

Cornell University
Cooperative Extension

2014 New York Hybrid Corn Grain Performance Trials



Plant Breeding and Genetics 2015-1

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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 2014 commercial hybrid corn grain trials. It shows results from eight locations in New York, divided into the following three maturity ranges:

	Base 50 Growing Degree Days	Relative Maturity
Early	1400-1900 GDD	70-85 Days
Medium Early	1900-2300 GDD	85-100 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 2015 trials, please contact Judy Singer at jls10@cornell.edu or 607-255-5461 or Margaret Smith.

2/2015
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Building Strong and Vibrant New York Communities

Cornell Cooperative Extension provides equal program and employment opportunities. NYS College of Agriculture and Life Sciences, NYS College of Human Ecology, and NYS College of Veterinary Medicine at Cornell University, Cooperative Extension associations, county governing bodies, and U.S. Department of Agriculture, cooperating.

2014 Growing Conditions

The 2014 growing season in New York was generally favorable for corn. For most locations, temperatures were above long term averages in May-June and September-October, and cooler than average during July and August. The cool mid-season temperatures slowed corn crop development. Rainfall distribution during the growing season was variable around the state, but most locations had average or above average rainfall in July, which set the crop up for adequate moisture during the critical flowering and early grain-filling season. September was dryer than normal throughout the state, and October was average or below average for rainfall. Although the warm weather and average or below average rain during the end of the growing season surely helped the crop mature, harvest was still delayed in many locations as the crop needed to catch up from the cool conditions experienced in July-August. State average yield was reported at 148 bu/acre – just 1 bu/acre lower than the record 2010 state average, and 10 bu/acre or more above state average yields for the intervening years. Despite delayed harvests, it turned out to be a good year for corn in New York.

Northern leaf blight was quite prevalent late in the growing season in many areas around the state, but tended to be less intense than it was in 2013. Gray leaf spot was common in misty valley areas of the southern tier and Hudson Valley, and was found at low levels in a variety of New York locations. Eyespot was more intense than it has been in recent years at our Aurora location.

Testing Procedures

Regional test locations for 2014 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 at harvest. 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**).

Early Vigor, Staygreen, Leaf Disease Ratings

Data were collected on these traits at locations where expression was uniform across the field and, for diseases, where disease pressure was sufficient. **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 September; 5 = completely dry plants and 1 = completely green plants. Northern leaf blight (**NLB**, caused by *Setosphaeria turcica*) and eyespot (**Kz**, caused by *Kabatiella zae*) were rated with 5 = completely susceptible (plant dead due to disease) and 0 = no disease apparent. Where several diseases were present and individual diseases could not be easily distinguished, plant health overall was rated (**Plt Hlth**) using the same scale.

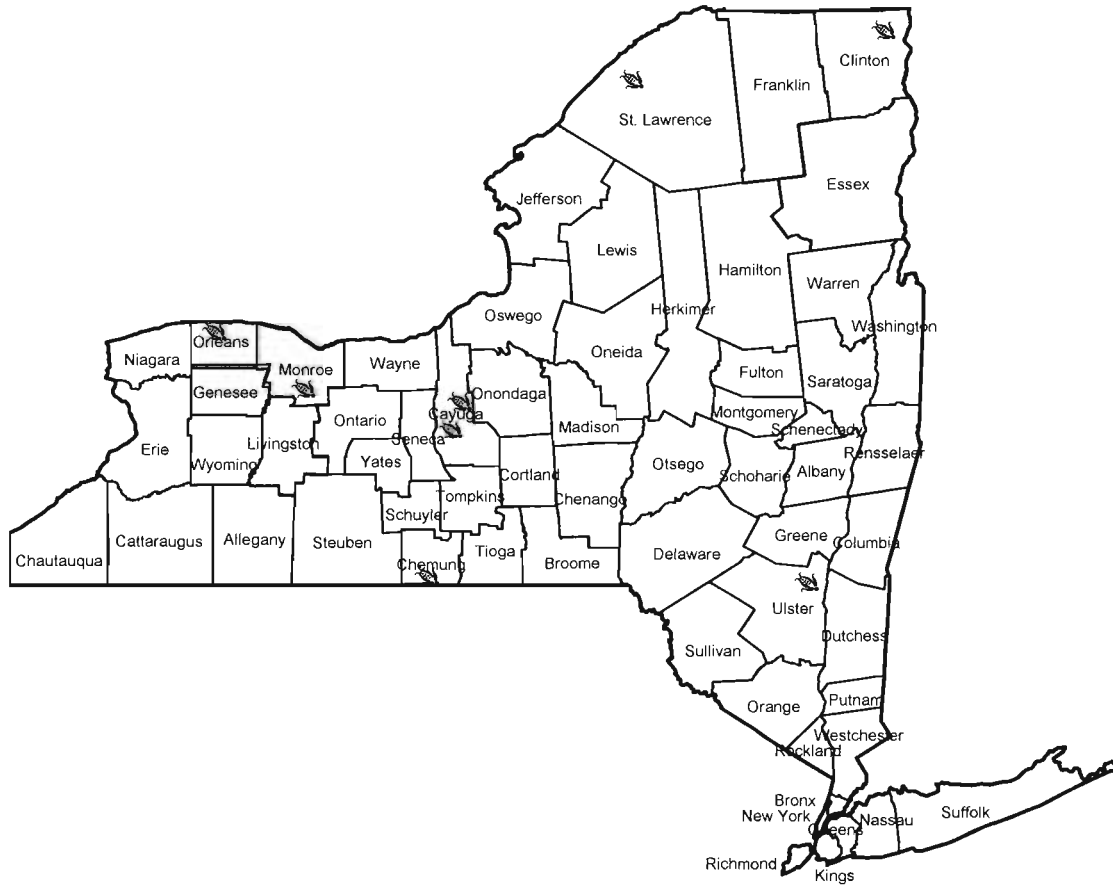
CV, LSD, SD

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, microclimate, fertility, etc. Grain yield CVs below 12 are excellent; those around 15 are acceptable. Grain moisture CVs below 5 are excellent. The least significant difference (**LSD**) is computed at the 5% level of probability. If a difference between two hybrids is larger than the LSD listed for the trial, 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.**

The information given herein is supplied with the understanding that no discrimination is intended and no endorsement by Cornell Cooperative Extension is implied.

2014 Trial Locations



**2014
Cooperators**

Early Grain Series

Cornell Cooperative Extension			
County	Local Contact	Cooperator	Location
Orleans	Mike Stanyard	Hugh Dudley	Albion
Clinton	Peter Hagar	Mike Davis	Chazy
Chemung	Janice Degni	Dudley French	Chemung
St. Lawrence	Brent Buchanan	Jon Greenwood	Madrid
Cayuga	Keith Severson	Steve Nemec	New Hope

Early/Medium Early Grain Series

Cornell Cooperative Extension			
County	Local Contact	Cooperator	Location
Orleans	Mike Stanyard	Hugh Dudley	Albion
Chemung	Janice Degni	Dudley French	Chemung
St. Lawrence	Brent Buchanan	Jon Greenwood	Madrid
Cayuga	Keith Severson	Steve Nemec	New Hope

Medium Grain Series

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

**2014
Participating Companies**

Company/Brand	Contact for Information	Address & Phone
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. Doebler's®	Doug Messersmith dmesser@doeblers.com	202 Tiadaghton Avenue Jersey Shore, PA 17740 Phone: 570-753-3210 Fax: 570-753-5302
FS InVISION	Mark Guttendorf mguttendorf@growmarkfs.com	308 N.E. Front Street Milford, DE 19963 Phone: 607-842-6330/315-427-3558
Syngenta Crop Protection	Jeff Zelna jeff.zelna@syngenta.com	4598 Reliant Road Jamesville, NY 13078 Phone: 315-243-8855
T. A. Seeds	Taylor Doebler III taylor@taseeds.com	PO Box 300 Avis, PA 17721 Phone: 866-813-SEED (7333) Fax: 570-753-4445

**Table 1. 2014 Early Maturity Hybrids Trial Summary
(New Hope, Madrid, Chemung, Chazy)**

Brand	Hybrid	Yield Bu/A	% Mois ture	Y/M Ratio	% Stalk Ldg	% Root Ldg	Early Vigor*
Doeblers®	2515GRQ	178	21.2	8.6	1	0	3.2
FS InVISION	FS 40R27VT3P	186	22.0	8.7	2	0	4.1
FS InVISION	FS 3647VT2P	190	22.5	8.8	0	0	3.3
FS InVISION	FS 3848SS	173	23.7	7.8	1	0	3.9
FS InVISION	FS 40R30SS	184	26.0	7.6	0	0	4.2
	MEAN	182	23.1	8.3	1	0	3.7
	S.D.	13	1.0				
	C.V.	7	4.5				
	LSD(.05)	11	0.8				

* 3 location data

Table 2. 2014 Early Maturity Hybrids, New Hope, Cayuga County, Central NY

Brand	Hybrid	Yield Bu/A	% Mois ture	Y/M Ratio	% Stalk Ldg	% Root Ldg	Early Vigor	Stay Grn	Plant Hlth	Planted:		Harvested:		
										May 9 2014		Nov 5 2014		
Doebblers®	2515GRQ	189	21.9	8.6	0	0	3.0	2.8	3.8	86/50				
FS InVISION	FS 3848SS	198	22.7	8.7	0	0	3.7	2.0	4.2	Growing Rainfall				
FS InVISION	FS 40R27VT3P	202	23.1	8.8	0	0	3.7	2.2	4.3	Degree Days (Inches)				
FS InVISION	FS 3647VT2P	208	23.6	8.8	0	0	3.2	1.7	3.3	2014 Ave. 2014 Ave.				
FS InVISION	FS 40R30SS	201	26.8	7.5	0	1	4.3	1.7	3.8	May	307	267	4.2	3.6
	MEAN	200	23.6	8.5	0	0.1	3.6	2.1	3.9	June	496	446	3.6	4.3
	S.D.	12	0.9							July	570	574	3.8	4.0
	C.V.	6	3.7							Aug	499	535	5.3	3.8
	LSD(.05)	21	1.6							Sept	381	337	2.9	4.2
										Oct	199	138	4.3	4.0
										Total	2450	2159	24.1	23.9
										% Norm	113		100.9	
										Departure	291		0.2	

Table 3. 2014 Early Maturity Hybrids, Madrid, St. Lawrence County, Northern NY

Brand	Hybrid	Yield Bu/A	% Mois ture	Y/M Ratio	% Stalk Ldg	% Root Ldg	Early Vigor	Planted:		Harvested:		
								May 20 2014		Oct 30 2014		
Doebblers®	2515GRQ	182	21.6	8.4	4	0	3.0	86/50				
FS InVISION	FS 3647VT2P	198	22.5	8.8	2	1	3.3	Growing Rainfall				
FS InVISION	FS 40R27VT3P	183	22.8	8.0	7	0	4.0	Degree Days (Inches)				
FS InVISION	FS 3848SS	175	23.1	7.6	4	2	3.3	2014 Ave. 2014 Ave.				
FS InVISION	FS 40R30SS	198	24.3	8.2	1	1	3.3	May	284	308	4.7	3.0
	MEAN	193	22.8	8.5	3	1	3.4	June	505	482	5.3	3.5
	S.D.	14	0.6					July	589	649	5.5	3.4
	C.V.	7	2.7					Aug	517	581	6.3	3.6
	LSD(.05)	24	1.1					Sept	389	354	2.1	3.6
								Oct	188	154	3.3	3.6
								Total	2472	2527	27.2	20.7
								% Norm	98		131.5	
								Departure	-55		6.5	

Table 4. 2014 Early Maturity Hybrids, Chemung, Chemung County, Southern Tier NY

Brand	Hybrid	Yield Bu/A	% Mois ture	Y/M Ratio	% Stalk Ldg	% Root Ldg	Early Vigor	Plant Hlth	Planted:		Harvested:		
									May 14 2014	Nov 11 2014	May 14 2014	Nov 11 2014	
FS InVISION	FS 3647VT2P	220	18.1	12.2	0	0	3.3	4.0	86/50				
Doebblers®	2515GRQ	207	18.1	11.4	0	2	3.5	4.5	Growing		Rainfall		
FS InVISION	FS 3848SS	201	18.2	11.0	0	0	4.7	4.3	Degree Days (Inches)				
FS InVISION	FS 40R27VT3P	225	18.2	12.3	1	0	4.7	4.2	2014 Ave. 2014 Ave.				
FS InVISION	FS 40R30SS	212	19.0	11.2	0	0	5.0	4.5	May	346	350	2.9	3.1
									June	532	535	3.4	4.1
	MEAN	213	18.3	11.6	0.2	0.3	4.2	4.3	July	593	639	1.7	3.6
	S.D.	17	0.3						Aug	522	619	3.3	3.4
	C.V.	8	1.5						Sept	432	421	1.5	3.6
	LSD(.05)	30	0.5						Oct	241	174	1.9	3.2
									Total	2666	2737	14.7	20.9
									% Norm	97		70.4	
									Departure	-71		-6.2	

Table 5. 2014 Early Maturity Hybrids, Chazy, St. Lawrence County, Northern NY

Brand	Hybrid	Yield Bu/A	% Mois ture	Y/M Ratio	% Stalk Ldg	% Root Ldg	Planted:		Harvested:		
							May 29 2014	Nov 11 2014	May 29 2014	Nov 11 2014	
Doebblers®	2515GRQ	136	23.0	5.9	0	0	86/50				
FS InVISION	FS 40R27VT3P	135	24.0	5.6	0	0	Growing		Rainfall		
FS InVISION	FS 3647VT2P	135	25.7	5.3	0	0	Degree Days (Inches)				
FS InVISION	FS 3848SS	116	30.6	3.8	0	0	2014 Ave. 2014 Ave.				
FS InVISION	FS 40R30SS	125	33.9	3.7	0	0	May	313	291	5.4	3.7
							June	489	445	5.0	3.9
	MEAN	129	27.4	4.9	0	0	July	582	612	4.9	3.4
	S.D.	12	1.9				Aug	515	554	3.7	4.7
	C.V.	9	6.9				Sept	373	366	1.0	3.5
	LSD(.05)	21	3.4				Oct	193	118	4.1	3.6
							Total	2463	2385	24.1	22.7
							% Norm	103		106.1	
							Departure	78		1.4	

**Table 6. 2014 Medium Early Maturity Hybrids Trial Summary
(New Hope, Chemung, Madrid, Albion)**

Brand	Hybrid	Yield Bu/A	%	Y/M Ratio	%	%	Early Vigor*	Plant Hlth**
			Mois ture		Stalk Ldg	Root Ldg		
Doebblers®	2515GRQ	193	20.5	9.5	1	1	3.2	4.2
FS InVISION	FS 3848SS	191	21.4	9.1	1	1	3.9	4.3
FS InVISION	FS 40R27VT3P	203	21.4	9.7	3	0	4.1	4.3
FS InVISION	FS 3647VT2P	209	21.4	9.9	1	0	3.3	3.7
Doebblers®	RPM® 448AMX™	192	21.8	8.9	1	0	3.9	4.5
FS InVISION	FS 4545SS	198	22.3	9.1	3	0	4.2	4.1
TA Seeds	TA 290-20	195	22.7	8.8	1	1	4.3	3.2
FS InVISION	FS 4343VT3P	202	22.8	9.1	0	0	4.6	3.5
Doebblers®	RPM® 497AM™	206	22.8	9.2	0	0	4.2	3.5
TA Seeds	TA333-28RIB	210	22.9	9.4	0	0	3.9	2.9
FS InVISION	FS 42R12VT3P	202	23.1	9.0	0	0	4.2	3.8
Syngenta	N36A-3111	210	23.1	9.4	0	0	3.3	3.5
Dyna-Gro	D39VP14	212	23.3	9.4	0	0	3.8	2.9
FS InVISION	FS 40R30SS	204	23.4	8.9	0	0	4.2	4.2
Dyna-Gro	D34VC52	199	23.4	8.8	0	0	4.2	3.7
TA Seeds	TA445-32EZ	202	23.5	9.0	1	0	3.1	3.7
FS InVISION	FS 50R40SS	206	23.6	9.0	0	0	3.8	2.9
Syngenta	SI 3232-3110	222	23.6	9.7	0	0	3.1	3.4
Doebblers®	RPM® 428AMX™	205	23.8	8.9	0	0	3.5	3.3
Syngenta	SG 3482-3111	213	24.4	9.1	0	0	4.1	3.9
Dyna-Gro	D40SS48	228	24.6	9.7	1	0	4.1	2.9
	MEAN	205	22.8	9.2	1	0.2	3.8	3.6
	S.D.	13	1.0					
	C.V.	7	4.4					
	LSD(.05)	12	0.9					

* 3 location data

** 2 location data

Table 7. 2014 Medium Early Maturity Hybrids, New Hope, Cayuga County, Central NY

Brand	Hybrid	Yield Bu/A	% Mois ture	Y/M Ratio	% Stalk Ldg	% Root Ldg	Early Vigor	Stay Grn	Plant Hlth	Planted: May 9 2014	Harvested: Nov 5 2014				
												Growing Degree Days (Inches)			
											2014	Ave.	2014	Ave.	
Doebler®	2515GRQ	189	21.9	8.6	0	0	3.0	2.8	3.8	86/50					
FS InVISION	FS 3848SS	198	22.7	8.7	0	0	3.7	2.0	4.2	Growing	Rainfall				
FS InVISION	FS 40R27VT3P	202	23.1	8.8	0	0	3.7	2.2	4.3	Degree Days (Inches)					
FS InVISION	FS 3647VT2P	208	23.6	8.8	0	0	3.2	1.7	3.3						
Doebler®	RPM® 448AMX™	183	24.1	7.6	0	0	4.0	2.5	4.2	May	307	267	4.2	3.6	
FS InVISION	FS 4545SS	192	24.9	7.7	0	1	4.1	2.3	4.0	June	496	446	3.6	4.3	
Doebler®	RPM® 497AM™	214	25.6	8.4	0	0	4.2	1.7	2.7	July	570	574	3.8	4.0	
T A Seeds	TA333-28RIB	205	25.6	8.1	0	0	3.7	1.2	1.8	Aug	499	535	5.3	3.8	
T A Seeds	TA 290-20	184	26.2	7.0	1	1	4.2	2.0	2.3	Sept	381	337	2.9	4.2	
FS InVISION	FS 4343VT3P	201	26.3	7.7	0	0	4.7	1.7	2.5	Oct	199	138	4.3	4.0	
Dyna-Gro	D34VC52	201	26.5	7.6	0	0	4.3	1.3	3.3						
Syngenta	N36A-3111	219	26.8	8.2	0	0	3.3	1.7	2.7	Total	2450	2159	24.1	23.9	
FS InVISION	FS 40R30SS	201	26.8	7.5	0	1	4.3	1.7	3.8	% Norm	113		100.9		
FS InVISION	FS 42R12VT3P	196	26.9	7.3	0	0	4.2	2.0	3.3	Departure	291		0.2		
FS InVISION	FS 50R40SS	195	26.9	7.3	0	0	3.8	1.0	2.2						
Dyna-Gro	D39VP14	211	27.1	7.8	0	0	3.7	1.0	2.0						
T A Seeds	TA445-32EZ	195	27.7	7.0	1	0	3.0	1.7	2.8						
Doebler®	RPM® 428AMX™	213	27.8	7.8	0	0	3.3	1.0	2.3						
Dyna-Gro	D40SS48	217	28.5	7.7	0	0	4.2	1.3	2.3						
Syngenta	SG 3482-3111	200	29.1	6.9	0	1	3.5	2.0	3.3						
Syngenta	SI 3232-3110	220	29.2	7.6	0	0	3.3	1.7	2.7						
	MEAN	202	26.1	7.8	0.1	0.1	3.8	1.7	3.0						
	S.D.	12	1.6												
	C.V.	6	6.2												
	LSD(.05)	19	2.7												

Table 8. 2014 Medium Early Maturity Hybrids, Chemung, Chemung County, Southern Tier NY

Brand	Hybrid	Yield Bu/A	% Mois ture	Y/M Ratio	% Stalk Ldg	% Root Ldg	Early Vigor	Plant Hlth	Planted: May 14 2014	Harvested: Nov 11 2014				
											Growing Degree Days (Inches)			
											2014	Ave.	2014	Ave.
FS InVISION	FS 3647VT2P	220	18.1	12.2	0	0	3.3	4.0		86/50				
Doebler®	2515GRQ	207	18.1	11.4	0	2	3.5	4.5		Growing	Rainfall			
FS InVISION	FS 4545SS	214	18.2	11.8	1	0	4.5	4.2		Degree Days (Inches)				
Doebler®	RPM® 448AMX™	193	18.2	10.6	0	0	4.3	4.8						
FS InVISION	FS 3848SS	201	18.2	11.0	0	0	4.7	4.3	May	346	350	2.9	3.1	
FS InVISION	FS 40R27VT3P	225	18.2	12.3	1	0	4.7	4.2	June	532	535	3.4	4.1	
TA Seeds	TA445-32EZ	227	18.3	12.4	0	0	3.3	4.5	July	593	639	1.7	3.6	
Syngenta	N36A-3111	223	18.4	12.1	0	0	3.0	4.3	Aug	522	619	3.3	3.4	
FS InVISION	FS 4343VT3P	208	18.6	11.2	0	0	4.8	4.5	Sept	432	421	1.5	3.6	
FS InVISION	FS 42R12VT3P	218	18.7	11.6	0	1	4.8	4.3	Oct	241	174	1.9	3.2	
Syngenta	SI 3232-3110	234	18.8	12.4	0	0	2.8	4.2						
Doebler®	RPM® 428AMX™	200	18.9	10.6	0	0	3.8	4.3	Total	2666	2737	14.7	20.9	
Doebler®	RPM® 497AM™	211	18.9	11.2	1	0	4.7	4.3	% Norm	97		70.4		
Dyna-Gro	D34VC52	231	18.9	12.2	0	0	4.5	4.0	Departure	-71		-6.2		
Syngenta	SG 3482-3111	229	18.9	12.1	0	0	4.2	4.5						
FS InVISION	FS 40R30SS	212	19.0	11.2	0	0	5.0	4.5						
Dyna-Gro	D39VP14	233	19.0	12.3	0	0	3.8	3.8						
TA Seeds	TA 290-20	217	19.0	11.4	1	1	4.5	4.0						
FS InVISION	FS 50R40SS	244	19.3	12.6	0	0	4.0	3.7						
TA Seeds	TA333-28RIB	219	19.5	11.3	0	0	4.0	4.0						
Dyna-Gro	D40SS48	260	19.5	13.4	1	0	4.3	3.5						
	MEAN	220	18.7	11.8	0.2	0.2	4.1	4.2						
	S.D.	14	0.3											
	C.V.	6	1.4											
	LSD(.05)	22	0.4											

Table 9. 2014 Medium Early Maturity Hybrids, Madrid, St. Lawrence County, Northern NY

Brand	Hybrid	Yield Bu/A	% Moisture	Y/M Ratio	% Stalk Ldg	% Root Ldg	Early Vigor		Planted:	Harvested:		
									May 20 2014	Oct 30 2014		
Doeblers®	2515GRQ	182	21.6	8.4	4	0	3.0		86/50			
FS InVISION	FS 3647VT2P	198	22.5	8.8	2	1	3.3		Growing	Rainfall		
FS InVISION	FS 40R27VT3P	183	22.8	8.0	7	0	4.0		Degree Days	(Inches)		
TA Seeds	TA 290-20	183	22.9	8.0	1	2	4.2		2014	Ave.	2014	Ave.
Syngenta	SI 3232-3110	212	22.9	9.3	1	0	3.0	May	284	308	4.7	3.0
FS InVISION	FS 3848SS	175	23.1	7.6	4	2	3.3	June	505	482	5.3	3.5
Doeblers®	RPM® 448AMX™	199	23.2	8.6	2	0	3.3	July	589	649	5.5	3.4
FS InVISION	FS 4343VT3P	196	23.5	8.4	0	0	4.2	Aug	517	581	6.3	3.6
TA Seeds	TA333-28RIB	206	23.7	8.7	0	0	3.9	Sept	389	354	2.1	3.6
FS InVISION	FS 42R12VT3P	191	23.7	8.1	0	0	3.7	Oct	188	154	3.3	3.6
Dyna-Gro	D39VP14	193	23.8	8.1	1	0	4.0					
FS InVISION	FS 4545SS	188	23.8	7.9	9	0	4.0	Total	2472	2527	27.2	20.7
Doeblers®	RPM® 497AM™	192	24.0	8.0	1	0	3.7	% Norm	98		131.5	
Syngenta	N36A-3111	189	24.2	7.8	1	0	3.7	Departure	-55		6.5	
FS InVISION	FS 40R30SS	198	24.3	8.2	1	1	3.3					
FS InVISION	FS 50R40SS	178	24.5	7.3	1	0	3.5					
TA Seeds	TA445-32EZ	184	24.5	7.5	2	0	3.0					
Doeblers®	RPM® 428AMX™	201	24.6	8.2	0	0	3.3					
Dyna-Gro	D34VC52	165	24.9	6.6	1	1	3.8					
Syngenta	SG 3482-3111	211	25.2	8.4	0	0	4.5					
Dyna-Gro	D40SS48	206	25.7	8.0	1	1	3.7					
	MEAN	192	23.8	8.1	2	0.3	3.6					
	S.D.	15	0.6									
	C.V.	8	2.6									
	LSD(.05)	25	1.0									

Table 10. 2014 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	Plant Hlth	Planted:	Harvested:			
										May 12 2014	Nov 6 2014			
Doeblers®	2515GRQ	171	18.3	9.4	1	0	2.8	3.0	3.8		86/50			
FS InVISION	FS 40R27VT3P	203	18.5	11.0	1	0	3.6	2.8	3.3		Growing			
FS InVISION	FS 4545SS	204	18.7	10.9	1	0	4.8	2.5	3.5		Rainfall			
FS InVISION	FS 3647VT2P	250	18.7	13.4	0	0	3.9	2.5	3.0		Degree Days			
Doeblers®	RPM® 448AMX™	162	18.8	8.6	0	0	3.5	3.0	3.8		2014	Ave.	2014	Ave.
Dyna-Gro	D39VP14	229	18.9	12.1	1	0	4.0	2.5	3.0	May	362	334	1.9	3.0
Dyna-Gro	D34VC52	188	19.0	9.9	0	0	4.0	2.3	3.0	June	556	524	5.3	3.0
Doeblers®	RPM® 428AMX™	206	19.0	10.8	0	0	3.0	2.0	2.5	July	578	665	5.6	3.1
TA Seeds	TA333-28RIB	233	19.2	12.2	0	0	4.0	2.0	2.5	Aug	579	622	2.7	3.1
TA Seeds	TA 290-20	167	19.4	8.6	1	0	3.5	2.8	3.8	Sept	429	420	1.4	3.6
FS InVISION	FS 4343VT3P	223	19.4	11.5	0	0	3.8	2.5	3.8	Oct	223	197	2.2	3.1
FS InVISION	FS 3848SS	226	19.4	11.7	0	0	3.0	2.8	3.3	Total	2727	2761	19.1	18.8
Syngenta	N36A-3111	251	19.5	12.9	0	0	3.5	2.3	3.3	% Norm	99		101	
FS InVISION	FS 42R12VT3P	214	19.6	11.0	0	0	3.3	2.5	3.3	Departure	-34		0.3	
FS InVISION	FS 40R30SS	230	19.6	11.8	0	0	3.8	3.0	3.5					
Doeblers®	RPM® 497AM™	243	19.8	12.3	0	0	3.8	2.5	3.3					
Syngenta	SI 3232-3110	222	19.9	11.1	1	0	2.8	2.3	3.0					
TA Seeds	TA445-32EZ	237	20.1	11.8	0	0	3.0	1.8	2.8					
Syngenta	SG 3482-3111	253	20.1	12.6	0	0	3.3	2.3	3.3					
FS InVISION	FS 50R40SS	240	20.8	11.5	0	0	3.5	2.3	2.3					
Dyna-Gro	D40SS48	246	21.0	11.7	0	0	3.8	2.3	2.8					
	MEAN	219	19.4	11.3	0.2	0	3.5	2.5	3.2					
	S.D.	33	0.6											
	C.V.	15	2.9											
	LSD(.05)	67	1.1											

**Table 11. 2014 Medium Maturity Hybrids Trial Summary
(Chemung, Aurora, Pittsford, Kingston)**

Brand	Hybrid	Yield Bu/A	% Mois ture	Y/M Ratio	% Stalk Ldg	% Root Ldg	Early Vigor*	Stay Grn**	Plant Hlth*
T A Seeds	TA524-22DPRIB	207	21.6	10.0	1	0	4.2	2.8	2.6
Doebblers®	RPM® 4315AMXT™	203	21.8	9.6	0	0	3.9	2.8	3.6
Syngenta	N45P-3011A	213	22.1	10.1	0	1	4.6	2.5	3.2
FS InVISION	55R25VT3P	228	22.4	10.7	1	0	4.3	2.3	2.4
Dyna-Gro	D41SS71	212	22.6	9.9	0	0	4.4	2.5	3.1
T A Seeds	TA545-20	220	22.9	10.1	0	0	4.6	2.5	2.8
Doebblers®	RPM® 563HXR™	230	23.5	10.2	0	0	3.9	2.0	2.3
FS InVISION	57R30SS	224	24.5	9.9	2	0	4.3	1.8	2.9
T A Seeds	TA566-31	235	24.6	10.1	2	1	4.3	2.0	2.7
Doebblers®	RPM® 5115AM™	235	24.7	10.0	0	0	4.3	2.1	2.4
Dyna-Gro	D46SS46	231	24.7	10.1	0	0	4.6	1.8	2.4
Doebblers®	RPM® 537AMX™	219	25.0	9.4	0	0	4.6	2.0	2.7
T A Seeds	TA583-22DPRIB	224	25.2	9.5	0	0	3.9	1.8	2.3
Doebblers®	RPM® 629AMXT™	224	26.1	9.2	1	0	3.9	1.7	2.6
	MEAN	222	23.7	9.9	.6	.2	4.3	2.2	2.7
	S.D.	16	1.3						
	C.V.	7	5.5						
	LSD(.05)	13	1.0						

* 3 location data

** 4 location data

Table 12. 2014 Medium Maturity Hybrids, Chemung, Chemung County, Southern Tier NY

Brand	Hybrid	Yield Bu/A	% Yield			% Stalk		% Root		Early Vigor	Stay Grn	Plant Hlth	Planted: May 14 2014	Harvested: Nov 11 2014		
			Mois ture	Y/M Ratio	Stalk Ldg	Root Ldg										
Syngenta	N45P-3011A	219	19.3	11.3	1	0	4.3	2.8	4.5			86/50				
Dyna-Gro	D41SS71	233	19.5	11.9	0	0	4.8	2.5	3.8			Growing	Rainfall			
Doeblers®	RPM® 4315AMXT™	203	19.6	10.4	0	0	3.2	3.3	4.5			Degree Days (Inches)				
T A Seeds	TA524-22DPRIB	235	20.0	11.7	0	0	3.7	2.0	3.0			2014	Ave.	2014	Ave.	
Dyna-Gro	D46SS46	244	20.2	12.1	0	0	4.5	2.0	3.8	May		346	350	2.9	3.1	
T A Seeds	TA545-20	240	20.2	11.9	0	0	5.0	2.5	4.3	June		532	535	3.4	4.1	
FS InVISION	55R25VT3P	231	20.5	11.3	1	0	4.0	2.0	3.5	July		593	639	1.7	3.6	
Doeblers®	RPM® 563HXR™	252	20.9	12.1	0	0	4.0	2.2	3.5	Aug		522	619	3.3	3.4	
FS InVISION	57R30SS	218	21.2	10.3	4	0	3.5	2.2	4.2	Sept		432	421	1.5	3.6	
Doeblers®	RPM® 5115AM™	244	21.7	11.2	0	0	4.3	2.2	3.5	Oct		241	174	1.9	3.2	
Doeblers®	RPM® 537AMX™	236	21.8	10.8	0	0	4.5	2.2	4.0							
T A Seeds	TA583-22DPRIB	254	21.9	11.6	0	0	4.0	1.8	3.5			Total	2666	2737	14.7	20.9
T A Seeds	TA566-31	246	22.0	11.2	7	0	4.2	2.0	3.7			% Norm	97		70.4	
Doeblers®	RPM® 629AMXT™	241	22.9	10.5	1	1	3.7	2.2	3.8			Departure	-71		-6.2	
	MEAN	235	20.8	11.3	1	0.04	4.1	2.3	3.8							
	S.D.	10	0.6													
	C.V.	4	2.8													
	LSD(.05)	17	1.0													

Table 13. 2014 Medium Maturity Hybrids, Aurora, Cayuga County, Central NY

Brand	Hybrid	Yield Bu/A	% Yield			% Stalk		% Root		Early Vigor	Stay Grn	NLB (0-5)	Eyespot (0-10)	Planted: May 28 2014	Harvested: Nov 21 2014	
			Mois ture	Y/M Ratio	Stalk Ldg	Root Ldg										
T A Seeds	TA524-22DPRIB	210	18.5	11.4	1	1	4.3	4.2	1.2	2.0			86/50			
Dyna-Gro	D41SS71	219	19.4	11.3	1	0	4.0	2.8	2.2	4.7			Growing	Rainfall		
T A Seeds	TA545-20	215	19.6	11.0	1	0	4.2	3.0	3.5	3.0			Degree Days (Inches)			
Doeblers®	RPM® 4315AMXT™	200	19.6	10.2	1	1	4.2	3.3	4.3	5.7			2014	Ave.	2014	Ave.
FS InVISION	55R25VT3P	226	19.7	11.5	1	0	4.0	3.2	1.5	3.0	May		314	315	4.3	3.2
Syngenta	N45P-3011A	219	20.1	10.9	0	1	4.3	2.5	2.2	2.3	June		504	498	2.9	3.8
Dyna-Gro	D46SS46	229	20.5	11.2	0	0	4.3	2.0	2.0	5.7	July		580	632	4.5	3.5
FS InVISION	57R30SS	220	20.9	10.5	1	1	4.7	1.8	3.5	4.7	Aug		511	591	4.5	3.2
T A Seeds	TA583-22DPRIB	213	21.2	10.1	1	0	4.0	1.8	2.2	4.7	Sept		384	398	2.3	4.0
Doeblers®	RPM® 5115AM™	242	21.5	11.3	0	1	4.8	2.3	3.0	2.3	Oct		212	179	2.6	3.4
Doeblers®	RPM® 537AMX™	233	21.7	10.7	1	1	4.3	2.0	2.7	3.3						
Doeblers®	RPM® 563HXR™	228	22.2	10.3	2	1	3.5	2.2	1.8	1.0	Total		2505	2613	21.1	21.0
T A Seeds	TA566-31	237	22.5	10.5	1	2	3.7	2.0	2.3	3.0	% Norm		96		100.2	
Doeblers®	RPM® 629AMXT™	225	22.6	10.0	1	0	4.0	1.8	2.3	4.7	Departure		-108		0.0	
	MEAN	223	20.7	10.8	1	1	4.2	2.5	2.5	3.6						
	S.D.	16	0.7													
	C.V.	7	3.2													
	LSD(.05)	27	1.1													

Table 14. 2014 Medium Maturity Hybrids, Pittsford, Monroe County, Western NY

Brand	Hybrid	Yield Bu/A	% Mois ture	Y/M Ratio	% Stalk Ldg	% Root Ldg	Stay Grn	Plant Hlth	Planted:		Harvested:		
									June 6 2014	Nov 24 2014	June 6 2014	Nov 24 2014	
Doebler's®	RPM® 4315AMXT™	201	28.3	7.1	0	0	2.2	2.7	86/50				
T A Seeds	TA524-22DPRIB	200	29.0	7.0	0	0	1.8	1.5	Growing Degree Days				
FS InVISION	55R25VT3P	194	29.9	6.5	1	0	1.8	1.8	Rainfall (Inches)				
Syngenta	N45P-3011A	190	30.0	6.4	0	1	1.7	2.2	2014	Ave.	2014	Ave.	
Doebler's®	RPM® 563HXR™	218	31.2	7.0	0	0	1.3	1.3	May	350	323	3.2	2.9
T A Seeds	TA545-20	202	32.0	6.3	0	0	2.0	1.7	June	568	508	2.1	3.3
Dyna-Gro	D41SS71	203	32.2	6.3	0	0	2.2	2.2	July	604	653	7.7	3.3
T A Seeds	TA566-31	201	33.4	6.0	1	0	2.2	2.0	Aug	571	605	2.3	3.5
Doebler's®	RPM® 5115AM™	210	34.3	6.1	0	0	1.6	1.8	Sept	425	394	1.3	3.4
FS InVISION	57R30SS	193	35.5	5.4	0	0	1.8	1.7	Oct	227	185	1.9	2.7
Dyna-Gro	D46SS46	200	36.5	5.5	0	0	1.7	1.2	Total				
Doebler's®	RPM® 537AMX™	183	36.5	5.0	0	0	1.7	1.8	% Norm	103	2668	18.4	19.1
T A Seeds	TA583-22DPRIB	196	36.7	5.4	1	0	1.3	1.0	Departure	77		-0.7	
Doebler's®	RPM® 629AMXT™	191	37.5	5.1	1	0	1.3	2.0					
MEAN		199	33.1	6.1	0.2	0.04	1.8	1.8					
S.D.		15	2.3										
C.V.		8	7.1										
LSD(.05)		25	3.9										

Table 15. 2014 Medium Maturity Hybrids, Kingston, Ulster County, Hudson Valley NY

Brand	Hybrid	Yield Bu/A	% Mois ture	Y/M Ratio	% Stalk Ldg	% Root Ldg	Early Vigor	Stay Grn	Plant Hlth	Planted:		Harvested:		
										May 21 2014	Nov 13 2014	May 21 2014	Nov 13 2014	
T A Seeds	TA524-22DPRIB	185	18.8	9.8	4	0	4.5	3.2	3.2	86/50				
Syngenta	N45P-3011A	222	19.1	11.6	0	1	5.0	3.0	2.8	Growing Degree Days				
Dyna-Gro	D41SS71	194	19.2	10.1	0	0	4.3	2.5	3.3	Rainfall (Inches)				
Doebler's®	RPM® 563HXR™	224	19.5	11.5	0	1	4.2	2.3	2.2	2014	Ave.	2014	Ave.	
FS InVISION	55R25VT3P	261	19.5	13.5	1	0	5.0	2.3	2.0	May	330	284	3.9	4.4
Doebler's®	RPM® 4315AMXT™	210	19.6	10.7	1	0	4.3	2.5	3.5	June	507	449	4.3	4.5
T A Seeds	TA545-20	223	19.8	11.2	0	0	4.5	2.5	2.5	July	633	573	6.3	4.6
Doebler's®	RPM® 537AMX™	225	20.1	11.2	0	0	5.0	2.2	2.3	Aug	531	538	1.6	4.3
FS InVISION	57R30SS	266	20.2	13.2	1	0	4.6	1.5	2.8	Sept	413	351	0.9	4.5
T A Seeds	TA566-31	254	20.3	12.5	0	0	5.0	2.0	2.5	Oct	217	163	4.6	4.7
Doebler's®	RPM® 5115AM™	242	21.1	11.5	0	0	3.7	2.2	1.8	Total				
T A Seeds	TA583-22DPRIB	233	21.1	11.0	0	0	3.8	2.0	2.3	% Norm	111	2358	21.7	27.0
Dyna-Gro	D46SS46	249	21.4	11.7	1	0	4.9	1.7	2.2	Departure	271		-5.3	
Doebler's®	RPM® 629AMXT™	241	21.5	11.2	0	0	4.2	1.5	1.8					
MEAN		231	20.1	11.5	1	0.1	4.5	2.2	2.5					
S.D.		21	0.9											
C.V.		9	4.7											
LSD(.05)		35	1.6											