

## 2016 New York Hybrid Corn Grain Performance Trials







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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 2016 commercial hybrid corn grain trials. It shows results from seven locations in New York, divided into the following two maturity ranges:

Base 50 Growing Degree Days Relative Maturity

Early/Medium-early 1900-2300 GDD 75-95 Days Medium 2300-2700 GDD 95-115 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 <u>Cornell Guide for Integrated Field Crop Management</u>.

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

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Extension Leader, Plant Breeding & Genetics

For information on entering hybrids in the 2017 trials, please contact Judy Singer at ils10@cornell.edu or 607-255-5461 or Margaret Smith.

1/2017 PB&G2017-1

### **2016 Growing Conditions**

The 2016 season in New York again had some precipitation extremes, but in different directions from what we saw in 2015. While 2015 was characterized by unusually high rainfall in early summer, 2016 was generally dry through much of the summer, and some parts of the state experienced severe drought. Average temperatures and generally dry conditions in May allowed for timely planting and good crop establishment. Beginning in June, the state experienced varying levels of drought combined with above average temperatures, resulting in drought-stressed corn in many areas. Those spots that had timely rains survived well, but some areas had significant crop losses. Trial sites in New Hope and Pittsford had less than 80% of average growing season rainfall combined with warmer-than-average temperatures, while those in Albion and Kingston had less than 67% of average growing season rainfall and high temperatures. Generally dry conditions through the summer months resulted in very little leaf disease pressure during 2016. Aside from our Kingston trial, which got reasonable rains in July and August but was then very dry through the fall, other sites had quite high rainfall in October (anywhere from 25% above average to more than twice the average monthly total).

Given the summer water stress in 2016, corn yields were surprisingly good. State average yield was reported at 129 bu/acre – 20 bu/acre lower than the record 2010 and 2014 yields, but still the 9th highest state corn grain yield reported. This drop-off in 2016 did not change the trend line for New York corn grain yields, which have increased at a rate of 1.8 bu/acre/year for the past 30 years.

#### **Testing Procedures**

Regional test locations for 2016 are shown on page –iii-. Tests were planted in 1/500 acre plots with three replications per location. All sites were machine planted and combine harvested. Grain weight and grain moisture percentage for each plot were 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. Gray leaf spot resistance (**Czm**) was rated using a scale where 5 = completely susceptible (plant dead due to disease) and 0 = no disease apparent.

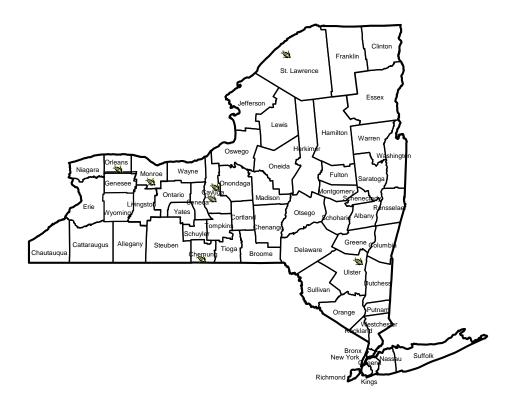
### CV, LSD, SD

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, microclimate, fertility, etc. Grain yield CVs below 12 are excellent; those ranging up to 15 are considered 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.

# **2016 Trial Locations**



### 2016 Cooperators

### **Early/Medium-early Grain Series**

County	Cornell Cooperative Extension Local Contact	Cooperator	Location
Orleans	Mike Stanyard	Hugh Dudley	Albion
Chemung	Janice Degni	<b>Dudley French</b>	Chemung
St. Lawrence	Kitty O'Neil	Jon Greenwood	Madrid
Cayuga	Keith Severson	Steve Nemec	New Hope

### **Medium Grain Series**

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

# 2016 Participating Companies

Company/Brand	<b>Contact for Information</b>	Address & Phone
Albert Lea Seed www.alseed.com	Matt Leavitt matt@alseed.com	1414 W. Main, PO Box 127 Albert Lea, MN 56007 Phone: 800-352-5247
Crop Production Services Dyna-Gro Brand www.cpsagu.com	Tom Barber tom.barber@cpsagu.com	1140 Sweet Road East Aurora, NY 14052 Phone: 716-912-5494
Doebler's PA Hybrids, Inc. Doebler's® www.doeblers.com	Doug Messersmith dmesser@doeblers.com	202 Tiadaghton Avenue Jersey Shore, PA 17740 Phone: 570-753-3210
T. A. Seeds www.taseeds.com	Cory Chelko cchelko@taseeds.com	PO Box 300 Avis, PA 17721 Phone: 866-813-SEED (7333)

2016 **Entries by Company** 

				Genetically	
	Maturity		Relative	Engineered	Seed
Company	Group*	Hybrid	Maturity	Traits**	Treatment**
Albert Lea	1	81-82	82	None	Soil Biotics 1r
Albert Lea	1	68-86 Art	86	None	Soil Biotics 1r
Albert Lea	2	90-91	91	None	Soil Biotics 1r
Albert Lea	2	O.58-98	98	None	Soil Biotics 1r
Albert Lea	2	51-95	95	None	Soil Biotics 1r
Albert Lea	2	O.69-99	99	None	Soil Biotics 1r
Albert Lea	3	O.63-05	105	None	Soil Biotics 1r
Albert Lea	3	O.51-04GS	104	None	Soil Biotics 1r
Albert Lea	3	O.73-08	107	None	Soil Biotics 1r
Doebler's	2	RPM® 3016AMX™	90	HXX/YGCB/LL/RR2	Cruiser 250/Maxim/Quatro
Doebler's	2	RPM® 3316AM™	93	HX1/YGCB/LL/RR2	Cruiser 250/Maxim/Quatro
Doebler's	3	RPM® 4317AMX™	103	HXX/YGCB/RW/LL/RR2	Poncho1250/Maxim/Quatro/Votivo
Doebler's	3	RPM® 4417AM™	104	HX1/YGCB/LL/RR2	Poncho1250/Maxim/Quatro/Votivo
Doebler's	3	RPM® 4717AMX™	107	HXX/YGCB/LL/RR2	Poncho1250/Maxim/Quatro/Votivo
Doebler's	3	RPM® 4917AM™	109	HX1/YGCB/LL/RR2	Poncho1250/Maxim/Quatro/Votivo
Dyna-Gro	2	D32VC41	92	VT2 PRO	Poncho500/Votivo
Dyna-Gro	2	D35SS58	95	SMARTSTAX	Poncho500/Votivo
Dyna-Gro	2	D37VC60	97	VT2PRO	Poncho500/Votivo
Dyna-Gro	2	D40SS48	100	SMARTSTAX	Poncho500/Votivo
T. A. Seeds	1	TA256-20A	85	3000GT	C250
T. A. Seeds	2	TA266-28RIB	86	VT2P	C250
T. A. Seeds	2	TA387-22DPRIB	86	VT2P	C250
T. A. Seeds	2	TA487-22DPRIB	98	VT2P	C250
T. A. Seeds	3	TA527-33EZ	102	3122EZ	C250
T. A. Seeds	3	TA583-22DPRIB	108	VT2P	C250

<sup>\* 1 =</sup> Early; 2 = Medium-early; 3 = Medium \*\* Trait abbreviations and Seed treatments are as provided by each seed company

Table 1. 2016 Early/Medium-Early Maturity Hybrids Trial Summary (Madrid, Chemung, Albion )

			%		%	%		
		Yield	Mois	Y/M	Stalk	Root	Early	Stay
Brand	Hybrid	Bu/A	ture	Ratio	Ldg	Ldg	Vigor	Grn
Albert Lea Seed	81-82	183	19.1	9.5	0	0	3.6	3.5
T A Seeds	TA266-28RIB	192	19.3	9.9	0	0	3.7	2.2
Doebler's®	RPM® 3316AM™	201	19.4	10.4	0	0	3.6	2.3
Albert Lea Seed	68-86 Art	183	19.7	9.3	0	0	3.9	3.5
T A Seeds	TA256-20A	185	20.0	9.2	0	0	3.7	2.8
Dyna-Gro	D37VC60	218	20.2	10.8	0	0	3.4	2.3
Albert Lea Seed	51-95	219	20.2	10.8	0	0	4.2	2.1
Dyna-Gro	D32VC41	210	20.2	10.4	0	0	3.8	2.2
Albert Lea Seed	90-91	217	20.3	10.7	1	0	2.9	2.3
Dyna-Gro	D35SS58	218	20.4	10.7	0	0	3.4	1.8
T A Seeds	TA487-22DPRIB	199	20.5	9.7	0	0	3.3	1.7
Doebler's®	RPM® 3016AMX™	186	20.6	9.1	0	0	3.0	1.9
T A Seeds	TA387-22DPRIB	206	20.9	9.9	0	0	3.5	2.3
Dyna-Gro	D40SS48	219	22.0	10.1	0	0	3.1	1.7
Albert Lea Seed	O.58-98	201	22.2	9.2	0	0	3.1	1.7
Albert Lea Seed	O.69-99	221	24.0	9.2	1	0	3.5	1.6
	MEAN	204	20.6	9.9	0	0	3.5	2.2
	S.D.	13	1.1					
	C.V.	6	5.3					
	LSD(.05)	12	1.0					

Table 2. 2016 Early/Medium-early Maturity Hybrids, Madrid, St. Lawrence County, Northern NY

			%		%	%							
		Yield	Mois	Y/M	Stalk	Root	Early	Stay		Plante	d:	Harves	ted:
Brand	Hybrid	Bu/A	ture	Ratio	Ldg	Ldg	Vigor	Grn		May 17	2016	Oct 28	2016
	DD140 0040444					_				/			
Doebler's®	RPM® 3316AM™	224	20.2	11.1	1	0	4.7	2.5		86/50			
Albert Lea Seed	68-86 Art	236	20.3	11.6	0	0	5.0	2.8		Growin	•	Rainfal	
T A Seeds	TA266-28RIB	219	20.6	10.6	0	0	5.0	2.2		Degree	Days	(Inches	;)
Albert Lea Seed	81-82N	220	20.7	10.6	0	0	5.0	3.0		2016	Ave.	2016	Ave.
T A Seeds	TA387-22DPRIB	237	21.6	11.0	0	0	5.0	2.3	May	323	308	0.9	3.0
T A Seeds	TA256-20A	235	21.7	10.9	0	0	4.7	2.5	June	454	482	2.4	3.5
Albert Lea Seed	51-95	249	22.1	11.3	0	0	5.0	1.8	July	627	649	2.2	3.4
T A Seeds	TA487-22DPRIB	230	22.2	10.4	0	0	4.3	1.7	Aug	649	581	3.3	3.6
Dyna-Gro	D32VC41	245	22.5	10.9	0	0	5.0	2.2	Sept	414	354	2.2	3.6
Dyna-Gro	D37VC60	249	22.5	11.1	1	0	4.3	2.0	Oct	160	154	6.2	3.6
Albert Lea Seed	90-91	240	22.5	10.7	3	0	3.7	2.2					
Doebler's®	RPM® 3016AMX™	216	23.0	9.4	0	0	3.3	2.2	Total	2627	2527	17.2	20.7
Dyna-Gro	D35SS58	259	23.7	11.0	0	0	4.3	1.5	% Norm	104		83	
Dyna-Gro	D40SS48	242	24.4	9.9	0	0	4.0	1.5	Departure	101		-3.5	
Albert Lea Seed	O.58-98	218	25.0	8.7	0	0	4.0	1.5					
Albert Lea Seed	O.69-99	245	25.2	9.7	1	0	4.7	1.5					
					_	_							
	MEAN	235	22.4	10.6	0	0	4.5	2.1					
	S.D.	12	1.1										
	C.V.	5	5.0										
	LSD(.05)	20	1.9										

Table 3. 2016 Early/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	Stay Grn		Plante May 10		Harves	
Doebler's®	RPM® 3316AM™	200	17.8	11.3	0	0	4.0	2.5		86/50			
Albert Lea Seed Dyna-Gro	81-82N D35SS58	167 218	17.9 18.3	9.3 11.9	0 1	0 0	3.3 3.5	4.2 2.0		Growin Degree	•	Rainfall (Inches	
Albert Lea Seed	51-95	215	18.3	11.7	0	0	4.3	2.3		<b>2016</b>	•	2016	,
Doebler's®	RPM® 3016AMX™	187	18.4	10.2	0	0	3.5	1.5	May	319	350	2.1	3.1
Albert Lea Seed	90-91	201	18.5	10.8	0	0	2.9	2.7	June	503	535	1.9	4.1
T A Seeds	TA266-28RIB	188	18.6	10.2	0	0	3.5	2.5	July	675	639	2.0	3.6
Dyna-Gro	D32VC41	216	18.6	11.6	0	0	3.6	2.7	Aug	696	619	2.7	3.4
Dyna-Gro	D37VC60	207	18.6	11.1	1	0	3.5	2.5	Sept	483	421	1.6	3.6
T A Seeds	TA487-22DPRIB	197	18.8	10.5	0	0	2.9	1.8	Oct	216	174	6.7	3.2
Albert Lea Seed	68-86 Art	167	18.9	8.9	1	0	4.3	3.8					
Dyna-Gro	D40SS48	225	19.1	11.8	0	0	3.2	2.0	Total	2891	2737	17.0	20.9
T A Seeds	TA256-20A	157	19.1	8.2	0	0	3.7	3.3	% Norm	106		81	
T A Seeds	TA387-22DPRIB	211	19.2	11.0	0	0	3.2	2.5	Departure	155		-3.9	
Albert Lea Seed	O.58-98	211	19.6	10.8	1	0	3.0	2.0					
Albert Lea Seed	O.69-99	234	22.7	10.3	0	0	3.4	1.5					
	MEAN S.D. C.V. LSD(.05)	200 13 6 22	18.9 0.6 3.1 1.0	10.6	0	0	3.5	2.5					

Table 4. 2016 Early/Medium-early Maturity Hybrids, Albion, Orleans County, Central NY

			%		%	%							
		Yield	Mois	Y/M	Stalk	Root	Early	Stay		Plante	d:	Harves	ted:
Brand	Hybrid	Bu/A	ture	Ratio	Ldg	Ldg	Vigor	Grn		May 6	2016	Oct 19	2016
Albert Lea Seed	81-82N	161	18.7	8.7	0	0	2.3	2.2		86/50			
	• . •	161	-		-	-		3.3				D - ' - ( - 1	
T A Seeds	TA266-28RIB	169	18.8	9.0	0	0	2.7	2.0		Growin	0	Rainfal	
Dyna-Gro	D35SS58	178	19.2	9.3	0	0	2.3	2.0		Degree	•	•	,
T A Seeds	TA256-20A	164	19.2	8.5	0	0	2.8	2.5		2016	Ave.	2016	Ave.
Dyna-Gro	D37VC60	199	19.4	10.2	0	0	2.5	2.5	May	358	389	1.1	3.0
Dyna-Gro	D32VC41	169	19.7	8.6	0	0	2.7	1.7	June	520	524	0.7	3.0
Albert Lea Seed	90-91	210	19.8	10.6	1	0	2.1	2.0	July	726	665	1.2	3.1
Albert Lea Seed	68-86 Art	145	19.9	7.3	0	0	2.5	3.8	Aug	751	622	3.4	3.1
Doebler's®	RPM® 3316AM™	178	20.2	8.9	0	0	2.3	2.0	Sept	503	420	1.6	3.6
Albert Lea Seed	51-95	193	20.2	9.5	0	0	3.3	2.0	Oct	235	197	4.1	3.1
Doebler's®	RPM® 3016AMX™	157	20.4	7.7	1	0	2.1	2.0					
T A Seeds	TA487-22DPRIB	171	20.5	8.4	0	0	2.5	1.5	Total	3093	2817	12	19
Albert Lea Seed	O.58-98	174	21.9	8.0	0	0	2.3	1.5	% Norm	110		64	
T A Seeds	TA387-22DPRIB	170	22.0	7.7	0	0	2.4	2.2	Departure	276		-6.7	
Dyna-Gro	D40SS48	190	22.4	8.5	0	0	2.1	1.5	•				
Albert Lea Seed	O.69-99	185	24.2	7.7	2	0	2.4	1.7					
					_	_							
	MEAN	176	20.4	8.7	0	0	2.5	2.1					
	S.D.	16	1.5										
	C.V.	9	7.1										
	LSD(.05)	26	2.4										

Table 5. 2016 Early/Medium-early Maturity Hybrids, New Hope, Cayuga County, Central NY

Brand	Hybrid	Yield Bu/A		Y/M Ratio	% Stalk Ldg		Early Vigor			Plante May 11		Harves	
Doebler's®	RPM® 3316AM™	155	21.3	7.3	0	0	2.5	2.3		86/50			
Dyna-Gro	D32VC41	178	22.5	8.0	0	0	2.4	2.0		Growin	g	Rainfal	I
Dyna-Gro	D40SS48	176	22.7	7.7	0	0	2.3	1.0		Degree	Days	(Inches	s)
T A Seeds	TA387-22DPRIB	188	22.8	8.3	0	0	2.3	2.3		2016	Ave.	2016	Ave.
T A Seeds	TA256-20A	155	22.8	6.8	0	0	2.8	2.5	May	286	267	1.7	3.6
Dyna-Gro	D35SS58	183	23.0	8.0	0	0	2.8	1.3	June	447	446	1.8	4.3
Doebler's®	RPM® 3016AMX™	179	23.0	7.8	1	0	2.3	1.7	July	642	574	2.1	4.0
T A Seeds	TA266-28RIB	183	23.3	7.9	0	0	2.9	1.3	Aug	675	535	4.4	3.8
Dyna-Gro	D37VC60	219	23.3	9.4	1	0	2.7	1.5	Sept	431	337	3.0	4.2
T A Seeds	TA487-22DPRIB	160	24.4	6.6	0	1	2.4	1.2	Oct	175	138	6.1	4.0
	MEAN S.D. C.V.	177 22 13	22.9 1.1 4.9	7.8	0	0	2.5	1.7	Total % Norm Departure	2655 123 496	2159	19.2 80 -4.8	23.9
	LSD(.05)	38	1.9										

Missing Entries: 8,9,10,11,15,16

Table 6. 2016 Medium Maturity Hybrids Trial Summary (Chemung, Kingston, Aurora, Pittsford)

			%		%	%		
		Yield	Mois	Y/M	Stalk	Root	Early	Stay
Brand	Hybrid	Bu/A	ture	Ratio	Ldg	Ldg	Vigor*	Grn
T A Seeds	TA527-33EZ	194	19.0	10.3	0	0	3.9	2.9
					-	•		_
Doebler's®	RPM® 4317AMX™	210	20.2	10.4	0	0	4.2	2.1
Albert Lea Seed	O.51-04GS	221	20.9	10.6	0	0	4.1	2.9
Doebler's®	RPM® 4417AM™	215	21.2	10.2	0	0	4.0	1.9
Doebler's®	RPM® 4717AMX™	210	21.5	9.7	0	0	3.8	1.8
Albert Lea Seed	O.63-05	192	21.8	8.9	0	0	3.9	2.5
T A Seeds	TA583-22DPRIB	225	22.8	9.9	0	0	4.1	1.9
Doebler's®	RPM® 4917AM™	209	23.1	9.0	0	0	3.2	2.0
Albert Lea Seed	O.73-08	218	23.1	9.5	0	0	4.3	2.7
		040	04.5	0.0	•	•	4.0	0.0
	MEAN	210	21.5	9.8	0	0	4.0	2.3
	S.D.	21	1.1					
	C.V.	10	4.9					
	LSD(.05)	18	0.9					

<sup>\* 3</sup> location data

Table 7. 2016 Medium Maturity Hybrids, Chemung, Chemung County, Southern Tier NY

			%		%	%							
		Yield	Mois	Y/M	Stalk	Root	Early	Stay		Plante	d:	Harves	ted:
Brand	Hybrid	Bu/A	ture	Ratio	Ldg	Ldg	Vigor	Grn		May 10	2016	Nov 8 2	2016
T A CI-	TA 507 0057	000	40.5	44.0	0	0	0.0	0.5		00/50			
T A Seeds	TA527-33EZ	220	18.5	11.9	0	0	3.2	2.5		86/50			
Doebler's®	RPM® 4317AMX™	236	20.4	11.6	0	0	3.0	1.7		Growin	g	Rainfal	
Albert Lea Seed	O.51-04GS	242	21.5	11.3	1	0	2.9	2.3		Degree	Days	(Inches	)
Albert Lea Seed	O.63-05	233	21.9	10.6	1	0	2.8	1.8		2016	Ave.	2016	Ave.
Doebler's®	RPM® 4417AM™	238	22.4	10.7	0	0	3.2	1.5	May	319	350	2.1	3.1
Doebler's®	RPM® 4717AMX™	253	22.5	11.2	0	0	2.7	1.2	June	503	535	1.9	4.1
Albert Lea Seed	O.73-08	250	23.9	10.5	1	0	3.5	1.8	July	675	639	2.0	3.6
Doebler's®	RPM® 4917AM™	258	24.3	10.7	0	0	2.2	1.2	Aug	696	619	2.7	3.4
T A Seeds	TA583-22DPRIB	249	24.4	10.2	0	0	3.0	1.0	Sept	483	421	1.6	3.6
									Oct	216	174	6.7	3.2
	MEAN	242	22.2	11.0	0	0	2.9	1.7					
	S.D.	13	1.0						Total	2891	2737	17.0	20.9
	C.V.	6	4.5						% Norm	106		81	
	LSD(.05)	23	1.7						Departure	155		-3.9	

Table 8. 2016 Medium Maturity Hybrids, Kingston, Ulster County, Hudson Valley NY

		Yield	% Mois	Y/M	% Stalk	% Root	Early	Stay	Gray Leaf		Plante	d:	Harves	ted:
Brand	Hybrid	Bu/A	ture	Ratio	Ldg	Ldg	Vigor	Grn	Spot		May 20	2016	Oct 18	2016
T A Seeds	TA527-33EZ	223	18.7	11.9	0	0	5.0	4.7	3.7		86/50			
Doebler's®	RPM® 4317AMX™	219	19.9	11.0	0	0	5.0	3.0	3.0		Growin	g	Rainfal	l
Doebler's®	RPM® 4417AM™	243	20.2	12.0	0	0	5.0	2.9	2.5		Degree	Days	(Inches	.)
Albert Lea Seed	O.63-05	238	20.7	11.5	0	0	5.0	3.8	2.7		2016	Ave.	2016	Ave.
Albert Lea Seed	O.51-04GS	236	21.0	11.3	0	0	5.0	4.8	3.7	May	362	284	2.8	4.4
Doebler's®	RPM® 4717AMX™	219	21.1	10.3	0	0	4.7	3.0	3.2	June	549	449	2.8	4.5
Albert Lea Seed	O.73-08	233	21.4	10.9	0	0	5.0	5.0	3.5	July	700	573	4.8	4.6
T A Seeds	TA583-22DPRIB	248	22.9	10.8	1	0	5.0	3.2	3.3	Aug	712	538	3.6	4.3
Doebler's®	RPM® 4917AM™	221	23.0	9.5	1	0	4.0	3.0	3.0	Sept	518	351	1.9	4.5
										Oct	243	163	2.4	4.7
	MEAN	231	21.0	11.0	0	0	4.9	3.7	3.2					
	S.D.	23	0.7							Total	3084	2358	18.2	27.0
	C.V.	10	3.4							% Norm	131		67	
	LSD(.05)	40	1.2							Departure	726		-8.8	

Table 9. 2016 Medium Maturity Hybrids, Aurora, Cayuga County, Central NY

			%		%	%							
		Yield	Mois	Y/M	Stalk	Root	Early	Stay		Plante	d:	Harves	ted:
Brand	Hybrid	Bu/A	ture	Ratio	Ldg	Ldg	Vigor	Grn		May 12	2016	Nov 10	2016
T A Coods	TA 507 2257	450	40.0	•	0	^	2.7	0.0		00/50			
T A Seeds	TA527-33EZ	153	19.3	8	0	0	3.7	2.2		86/50			
Doebler's®	RPM® 4417AM™	184	19.9	9	0	0	3.8	1.8		Growin	g	Rainfall	
Albert Lea Seed	O.51-04GS	205	20.3	10	1	0	4.5	2.0		Degree	Days	(Inches)	
Doebler's®	RPM® 4317AMX™	186	20.8	9	0	0	4.7	1.7		2016	Ave.	2016	Ave.
T A Seeds	TA583-22DPRIB	207	21.3	10	0	0	4.3	1.7	May	314	315	2.0	3.2
Doebler's®	RPM® 4717AMX™	178	21.4	8	0	0	4.0	1.3	June	507	498	0.7	3.8
Albert Lea Seed	O.63-05	124	21.6	6	1	0	4.0	1.8	July	696	632	1.7	3.5
Doebler's®	RPM® 4917AM™	172	22.0	8	0	1	3.3	1.5	Aug	730	591	4.6	3.2
Albert Lea Seed	O.73-08	197	23.4	8	0	0	4.3	1.8	Sept	487	398	2.2	4.0
									Oct	218	179	7.9	3.4
	MEAN	179	21.1	8.5	0	0	4.1	1.8					
	S.D.	24	1.4						Total	2951	2613	19.1	21.0
	C.V.	13	6.4						% Norm	113		91	
	LSD(.05)	40	2.3						Departure	338.3		-1.9	

Table 10. 2016 Medium Maturity Hybrids, Pittsford, Monroe County, Western NY

		Yield	% Mois	Y/M	% Stalk	% Root	Early	Stay	Planted:		Harves	sted:	
Brand	Hybrid	Bu/A	ture	Ratio	Ldg	Ldg	Vigor	Grn	May 21 20	16	Nov 9	2016	
Doebler's®	RPM® 4317AMX™	194	19.4	10.0	0	0		2.0		86/50			
T A Seeds	TA527-33EZ	172	19.5	8.8	0	1		1.8		Growin	g	Rainfal	
Doebler's®	RPM® 4717AMX™	179	20.7	8.7	0	0		1.8		Degree Days (Inches)			<b>(</b> )
Albert Lea Seed	O.51-04GS	191	20.8	9.2	1	0		2.3		2016	Ave.	2016	Ave.
T A Seeds	TA583-22DPRIB	182	22.4	8.2	0	0		1.5	May	344	323	2.9	2.9
Doebler's®	RPM® 4417AM™	183	22.6	8.1	1	0		1.3	June	527	508	0.9	3.3
Doebler's®	RPM® 4917AM™	171	23.1	7.4	0	0		2.3	July	741	653	1.2	3.3
Albert Lea Seed	O.63-05	164	23.6	7.0	2	0		2.5	Aug	776	605	3.9	3.5
Albert Lea Seed	O.73-08	177	24.1	7.4	0	0		2.0	Sept	509	394	2.3	3.4
									Oct	239	185	3.8	2.7
	MEAN	179	21.8	8.3	0	0		1.9					
	S.D.	20	1.1						Total	3135	2668	15.1	19.1
	C.V.	11	4.9						% Norm	118		79	
	LSD(.05)	44	2.4						Departure	467		-4.1	