Cornell University
Cooperative Extension

2012 New York Hybrid Corn Grain Performance Trials

Plant Breeding and Genetics 2013-1

Cornell University
Cooperative Extension

Margaret E. Smith
Professor

Phone: 607-255-1654
Fax: 607-255-6683
Email: mes25@cornell.edu

Department of Plant Breeding & Genetics
College of Agriculture & Life Sciences
G42 Emerson Hall
Ithaca, NY 14853-1901

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

This report includes a summary of our 2012 commercial hybrid corn grain trials. It shows results from nine 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 2013 trials, please contact Judy Singer at jls10@cornell.edu or 607-255-5461 or Margaret Smith.

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2012 Growing Conditions

The 2012 growing season in New York began with slightly dry conditions in the eastern and southern portions of the state, but then proceeded fairly normally until mid-July. Starting at that point, drought began to affect most areas of the state, with abnormally to moderately dry conditions prevailing right through September, particularly in the mid-latitudes of the state. Despite many dry areas, our trial locations fared relatively well in terms of rainfall, with occasional showers helping to get the crop through flowering and grain fill without much apparent effect on yield. Growing degree day accumulation was above normal for most locations throughout the growing season, with more seasonable heat units in June and September in many areas. State average yield was reported at 134 bu/acre, almost identical to reported New York averages for 2011 and 2009, but 16 bu/acre lower than the record 2010 state average.

Northern leaf blight was prevalent in central and southern tier areas, and found in lesser amounts in most of our field locations. Gray leaf spot was prevalent in misty valley areas of the southern tier and Hudson Valley, and was found at low levels in central New York locations. A number of other leaf diseases were present at our trial locations, but at levels that likely did not affect yield. These included anthracnose leaf blight, eyespot, rust, and possibly Stewart's wilt. Consistent with recent years, very little European corn borer pressure was apparent.

Testing Procedures

Regional test locations for 2012 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.

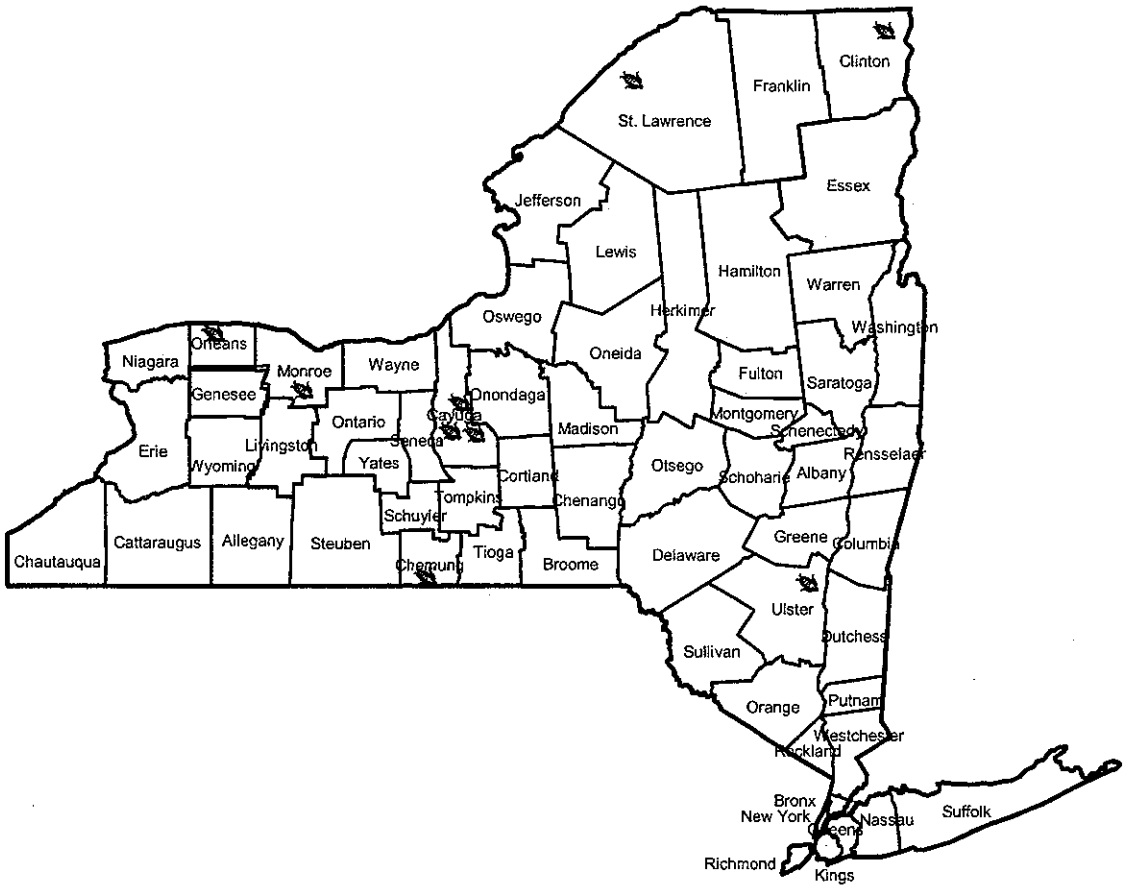
Early Vigor, Staygreen, Top Death, and Leaf Disease Ratings

Data were collected on these traits at those locations where expression was uniform across the field and (for diseases) where disease pressure was sufficient to rate. **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. 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 showing top death and 0 = no plants showing it. Gray leaf spot (**GLS**, caused by *Cercospora zeae-maydis*) and northern leaf blight (**NLB**, caused by *Setosphaeria turcica*) each were prevalent at several sites, and severity was rated with 5 = completely susceptible (plant dead due to disease) and 0 = no disease apparent. **Rust** (caused by *Puccinia sorghi*) was rated at one site on a scale with 3 = severe rust and 0 = no rust 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.

2012 Trial Locations



2012
Cooperators

Early Grain Series

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

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

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
2012 Commercial Hybrid Corn Field Trials

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
Dairyland Seed	Rod Moran rmoran@dairylandseed.com	PO Box 958 West Bend, WI 53095 Phone: 217-972-9839
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
FS InVISION	Mark Guttendorf mguttendorf@growmarkfs.com	308 N.E. Front Street Milford, DE 19963 Phone: 607-842-6330 Fax: call first
Monsanto, Channel	James Valent jcvale@monsanto.com	800 N. Lindbergh Blvd. St. Louis, MO 63137 Phone: 814-571-8600 Fax: 814-237-1182
T. A. Seeds	Taylor Doebler III taylor@taseeds.com	PO Box 300 Avis, PA 17721 Phone: 866-813-SEED Fax: 570-753-4445
WinField a division of LandOLakes CROPLAN Brand	Ron Brown rcbrown@landolakes.com	235 West Street Canandaigua, NY 14424 Phone: 585-455-9667

Table 1. 2012 Early Maturity Hybrids Trial Summary
(Madrid, Chazy, Chemung, New Hope, Albion, Lansing)

Brand	Hybrid	Yield Bu/A	% Moisture	Y/M Ratio	% Stalk Ldg	% Root Ldg	Early Vigor*	Stay Grn**	Top Death**
RPM®	278HXR™	188	20.6	9.1	1	1	4.2	2.8	2.6
FS InVISION	FS 3722VT3P	214	21.0	10.2	1	0	4.6	2.3	2.5
FS InVISION	FS 3808VT3P	211	21.2	10.0	3	0	3.9	2.0	2.8
FS InVISION	FS 4027VT3P	214	21.6	9.9	1	0	4.0	2.3	2.7
FS InVISION	FS 3984VP3	219	22.0	9.9	1	1	4.6	2.9	2.0
FS InVISION	FS 4212VT3P	213	22.1	9.7	5	0	4.7	2.6	2.9
	MEAN	210	21.4	9.8	2.1	0.4	4.3	2.5	2.6
	S.D.	15	0.8						
	C.V.	7	3.6						
	LSD(.05)	10	0.5						

* 3 location data
** 4 location data

Table 2. 2012 Early Maturity Hybrids, Madrid, St. Lawrence County, Northern NY

Brand	Hybrid	Yield Bu/A	% Moisture	Y/M Ratio	% Stalk Ldg	% Root Ldg	Stay Grn	Rust	Top Death
FS InVISION	FS 3722VT3P	230	19.0	12.1	0	1	1.5	3.0	2.0
FS InVISION	FS 3808VT3P	236	19.3	12.3	0	0	2.2	1.3	3.0
FS InVISION	FS 4212VT3P	237	19.3	12.3	0	1	2.5	1.0	3.0
FS InVISION	FS 3984VP3	245	20.0	12.3	2	3	2.3	2.0	1.5
RPM®	278HXR™	162	20.0	8.1	1	4	2.8	1.7	2.9
FS InVISION	FS 4027VT3P	225	20.4	11.0	0	1	2.0	2.7	3.0
	MEAN	223	19.6	11.4	0.4	1.8	2.2	1.9	2.6
	S.D.	12	0.9						
	C.V.	5	4.3						
	LSD(.05)	21	1.5						

Planted: May 14 2012 **Harvested:** Oct 25 2012

86/50 Growing Degree Days | Rainfall (Inches)

	2012	Ave.	2012	Ave.
May	388	308	2.4	2.8
June	516	482	3.4	3.2
July	707	649	1.9	3.1
Aug	651	581	2.3	3.7
Sept	384	354	6.5	3.8
Oct	173	154	3.8	2.9
Total	2819	2527	20.2	19.5
% Norm	112		103.5	
Departure	293		0.7	

Table 3. 2012 Early Maturity Hybrids, Chazy, Clinton County, Northern NY

Brand	Hybrid	Yield Bu/A	% Moisture	Y/M Ratio	% Stalk Ldg	% Root Ldg
FS InVISION	FS 4027VT3P	212	19.2	11.0	8	0
FS InVISION	FS 3722VT3P	212	19.6	10.8	6	0
FS InVISION	FS 3808VT3P	205	19.8	10.4	9	0
RPM®	278HXR™	202	19.8	10.2	4	0
FS InVISION	FS 4212VT3P	220	22.2	9.9	27	0
FS InVISION	FS 3984VP3	228	22.9	10.0	5	0
	MEAN	213	20.6	10.4	9.6	0.0
	S.D.	13	0.4			
	C.V.	6	2.1			
	LSD(.05)	22	0.8			

Planted: May 12 2012 **Harvested:** Oct 26 2012

86/50 Growing Degree Days | Rainfall (Inches)

	2012	Ave.	2012	Ave.
May	355	291	2.3	3.7
June	472	445	2.0	3.9
July	628	612	3.3	3.4
Aug	617	554	2.4	4.7
Sept	334	366	4.3	3.5
Oct	167	118	3.6	3.6
Total	2573	2385	17.9	22.7
% Norm	108		78.8	
Departure	188		-4.8	

Table 4. 2012 Early Maturity Hybrids, Chemung, Chemung County, Southern Tier NY

Brand	Hybrid	Yield Bu/A	% Moisture	Y/M Ratio	% Stalk Ldg	% Root Ldg	Early Vigor	GLS	Top Death
FS InVISION	FS 3722VT3P	254	17.2	14.8	0	0	4.5	3.8	3.0
FS InVISION	FS 3808VT3P	215	17.5	12.3	5	0	3.5	3.2	3.0
FS InVISION	FS 4027VT3P	252	17.6	14.3	1	0	4.7	3.7	3.0
RPM®	278HXR™	210	17.6	11.9	1	0	4.4	4.0	3.0
FS InVISION	FS 4212VT3P	239	17.6	13.6	1	0	4.7	3.8	3.0
FS InVISION	FS 3984VP3	247	18.4	13.5	1	0	4.0	3.7	3.0
	MEAN	236	17.6	13.4	1.4	0.0	4.3	3.7	3.0
	S.D.	14	0.3						
	C.V.	6	1.5						
	LSD(.05)	26	0.5						

Planted: May 18 2012 **Harvested:** Nov 7 2012

86/50 Growing Degree Days | Rainfall (Inches)

	2012	Ave.	2012	Ave.
May	453	350	3.7	3.2
June	478	535	3.2	4.0
July	697	639	2.3	3.2
Aug	613	619	4.0	3.3
Sept	398	421	3.8	3.7
Oct	221	174	3.9	3.0
Total	2860	2737	20.8	20.2
% Norm	105		102.9	
Departure	124		0.6	

Table 5. 2012 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
FS InVISION	FS 3808VT3P	194	24.6	7.9	1	0	4.0	2.2	2.3
FS InVISION	FS 4212VT3P	189	24.9	7.6	1	0	4.8	2.5	2.5
FS InVISION	FS 3984VP3	206	25.1	8.2	1	2	4.7	2.7	1.7
RPM®	278HXR™	211	25.5	8.3	1	0	4.3	2.8	1.5
FS InVISION	FS 3722VT3P	190	25.7	7.4	2	0	4.3	1.8	2.0
FS InVISION	FS 4027VT3P	210	26.3	8.0	0	0	3.8	2.2	2.0
	MEAN	200	25.4	7.9	0.7	0.4	4.3	2.3	2.0
	S.D.	14	0.8						
	C.V.	7	3.2						
	LSD(.05)	26	1.5						

Planted: May 7 2012 **Harvested:** Oct 17 2012

86/50 Growing Degree Days; Rainfall (Inches)

	2012	Ave.	2012	Ave.
May	382	295	3.6	3.4
June	422	471	3.5	4.2
July	617	584	1.9	3.7
Aug	551	566	3.4	3.5
Sept	345	382	3.8	4.2
Oct	151	159	3.4	3.5
Total	2468	2456	19.5	22.4
% Norm	100		87.1	
Departure	12		-2.9	

Table 6. 2012 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
FS InVISION	FS 3722VT3P	204	19.3	10.6	0	0	5.0	2.3	3.0
RPM®	278HXR™	185	19.7	9.4	0	0	4.0	2.8	3.0
FS InVISION	FS 4027VT3P	186	20.3	9.1	0	0	3.5	2.2	2.7
FS InVISION	FS 3984VP3	184	20.8	8.9	1	0	5.0	2.8	2.0
FS InVISION	FS 3808VT3P	217	21.1	10.3	1	0	4.3	1.2	3.0
FS InVISION	FS 4212VT3P	187	22.0	8.5	0	0	4.5	2.5	3.0
	MEAN	194	20.5	9.5	0.3	0.0	4.4	2.3	2.8
	S.D.	16	1.5						
	C.V.	8	7.3						
	LSD(.05)	30	2.7						

Planted: May 4 2012 **Harvested:** Oct 19 2012

86/50 Growing Degree Days; Rainfall (Inches)

	2012	Ave.	2012	Ave.
May	440	332	2.6	3.0
June	568	523	3.7	3.6
July	741	661	1.6	2.6
Aug	649	619	1.5	3.2
Sept	450	420	3.2	3.7
Oct	211	197	5.1	2.8
Total	3059	2752	17.7	18.8
% Norm	111		93.8	
Departure	298		-1.2	

Table 7. 2012 Early Maturity Hybrids, Lansing, Cayuga County, Central NY

Brand	Hybrid	Yield Bu/A	% Moisture	Y/M Ratio	% Stalk Ldg	% Root Ldg	Stay Grn	NLB
RPM®	278HXR™	161	21.3	7.5	0	0	2.8	3.5
FS InVISION	FS 3984VP3	200	24.8	8.1	0	0	3.8	3.3
FS InVISION	FS 3808VT3P	200	24.9	8.0	0	0	2.5	3.3
FS InVISION	FS 3722VT3P	195	25.4	7.7	0	0	3.5	3.0
FS InVISION	FS 4027VT3P	198	25.9	7.6	0	1	2.7	3.0
FS InVISION	FS 4212VT3P	208	26.5	7.8	0	0	3.0	3.3
	MEAN	194	24.8	7.8	0.0	0.1	3.0	3.3
	S.D.	20	0.5					
	C.V.	10	2.1					
	LSD(.05)	36	1.0					

Planted: May 17 2012 **Harvested:** Oct 16 2012

86/50 Growing Degree Days; Rainfall (Inches)

	2012	Ave.	2012	Ave.
May	430	315	3.3	3.2
June	498	498	4.1	4.1
July	707	632	3.6	3.3
Aug	620	591	1.8	3.6
Sept	387	389	5.1	4.2
Oct	188	179	4.3	3.2
Total	2830	2604	22.2	21.6
% Norm	109		102.7	
Departure	226		0.6	

Table 8. 2012 Medium Early Maturity Hybrids Trial Summary
(Chemung, New Hope, Albion, Lansing)

Brand	Hybrid	Yield Bu/A	% Moisture	Y/M Ratio	% Stalk Ldg	% Root Ldg	Early Vigor*	Stay Grn*	Top Death*
Doeblers	329GRQ	208	21.2	9.8	0	1	3.4	3.0	2.3
RPM®	448AMX-R™	200	21.2	9.5	0	0	4.0	2.7	2.1
RPM®	357AM1™	196	21.3	9.2	1	0	4.2	2.2	2.8
TA Seeds	TA 370-31	209	21.4	9.8	1	1	3.4	2.8	2.7
Dyna-Gro	D31VP31	208	21.7	9.6	1	0	4.2	2.7	2.4
Dairyland	DS9789SSX	204	21.7	9.4	2	0	4.1	2.8	2.4
Dyna-Gro	D35VP40	213	21.7	9.8	0	0	4.0	2.5	2.1
TA Seeds	TA 333-22DP	221	21.7	10.2	0	0	4.0	2.3	2.3
Channel	192-09VT3P	214	22.0	9.7	0	0	4.1	2.2	2.7
Dairyland	DS9494SSX	201	22.0	9.1	0	0	4.7	2.3	1.8
TA Seeds	TA 451-31	211	22.4	9.4	1	1	2.6	2.5	2.7
FS InVISION	FS 4422VT3P	225	22.6	9.9	0	0	4.3	2.3	2.4
FS InVISION	FS 4626VT3P	213	22.8	9.3	0	0	3.9	2.1	2.3
Channel	194-62VT3P	204	22.8	9.0	0	0	4.1	2.1	2.3
Dyna-Gro	D34VP52	220	22.8	9.6	0	0	4.4	2.2	2.3
CROPLAN	3699VT3P	200	23.2	8.6	0	0	3.8	2.5	2.3
Dyna-Gro	D40SS09RIB	223	23.3	9.6	0	0	3.9	2.4	2.3
Dyna-Gro	D39VP14	214	23.3	9.2	0	0	4.5	2.3	2.7
CROPLAN	3738VT3	218	23.3	9.4	0	0	4.1	1.8	2.2
RPM®	487AM-R™	198	23.3	8.5	0	0	4.4	2.4	1.8
Channel	197-67VT3P	210	23.4	9.0	0	0	3.7	2.3	2.5
CROPLAN	3514VT3	212	23.5	9.0	0	0	3.4	2.3	1.8
FS InVISION	FS 4828VT3P	212	23.6	9.0	0	0	4.2	2.4	1.7
Channel	197-32VT3P	227	24.0	9.5	0	0	4.3	2.0	2.2
TA Seeds	TA 477-31	213	24.1	8.9	1	0	4.0	1.8	1.3
Dairyland	DS1803	208	24.2	8.6	0	0	4.2	2.3	1.8
FS InVISION	FS 5525VT3P	236	24.3	9.7	0	0	4.0	1.7	1.2
CROPLAN	3737VT3P	221	24.8	8.9	1	0	4.0	2.2	1.7
FS InVISION	FS 5667GT3	222	25.4	8.8	0	0	4.2	1.8	.5
	MEAN	212	22.9	9.3	0.3	0.2	4.0	2.3	2.1
	S.D.	17	1.0						
	C.V.	8	4.4						
	LSD(.05)	13	.8						

* 3 location data

Table 9. 2012 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	GLS	Top Death
Dairyland	DS9789SSX	221	17.0	13.0	2	0	4.3	2.5	3.0
TA Seeds	TA 333-22DP	260	17.3	15.0	1	0	4.5	3.5	3.0
RPM®	357AM1™	236	17.4	13.6	2	1	3.8	4.8	3.0
Channel	192-09VT3P	232	17.4	13.4	0	0	3.9	3.8	3.0
FS InVISION	FS 4626VT3P	224	17.4	12.9	1	0	3.7	3.3	3.0
TA Seeds	TA 370-31	230	17.6	13.0	2	4	3.4	3.8	3.0
Dyna-Gro	D31VP31	242	17.7	13.7	2	0	4.3	3.3	3.0
Doeblers	329GRQ	243	17.7	13.7	0	4	3.2	4.3	3.0
Dyna-Gro	D35VP40	240	17.8	13.5	0	0	4.0	3.3	3.0
RPM®	448AMX-R™	232	17.9	12.9	1	0	4.0	3.5	3.0
Dyna-Gro	D39VP14	226	18.1	12.5	0	0	4.6	3.8	3.0
Dairyland	DS9494SSX	241	18.1	13.3	0	0	4.7	3.5	3.0
CROPLAN	3737VT3P	253	18.1	13.9	1	0	3.3	3.2	2.7
FS InVISION	FS 4422VT3P	244	18.3	13.3	2	0	4.2	3.7	3.0
Channel	194-62VT3P	239	18.3	13.1	0	0	3.7	3.2	3.0
Dyna-Gro	D34VP52	232	18.4	12.6	1	0	3.7	3.8	3.0
TA Seeds	TA 451-31	226	18.4	12.3	2	3	2.3	4.0	3.0
RPM®	487AM-R™	238	18.4	12.9	0	0	4.7	3.7	3.0
CROPLAN	3514VT3	232	18.5	12.6	0	0	3.3	3.2	3.0
Dyna-Gro	D40SS09RIB	230	18.5	12.5	1	0	3.8	3.8	3.0
Channel	197-67VT3P	238	18.6	12.8	0	0	3.3	3.8	3.0
CROPLAN	3738VT3	247	18.6	13.3	0	0	3.7	3.3	3.0
Channel	197-32VT3P	248	18.9	13.1	1	0	4.3	3.8	3.0
FS InVISION	FS 4828VT3P	243	19.0	12.8	0	0	4.3	3.3	3.0
TA Seeds	TA 477-31	253	19.1	13.2	0	0	3.7	3.3	3.0
FS InVISION	FS 5525VT3P	264	19.4	13.6	1	0	3.4	3.3	3.0
CROPLAN	3699VT3P	231	19.5	11.9	0	0	3.5	4.0	3.0
Dairyland	DS1803	235	20.1	11.7	0	0	3.9	3.3	3.0
FS InVISION	FS 5667GT3	245	21.9	11.2	0	0	3.8	3.7	1.0
	MEAN	239	18.4	13.0	0.6	0.4	3.8	3.6	2.9
	S.D.	14	0.6						
	C.V.	6	3.5						
	LSD(.05)	23	1.0						

Planted: May 18 2012		Harvested: Nov 7 2012	
Growing Degree Days		Rainfall (Inches)	
2012	**Ave.**	**2012**	**Ave.**
May 453	350	3.7	3.2
June 478	535	3.2	4.0
July 697	639	2.3	3.2
Aug 613	619	4.0	3.3
Sept 398	421	3.8	3.7
Oct 221	174	3.9	3.0
Total 2860	2737	20.8	20.2
% Norm 105		102.9	
Departure 124		0.6	

Table 10. 2012 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
CROPLAN	3738VT3	205	24.2	8.5	0	0	4.2	1.8	1.7
Doeblers	329GRQ	204	24.4	8.4	0	0	3.3	2.3	1.5
RPM®	448AMX-R™	201	24.4	8.2	0	0	4.0	2.0	1.5
Dyna-Gro	D35VP40	207	24.6	8.4	0	0	4.0	1.8	2.3
Dyna-Gro	D34VP52	224	24.9	9.0	1	0	4.8	2.0	1.8
Channel	192-09VT3P	220	25.1	8.7	1	0	4.3	2.2	2.2
TA Seeds	TA 370-31	202	25.1	8.1	0	1	3.7	2.5	2.7
TA Seeds	TA 333-22DP	224	25.2	8.9	1	0	4.2	2.2	1.7
RPM®	357AM1™	165	25.2	6.5	1	1	4.0	2.2	2.5
CROPLAN	3699VT3P	183	25.2	7.3	0	0	4.0	2.6	1.5
TA Seeds	TA 451-31	193	25.2	7.7	1	0	2.5	2.1	2.3
Dyna-Gro	D31VP31	208	25.3	8.2	0	0	4.0	2.2	2.0
Dairyland	DS9789SSX	213	25.4	8.4	1	0	4.0	2.0	1.7
Channel	197-67VT3P	211	25.4	8.3	0	0	3.7	2.3	1.8
FS InVISION	FS 4626VT3P	226	25.4	8.9	0	0	4.0	2.2	1.5
RPM®	487AM-R™	187	25.5	7.3	0	0	4.8	2.8	1.7
Dairyland	DS9494SSX	205	25.6	8.0	0	0	4.8	1.8	0.7
TA Seeds	TA 477-31	197	25.6	7.7	0	1	4.3	1.7	0.5
Channel	194-62VT3P	196	25.6	7.6	1	0	4.2	2.2	1.8
FS InVISION	FS 4828VT3P	205	26.0	7.9	0	0	4.2	2.3	1.0
CROPLAN	3514VT3	195	26.1	7.5	2	0	3.7	2.2	1.0
Dyna-Gro	D40SS09RIB	236	26.1	9.0	0	0	4.0	2.3	2.0
Dyna-Gro	D39VP14	202	26.1	7.7	0	0	4.3	2.0	2.8
Channel	197-32VT3P	228	26.3	8.7	0	0	4.0	2.3	1.5
FS InVISION	FS 5667GT3	219	26.3	8.3	0	0	4.2	1.6	0.2
FS InVISION	FS 5525VT3P	226	26.7	8.4	0	0	4.3	1.8	0.5
FS InVISION	FS 4422VT3P	236	26.8	8.8	0	0	4.2	1.8	1.7
Dairyland	DS1803	196	27.2	7.2	0	0	4.3	2.2	1.5
CROPLAN	3737VT3P	213	28.6	7.4	0	0	3.8	2.0	0.8
	MEAN	208	25.6	8.1	0.2	0.1	4.1	2.1	1.6
	S.D.	17	0.9						
	C.V.	8	3.6						
	LSD(.05)	27	1.5						

Planted: May 7 2012 **Harvested:** Oct 17 2012

	Growing Degree Days		Rainfall (Inches)	
	2012	**Ave.**	**2012**	**Ave.**
May	382	295	3.6	3.4
June	422	471	3.5	4.2
July	617	584	1.9	3.7
Aug	551	566	3.4	3.5
Sept	345	382	3.8	4.2
Oct	151	159	3.4	3.5
Total	2468	2456	19.5	22.4
% Norm	100		87.1	
Departure	12		-2.9	

Table 11. 2012 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
Dyna-Gro	D31VP31	203	19.1	10.6	0	0	4.3	2.2	2.3
RPM®	448AMX-R™	169	19.4	8.7	0	1	4.0	1.8	1.7
RPM®	357AM1™	206	19.4	10.6	0	0	4.8	2.2	3.0
TA Seeds	TA 370-31	185	19.8	9.3	1	0	3.0	1.8	2.3
Dairyland	DS9494SSX	179	19.9	9.0	0	0	4.7	1.7	1.7
Channel	192-09VT3P	197	20.0	9.9	0	0	3.9	2.2	3.0
TA Seeds	TA 333-22DP	199	20.0	9.9	0	1	3.3	2.3	2.3
Dyna-Gro	D35VP40	198	20.4	9.7	0	0	4.0	1.7	1.2
Dairyland	DS9789SSX	186	20.6	9.1	3	0	3.8	1.7	2.7
FS InVISION	FS 4422VT3P	211	20.7	10.2	0	0	4.5	1.8	2.5
Channel	194-62VT3P	198	20.7	9.6	0	0	4.5	1.8	2.0
Doeblers	329GRQ	190	21.0	9.0	0	1	3.8	2.0	2.3
RPM®	487AM-R™	190	21.4	8.9	0	0	3.8	1.8	0.7
Dyna-Gro	D34VP52	217	21.5	10.1	0	0	4.7	2.0	2.0
CROPLAN	3699VT3P	195	21.8	8.9	1	0	4.0	1.5	2.5
TA Seeds	TA 451-31	216	21.8	9.9	0	0	2.9	1.5	2.7
Dairyland	DS1803	200	22.0	9.1	1	0	4.3	2.2	1.0
FS InVISION	FS 4626VT3P	192	22.1	8.7	0	0	4.0	1.8	2.3
Channel	197-67VT3P	206	22.4	9.2	1	0	4.2	1.7	2.7
Dyna-Gro	D39VP14	219	22.7	9.6	0	0	4.7	2.0	2.3
FS InVISION	FS 5525VT3P	225	22.7	9.9	0	0	4.3	1.0	0.0
CROPLAN	3514VT3	204	22.9	8.9	0	1	3.3	1.3	1.3
Channel	197-32VT3P	209	23.0	9.1	0	0	4.5	1.3	2.0
CROPLAN	3737VT3P	221	23.5	9.4	0	0	4.8	2.3	1.5
FS InVISION	FS 4828VT3P	205	23.5	8.8	0	0	4.2	1.8	1.0
FS InVISION	FS 5667GT3	203	23.5	8.6	0	0	4.5	1.3	0.3
CROPLAN	3738VT3	210	23.8	8.8	0	0	4.3	1.3	2.0
TA Seeds	TA 477-31	205	24.4	8.4	1	0	4.0	1.0	0.5
	MEAN	201	21.6	9.4	0.2	0.1	4.1	1.8	1.9
	S.D.	18	1.3						
	C.V.	9	5.8						
	LSD(.05)	29	2.0						

Planted: May 4 2012
Harvested: Oct 19 2012

86/50 Growing Degree Days / Rainfall (Inches)

	2012	Ave.	2012	Ave.
May	440	332	2.6	3.0
June	568	523	3.7	3.6
July	741	661	1.6	2.6
Aug	649	619	1.5	3.2
Sept	450	420	3.2	3.7
Oct	211	197	5.1	2.8
Total	3059	2752	17.7	18.8
% Norm	111		93.8	
Departure	298		-1.2	

Table 12. 2012 Medium Early Maturity Hybrids, Lansing, Cayuga County, Central NY

Brand	Hybrid	Yield Bu/A	% Moisture	Y/M Ratio	% Stalk Ldg	% Root Ldg	Stay Grn	NLB
Doeblers	329GRQ	195	21.6	9.1	0	0	4.7	3.7
TA Seeds	TA 370-31	221	23.0	9.6	1	0	4.0	3.7
RPM®	448AMX-R™	201	23.0	8.8	0	1	4.3	2.0
RPM®	357AM1™	176	23.3	7.6	0	0	2.2	3.7
Dairyland	DS9789SSX	196	23.9	8.2	1	0	4.7	1.7
Dyna-Gro	D35VP40	206	24.2	8.5	0	0	4.0	3.7
TA Seeds	TA 451-31	209	24.2	8.7	0	0	3.8	2.0
Dairyland	DS9494SSX	179	24.5	7.3	0	0	3.5	5.0
TA Seeds	TA 333-22DP	204	24.5	8.3	0	0	2.5	2.0
Dyna-Gro	D31VP31	177	24.6	7.2	1	0	3.7	3.0
FS InVISION	FS 4422VT3P	211	24.8	8.5	0	0	3.2	3.0
Channel	192-09VT3P	207	25.3	8.2	0	0	2.3	3.0
FS InVISION	FS 4626VT3P	208	26.1	8.0	0	0	2.3	2.0
FS InVISION	FS 4828VT3P	193	26.1	7.4	1	0	3.0	2.5
Dyna-Gro	D39VP14	211	26.4	8.0	1	0	2.8	4.0
CROPLAN	3699VT3P	190	26.4	7.2	0	0	3.5	2.0
Dyna-Gro	D34VP52	207	26.5	7.9	0	0	2.7	3.7
Channel	194-62VT3P	183	26.5	6.9	1	0	2.3	2.3
CROPLAN	3738VT3	211	26.6	7.9	0	0	2.2	3.7
Dyna-Gro	D40SS09RIB	212	26.6	8.0	0	0	3.0	2.7
CROPLAN	3514VT3	219	26.6	8.2	0	0	3.3	3.0
TA Seeds	TA 477-31	199	27.2	7.3	1	0	2.7	3.3
Channel	197-67VT3P	187	27.3	6.9	0	0	2.8	4.0
Dairyland	DS1803	202	27.5	7.4	0	0	2.5	3.0
Channel	197-32VT3P	224	27.7	8.1	0	1	2.5	3.7
RPM®	487AM-R™	176	28.0	6.3	0	0	2.7	3.7
FS InVISION	FS 5525VT3P	229	28.3	8.1	0	0	2.4	3.0
CROPLAN	3737VT3P	196	29.1	6.8	1	0	2.3	3.0
FS InVISION	FS 5667GT3	222	29.6	7.5	0	0	2.5	3.7
	MEAN	202	25.8	7.9	0.2	0.0	3.0	3.1
	S.D.	19	1.2					
	C.V.	10	4.7					
	LSD(.05)	32	2.0					

Planted: May 17 2012 **Harvested:** Oct 16 2012

86/50 Growing Degree Days

	2012	Ave.	Rainfall (Inches) 2012	Ave.
May	430	315	3.3	3.2
June	498	498	4.1	4.1
July	707	632	3.6	3.3
Aug	620	591	1.8	3.6
Sept	387	389	5.1	4.2
Oct	188	179	4.3	3.2
Total	2830	2604	22.2	21.6
% Norm	109		102.7	
Departure	226		0.6	

Table 13. 2012 Medium Maturity Hybrids Trial Summary
(Aurora, Pittsford, Chemung, Kingston)

Brand	Hybrid	Yield Bu/A	% Moisture	Y/M Ratio	% Stalk Ldg	% Root Ldg	Early Vigor	Top Death
RPM®	547AM1™	221	20.8	10.6	6	9	4.6	3.2
Dyna-Gro	D45Q50	223	21.7	10.2	4	0	4.3	1.9
TA Seeds	TA 522-22DP	205	21.7	9.4	10	1	3.3	2.6
TA Seeds	TA 565-20	225	21.8	10.3	8	0	4.4	2.2
TA Seeds	TA 545-20	214	21.9	9.8	3	2	4.2	2.4
RPM®	609AM1™	222	21.9	10.1	0	1	4.9	2.4
TA Seeds	TA 583-22DP	214	22.6	9.5	8	1	4.4	2.8
TA Seeds	TA 533-31	196	22.7	8.6	13	10	3.1	2.4
RPM®	588AMX™	218	23.0	9.5	6	2	4.3	2.8
TA Seeds	TA 647-22DP	216	23.9	9.0	9	1	4.0	2.5
RPM®	647AM1™	213	24.1	8.9	2	1	4.8	3.1
TA Seeds	TA 617-20	217	24.9	8.7	8	1	4.6	2.4
	MEAN	215	22.6	9.6	6.5	2.4	4.2	2.6
	S.D.	24	1.0					
	C.V.	11	4.3					
	LSD(.05)	19	.8					

Table 14. 2012 Medium Maturity Hybrids, Aurora, Cayuga County, Central NY

Brand	Hybrid	Yield Bu/A	% Moisture	Y/M Ratio	% Stalk Ldg	% Root Ldg	Early Vigor	Stay Grn	NLB	Top Death
RPM®	547AM1™	243	23.6	10.3	3	0	4.2	3.3	2.3	3.0
Dyna-Gro	D45Q50	250	24.4	10.2	3	1	4.2	2.2	3.3	2.0
TA Seeds	TA 545-20	224	24.7	9.1	1	0	4.5	2.8	2.3	3.0
TA Seeds	TA 565-20	255	24.7	10.3	0	0	4.3	1.8	2.7	1.7
TA Seeds	TA 522-22DP	234	25.0	9.4	2	0	3.7	2.3	2.3	3.0
RPM®	609AM1™	239	25.1	9.5	1	0	4.3	2.2	2.7	1.3
RPM®	588AMX™	231	25.4	9.1	3	0	4.0	2.5	2.3	2.3
TA Seeds	TA 583-22DP	247	25.5	9.7	3	0	4.3	2.5	1.3	3.0
RPM®	647AM1™	233	26.1	8.9	1	1	4.7	3.0	1.7	3.0
TA Seeds	TA 533-31	215	26.3	8.2	4	0	3.3	2.3	2.3	2.3
TA Seeds	TA 647-22DP	267	26.5	10.1	3	0	3.8	2.0	2.7	1.3
TA Seeds	TA 617-20	231	27.4	8.4	1	1	4.5	1.8	1.7	2.0
	MEAN	239	25.4	9.4	2.2	0.2	4.1	2.4	2.3	2.3
	S.D.	15	0.6							
	C.V.	6	2.2							
	LSD(.05)	26	0.9							

Planted: May 20 2012 **Harvested:** Nov 6 2012

	Growing Degree Days 2012	Growing Degree Days Ave.	Rainfall (Inches) 2012	Rainfall (Inches) Ave.
May	430	315	3.3	3.2
June	498	498	4.1	4.1
July	707	632	3.6	3.3
Aug	620	591	1.8	3.6
Sept	387	389	5.1	4.2
Oct	188	179	4.3	3.2
Total	2830	2604	22.2	21.6
% Norm	109		102.7	
Departure	226		0.6	

Table 15. 2012 Medium Maturity Hybrids, Pittsford, Monroe County, Western NY

Brand	Hybrid	Yield Bu/A	% Moisture	Y/M Ratio	% Stalk Ldg	% Root Ldg	Early Vigor	Stay Grn	Top Death
RPM®	547AM1™	188	21.8	8.6	2	36	4.3	2.8	2.7
TA Seeds	TA 545-20	185	21.9	8.4	4	10	3.7	2.5	1.7
TA Seeds	TA 565-20	191	22.2	8.6	2	0	4.3	2.2	2.0
Dyna-Gro	D45Q50	178	22.6	7.9	4	0	5.0	2.0	2.0
RPM®	609AM1™	158	23.0	6.9	0	3	4.7	2.3	2.3
TA Seeds	TA 522-22DP	175	23.5	7.5	2	6	3.3	2.2	3.0
TA Seeds	TA 533-31	163	23.5	6.9	5	38	3.3	2.2	2.3
RPM®	588AMX™	177	23.7	7.5	1	7	4.0	2.3	2.7
TA Seeds	TA 583-22DP	165	23.7	7.0	3	3	4.7	2.0	2.7
RPM®	647AM1™	155	25.4	6.1	2	2	4.0	2.0	2.3
TA Seeds	TA 647-22DP	181	25.4	7.1	7	5	4.7	2.5	2.7
TA Seeds	TA 617-20	159	25.8	6.2	0	3	5.0	2.8	2.5
	MEAN	173	23.5	7.4	2.6	9.4	4.3	2.3	2.4
	S.D.	19	1.3						
	C.V.	11	5.6						
	LSD(.05)	32	2.2						

Planted: May 16 2012 **Harvested:** Nov 8-9 2012

	Growing Degree Days 2012	Growing Degree Days Ave.	Rainfall (Inches) 2012	Rainfall (Inches) Ave.
May	439	323	1.4	2.8
June	548	508	4.0	3.4
July	737	653	2.6	2.9
Aug	636	605	2.7	3.5
Sept	401	394	4.5	3.5
Oct	202	185	4.9	2.6
Total	2963	2668	20.1	18.7
% Norm	111		107.4	
Departure	295		1.4	

Table 16. 2012 Medium Maturity Hybrids, Chemung, Chemung County, Southern Tier NY

Brand	Hybrid	Yield Bu/A	% Moisture	Y/M Ratio	% Stalk Ldg	% Root Ldg	Early Vigor	GLS	Top Death
RPM®	547AM1™	244	19.7	12.4	0	0	3.9	3.7	2.0
TA Seeds	TA 522-22DP	233	20.7	11.2	0	0	2.8	3.2	1.7
Dyna-Gro	D45Q50	247	22.0	11.2	0	0	4.1	3.5	1.0
RPM®	609AM1™	255	22.1	11.5	0	0	4.5	3.0	0.7
TA Seeds	TA 583-22DP	225	22.3	10.1	0	0	3.8	3.2	1.7
TA Seeds	TA 545-20	240	22.5	10.7	0	0	3.9	3.8	1.7
TA Seeds	TA 565-20	241	22.6	10.7	0	0	3.9	3.5	1.0
TA Seeds	TA 533-31	213	22.6	9.4	2	0	2.2	3.3	1.7
RPM®	588AMX™	242	23.7	10.2	0	0	3.0	3.0	1.3
TA Seeds	TA 647-22DP	227	25.2	9.0	0	0	2.8	3.2	1.3
RPM®	647AM1™	229	25.3	9.0	0	0	3.7	3.0	1.0
TA Seeds	TA 617-20	239	26.9	8.9	1	0	3.5	2.5	0.7
	MEAN	236	23.0	10.4	0.2	0.0	3.5	3.2	1.3
	S.D.	29	1.3						
	C.V.	12	5.7						
	LSD(.05)	48	2.2						

Planted: May 18 2012 **Harvested:** Nov 7 2012

86/50 Growing Degree Days

	2012	Ave.	Rainfall (Inches) 2012	Ave.
May	453	350	3.7	3.2
June	478	535	3.2	4.0
July	697	639	2.3	3.2
Aug	613	619	4.0	3.3
Sept	398	421	3.8	3.7
Oct	221	174	3.9	3.0
Total	2860	2737	20.8	20.2
% Norm	105		102.9	
Departure	124		0.6	

Table 17. 2012 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	NCLB	Top Death
RPM®	609AM1™	237	17.6	13.5	1	0	4.2	2.7	1.8	2.2	3.0
TA Seeds	TA 565-20	237	17.7	13.4	28	0	4.7	3.0	1.7	1.7	2.7
TA Seeds	TA 522-22DP	179	17.7	10.1	37	0	3.7	2.8	2.5	2.5	2.7
Dyna-Gro	D45Q50	217	18.0	12.0	9	0	5.0	2.5	1.5	2.3	3.0
RPM®	547AM1™	210	18.2	11.5	18	0	4.5	3.3	2.3	2.5	3.0
TA Seeds	TA 545-20	206	18.3	11.3	8	0	4.7	2.8	2.2	2.0	2.7
TA Seeds	TA 533-31	191	18.4	10.4	41	0	3.5	2.5	1.8	2.3	3.0
TA Seeds	TA 647-22DP	187	18.5	10.1	26	0	3.2	2.2	1.5	2.5	2.3
TA Seeds	TA 583-22DP	222	18.8	11.8	26	0	4.2	2.3	1.7	1.2	3.0
RPM®	588AMX™	221	19.4	11.4	20	0	4.3	2.5	2.0	0.8	3.0
RPM®	647AM1™	238	19.4	12.3	5	0	4.7	2.3	1.8	1.5	3.0
TA Seeds	TA 617-20	238	19.6	12.2	31	0	4.7	3.2	1.7	1.2	3.0
	MEAN	215	18.5	11.7	20.8	0.0	4.3	2.7	1.9	1.9	2.9
	S.D.	29	0.5								
	C.V.	14	2.9								
	LSD(.05)	49	0.9								

Planted: May 12 2012 **Harvested:** Nov 5 2012

86/50 Growing Degree Days

	2012	Ave.	Rainfall (Inches) 2012	Ave.
May	438	347	5.8	3.9
June	492	511	5.5	4.0
July	666	610	5.5	4.6
Aug	626	580	3.8	4.7
Sept	630	414	4.0	4.7
Oct	260	225	5.0	5.0
Total	3112	2687	29.6	26.9
% Norm	116		110.1	
Departure	425		2.7	