DP	220	26.9	8.2	0	0	4.0	2.5	2.0	2.3
Hyland	8677	199	27.9	7.1	0	0	4.5	1.7	3.0	2.2
Hyland	HL B77R	203	28.0	7.3	0	0	3.8	2.2	3.0	2.7
Channel Bio	211-99VT3P	220	28.2	7.8	0	0	3.7	2.0	2.7	3.2
T A Seeds	TA 657-13V	230	29.3	7.8	0	0	4.0	2.2	1.7	2.3
	MEAN	214	26.1	8.2	0	0	4.4	2.3	2.9	2.6
	S.D.	12	0.8							
	C.V.	6	2.9							
	LSD(.05)	21	1.3							

	Planted: May 6 2011		Harvested: Nov 3 2011	
	86/50 Growing Degree Days		Rainfall (Inches)	
	2011	**Ave.**	**2011**	**Ave.**
May	366	351	6.0	3.0
June	531	534	2.5	4.1
July	681	631	0.8	3.4
Aug	583	616	5.9	3.5
Sept	460	420	10.0	4.2
Oct	190	176	3.8	3.5
Total	2811	2727	29.0	21.6
% Norm	103		134.2	
Departure	84		7.4	

High yield potential site with less gray leaf spot than last year and little lodging despite high September rainfall.

Table 14. 2011 Medium Maturity Hybrids, Pittsford, Monroe County, Western NY

Brand	Hybrid	Yield Bu/A	% Moisture	Y/M Ratio	% Stalk Ldg	% Root Ldg	Early Vigor
Doebler's	RPM® 515HXR™	206	21.1	9.8	1	1	4.3
Doebler's	554GRQ	200	21.6	9.3	1	1	4.7
Dyna-Gro	D43QV30	221	21.8	10.1	3	0	5.0
Channel Bio	202-32STX	208	21.9	9.5	2	0	4.2
T A Seeds	TA 545-20	225	21.9	10.3	0	0	4.0
Doebler's	529GRV	211	21.9	9.6	1	0	4.5
Hyland	HL B77R	219	22.4	9.8	3	1	3.5
T A Seeds	TA 565-20	226	22.5	10.1	1	0	5.0
Dyna-Gro	D45Q50	222	22.7	9.8	1	0	5.0
Hyland	8677	192	23.0	8.3	7	0	4.7
Doebler's	RPM® 634HRQ™	223	23.1	9.6	0	0	4.3
T A Seeds	TA 657-13V	214	23.4	9.2	6	0	4.0
T A Seeds	TA 587-22DP	206	23.5	8.8	1	0	4.0
Channel Bio	211-99VT3P	226	23.8	9.5	2	1	4.3
	MEAN	214	22.5	9.5	2	0	4.4
	S.D.	14	0.7				
	C.V.	7	2.9				
	LSD(.05)	24	1.1				

	Planted: May 21 2011		Harvested: Nov 11 2011	
	86/50 Growing Degree Days		Rainfall (Inches)	
	2011	**Ave.**	**2011**	**Ave.**
May	332	323	4.8	2.8
June	525	508	1.5	3.4
July	738	653	1.8	2.9
Aug	616	604	5.6	3.5
Sept	453	393	3.8	3.5
Oct	173	185	5.2	2.6
Total	2837	2666	22.6	18.7
% Norm	106		121.0	
Departure	171		3.9	

High yield potential site that avoided some of the really excessive rains that hit many sites in September.

Table 15. 2011 Medium Maturity Hybrids, Aurora, Cayuga County, Central NY

Brand	Hybrid	Yield Bu/A	% Moisture	Y/M Ratio	% Stalk Ldg	% Root Ldg	Stay Grn
Doebler's	RPM® 515HXR™	122	23.1	5.3	0	0	4.2
Dyna-Gro	D43QV30	135	23.5	5.7	2	1	3.8
Doebler's	529GRV	135	24.2	5.6	2	2	3.5
Channel Bio	202-32STX	134	24.3	5.5	1	1	3.7
Hyland	8677	109	25.0	4.3	2	1	4.2
Doebler's	554GRQ	136	25.2	5.4	0	0	3.8
T A Seeds	TA 545-20	130	25.7	5.0	0	1	4.0
Doebler's	RPM® 634HRQ™	136	25.8	5.3	0	2	3.5
Dyna-Gro	D45Q50	164	26.0	6.3	0	1	3.5
T A Seeds	TA 587-22DP	126	26.4	4.8	1	1	3.8
T A Seeds	TA 657-13V	134	27.1	5.0	0	8	3.2
T A Seeds	TA 565-20	154	27.2	5.7	0	0	3.3
Channel Bio	211-99VT3P	145	27.7	5.2	0	0	3.7
Hyland	HL B77R	135	27.9	4.8	3	1	3.3
	MEAN	135	25.6	5.3	1	1	3.7
	S.D.	21	1.2				
	C.V.	15	4.8				
	LSD(.05)	34	2.1				

Planted: June 1 2011
Harvested: Nov 4-5 2011

86/50 Growing Degree Days / Rainfall (Inches)

	2011	Ave.	2011	Ave.
May	341	315	3.6	3.2
June	514	498	2.8	4.1
July	706	632	0.9	3.3
Aug	590	591	4.2	3.6
Sept	441	398	5.9	4.2
Oct	166	179	3.8	3.2
Total	2758	2613	21.1	21.6
% Norm	106		97.5	
Departure	145		-0.5	

Germination was spread over a few weeks due to excessive rain followed by a serious dry spell. Very droughty weather during flowering likely limited yield potential. Together, these effects resulted in higher variability in this trial.

Table 16. 2011 Medium Maturity Hybrids, Kingston, Ulster County, Hudson Valley NY

Brand	Hybrid	Yield Bu/A	% Moisture	Y/M Ratio	% Stalk Ldg	% Root Ldg	Early Vigor	Stay Grn	GLS
Channel Bio	202-32STX	189	19.1	9.9	12	4	3.8	3.3	3.7
Doebler's	554GRQ	198	19.2	10.3	16	23	4.7	3.7	4.3
T A Seeds	TA 587-22DP	157	19.3	8.1	8	41	4.2	3.5	3.7
T A Seeds	TA 565-20	194	19.4	10.0	11	24	5.0	3.7	4.2
Doebler's	RPM® 515HXR™	208	19.5	10.6	2	12	4.7	3.3	3.8
T A Seeds	TA 545-20	200	19.5	10.3	7	29	4.8	3.2	3.8
T A Seeds	TA 657-13V	187	19.8	9.5	13	30	4.0	3.3	4.0
Dyna-Gro	D45Q50	231	20.1	11.5	9	38	5.0	3.2	3.7
Channel Bio	211-99VT3P	188	20.1	9.4	11	34	3.8	2.8	3.7
Doebler's	529GRV	183	20.2	9.0	1	84	4.7	3.0	4.2
Dyna-Gro	D43QV30	143	20.3	7.0	2	83	4.2	3.0	4.0
Hyland	8677	164	20.7	7.9	16	28	4.3	3.2	3.2
Hyland	HL B77R	162	21.0	7.7	5	18	3.5	3.2	3.0
Doebler's	RPM® 634HRQ™	161	22.7	7.1	15	28	3.5	2.2	3.7
	MEAN	183	20.1	9.2	9	34	4.3	3.2	3.8
	S.D.	30	1.3						
	C.V.	17	6.6						
	LSD(.05)	51	2.2						

Planted: May 11 2011
Harvested: Nov 2 2011

86/50 Growing Degree Days / Rainfall (Inches)

	2011	Ave.	2011	Ave.
May	407	347	6.7	3.9
June	502	508	6.4	4.2
July	661	608	2.9	4.6
Aug	598	585	13.2	4.9
Sept	473	414	11.0	4.7
Oct	266	225	4.2	5.0
Total	2907	2688	44.4	27.2
% Norm	108		163.2	
Departure	219		17.2	

Serious effects of Hurricane Irene and Tropical Storm Lee resulted in lots of lodging and somewhat higher variability at this site.