

University of Wisconsin - Extension Wisconsin Association of Professional Ag Consultants Independent, Replicated, On-Farm Research

#### 2009 WAPAC Corn Performance Trials

2009 Data Analyzed and Compiled by Jon Baldock, PhD (AgStat, Verona, WI) in cooperation with the Wisconsin Association of Professional Ag Consultants (WAPAC)

#### Introduction

Before the time of universities, industry research programs or crop consultants, farmers implemented changes in their production practices through a myriad of methods with some success. The process of incremental change and gradual improvements has evolved into an impressive system of research, development and production never imagined just decades ago. This production system, while impressive and productive can attribute much of its success on the recurring question asked by the farmer: "What am I going to do differently next season?"

The answer to the question hopefully results in an improvement of efficiency and profitability that is real and a result of the changes implemented. Our production system is dependent on selecting the inputs and operations that achieve a desired outcome. The process of testing a hypothesis and using the information gained in a cooperative, systematic manner has been highly successful in providing viable options for producing food, feed and fiber on the farm. However, that success has created what can be a bewildering mix of options that leave the farmer and farm advisor struggling with the answer to the question above. As a result, the Wisconsin Association of Professional Agricultural Consultants (WAPAC) and UW-Extension have worked together with farm clients across the state to develop a network for the purpose of conducting applied research trials.

This network consists of crop consultants, local and statewide extension faculty and most importantly farmers cooperating in a coordinated effort across Wisconsin. The objective of this program is to evaluate new technologies and management practices. Trials are conducted across a wide range of environments and management schemes in replicated plots using production scale equipment. This publication summarizes the results of on-farm hybrid trials conducted during 2009.

Identifying the source of variability in yield is a primary objective in any hybrid trial. The use of statistical methods including replication and means comparisons improves the reliability and confidence of results and outcome from the implemented practice. On-farm testing with field scale equipment has traditionally been used for demonstration in non-replicated trials. An overriding strength of on-farm evaluations is the credibility of the results in the eyes of the end user, the farmer by showing how the practice responds within his production system. Often the power of these trials can be enhanced with simple modifications such as replication within locations and across multiple sites with coordinated effort. That coordination is what the membership of WAPAC and UW Extension provide in the execution of the trials. The advent of effective tools for collecting data related to crop production such as weigh wagons, on farm scales and yield monitors have removed many of the traditional barriers of on-farm trials. The increased incidence of having a trained specialist such as a crop consultant on the farm enables the coordination of multi-site evaluations that address production concerns in a real time manner. The evolution of all components of the production process will likely increase the need for more on-farm data collection and analysis as agriculture moves into the future. Collaborative efforts such as this will be necessary to utilize the wealth of information residing in the data collected at the farm.

#### Methodology of the On-Farm Trials

A recognized strength of field scale on-farm trials is the low coefficient of variability achieved within this type of trial as compared to smaller traditional field research trials. The coefficient of variability (CV) can be looked as a measure of quality of the trial itself. By reducing or addressing the variability of sites or practices within a trial, one can better evaluate the treatment effects of the trait or practice being tested. The use of randomization, replication and thoughtful plot layout help improve the quality of information

gleaned from the trial. The WAPAC Hybrid Trials use a minimum of 2 replications for each site and treatments (hybrids) are randomly placed within each replication. Plots are planted across sources of variability such as soil types or slopes to provide somewhat uniform representation of these sources within each replication. The plots are planted and harvested with field scale equipment. Individual plot sizes for hybrid trials are typically 6 to 12 rows wide and run distances of 500 to over 1000 feet in length. Data and observations are collected throughout the growing season and utilized in the analysis when appropriate. Information identifying plot locations, production inputs, site characteristics along with other supporting information is systematically collected and recorded in a database format to facilitate user queries and data archival.

#### **Using the Results**

Coupling the information from this publication with the UWEX Hybrid Corn Performance Trials as well as other hybrid performance trials will give the user the ability to evaluate how a particular hybrid performs in multiple environments. Predicting the performance of a hybrid in the future is done through analysis of past performance. A primary factor in the prediction is the number of locations or replications of a hybrid. This trial typically provides 6 to 12 or more replications of a hybrid at 3 to 6 locations across the state.

The results are reported in Yield per acre and Grower return.

Gross Margin = Gross Income - drying cost - test weight dockage, where Gross Income is the yield times \$4.00/bu, and Drying cost is 3.5¢/bu wet corn for each point above 15%, and Test weight dockage is 1¢/bu for each lb/bu below 54 lbs/bu, plus 3¢/bu for each lb/bu below 52 lb/bu, plus 5¢/bu for each lb/bu below 50 lbs/bu, assuming drying the grain adds 1 lb/bu to the test weight.

The data tables contain the number labeled "LSD" which stands for least significant difference. LSD's at the 10% level of probability are shown. Where the difference between two selected treatments within a column is equal to or greater than the LSD value at the bottom of the column, you can be sure that in nine out of ten chances that there is a real difference between the two treatment averages. If the difference is less than the LSD value, the difference may still be real, but the experiment has produced no evidence of real differences.

Statistics are a tool to help prevent us from deceiving others and ourselves. Growing conditions in any particular year can have large effects on certain practices. Two years of replicated data are a minimum for supporting most practices. On-farm testing is not a quick cure for anything, but it should greatly accelerate innovation and adoption of new practices by providing reliable, quantitative answers that apply directly to a producer's situation. Treatments frequently differ in performance and these differences may vary with management practices, weather patterns, soil conditions, and other environmental and management practices. Replicated trials that take into account field variability are more reliable than non-replicated trials and improve the confidence of implementing of new practices for profitable crop production.

(Written by Bill Stangel and Joe Lauer, WAPAC Executive Council Members, December 2003. Corn price updated for 2009.)

## **WAPAC Trial Information: 90 day**

Location	tri_id		Planting Date		Fall and	Sc	oil test		Fert	tilizer	(lb/a)	
Cooperator	Soil series	Previous	Row width	Harvest Date	Spring Tillage	pН	Р	Κ	Ν	Ρ	K	Weed
Consultant	Soil texture	crop	Population		Cultivation		ppm		Micr	o + N	lanure	Control
Bonduel,WI	901	Wheat	5/7/2009	11/27/2009	Spring Deep Till	6.7	27	117	149	26	45	Halex GT 3.6 pt
James Stern	Onaway		30		Spring Field							Atrazine 9-0 3/4 #
Phil Stern			31,500		Cultivator							AMS 2#
Drought												
Clintonville,WI	902	Wheat	5/21/2009	12/19/2009	Fall Ripper	7.2	31	50	153	56	0	Keystone LA 1 qt
Paul Kirchner	Symco		30		Spring Field							Credit Extra 1 qt
Mike Kiddy			32,000		Cultivator							Oracle 3 oz
												AMS 3 #
Marathon,WI	903	Corn	5/10/2009	11/18/2009	Fall Chisel	6.3	14	66	135	43	132	Lumax pre 2 1/2 qt
Draeger Farms	Fenwood		30		Spring Finisher							
Paul Sturgis			29,500									
Oneida,WI	904	Corn silage	5/18/2009	11/16/2009	Spring Field	6.5	24	78	151	75	97	Keystone LA 1.8 qt
Oneida Nation Farms	Oshkosh		30		Cultivator							Hornet WDG 3 oz
Bill Schaumberg			32,500		Spring Rotary Hoe							
Pittsville,WI	905	Soybeans	5/5/2009	12/5/2009	Fall Chisel				66	33	67	Lumax pre 2 1/2 qt
Pete Peterson			30		Spring Finisher							
Paul Sturgis			32,000									
Pound,WI	906	Corn silage	5/20/2009	12/5/2009	Spring Chisel				28	14	28	Dual II
Darga Farms	Emmet	-	30		Spring Field				22 t	on M	anure	Banvel
Scott Reuss	fine sdy loam	1	30,500		Cultivator							Atrazine
Pulaski, WI	907	Soybeans	5/11/2009	11/18/2009	No Till	7.2	26	119	100	26	76	Lumax 2 1/4 qt
Lee & Cindy Herman	Onaway		30									
Jeff Polenske			30,000									

# WAPAC Trial Information: 95 day

Location	tri_id		Planting Date	;	Fall and	Sc	oil test		Fei	rtilizer	(lb/a)	
Cooperator	Soil series	Previous	Row width	Harvest Date	Spring Tillage	pН	Р	Κ	Ν	Р	Ŕ	Weed
Consultant	Soil texture	crop	Population		Cultivation		ppm	-	Mic	ro + M	anure	Control
DePere,WI	951	Soybeans	5/12/2009	11/18/2009	Fall Chisel	7	20	90	140	70	224	Lumax 2 1/2 qt
Robertson Bros	Hortonville		30		Spring Field							
Jeff Polenske			36,000		Cultivator							
Manawa,WI	952	Corn	5/18/2009	12/17/2009	Fall Chisel	6.6	9	50	162	140	330	Lumax 2 qt
Dan Boerst	Hortonville		30		Spring Field							
Mike Kiddy			32,500		Cultivator							
Manawa	953	Corn	5/18/2009	11/16/2009	Spring Chisel	7.2	30	160				Lumax 2 1/4 qt
Fietzer Farms	Hortonville		30		Spring Field				9000	) gal N	lanure	
Nathen Nysse	silt loam		32,000		Cultivator 2x							
Pulaski,WI	954	Corn	5/18/2009			6.9	35	89	9	1.5	0.5	Lumax 2 qt
Ullmer Acres	Casco		30									Roundup 1 qt
Nathen Nysse			32,000									
Reedsville,WI	955	Alfalfa	5/8/2009	11/24/2009	Fall Chisel	6.7	17	77	49	70	50	Roundup Power Max 21 oz
Larry Krepline	Kewaunee		30		Spring Field							Yukon 3 oz
Carl Buchner	loam		33,500		Cultivator							Aatrex 4L 1 pt
												AMS/100 gal 9 lbs
Seymour,WI	956	Wheat	5/5/2009	11/13/2009	Spring Field	7.6	22	150	124	76	287	Lumax 2.5 qt
Marvin & Ann Marie	Onaway		30		Cultivator							Touchdown HiTech 26 oz
Karweick	Silt loam		32,500									AMS 3#
Bill Schaumberg												NIS 1qt/100
St. Nazianz, WI	957	Corn	5/8/2009	11/20/2009	Fall Chisel	7.8	22	119	156	112	303	Acetochlor 3/4pt Pre
Mark Litz	Kewaunee		30		Spring Field				8000	) gal N	lanure	Steadfast 1/2oz+ ATZ 1/2#
Steve Hoffman			30,000		Cultivator					-		Callisto 2oz Post
Suamico,WI	958	Soybean	5/17/2009	11/29/2009	Spring Chisel	7.3	101	179	94	1	6	Lumax 2 qt
Jerry Peters	Onaway	-	30		Spring Field					manur	е	-
Phil Stern			31,500		Cultivator				138	23	30	

# **WAPAC Trial Information: 100 day**

Location	tri_id		Planting Date	;	Fall and	Sc	oil test		Fei	rtilizer (	(lb/a)	
Cooperator	Soil series	Previous	Row width	Harvest Date	Spring Tillage	pН	Р	Κ	Ν	Р	K	Weed
Consultant	Soil texture	crop	Population		Cultivation		ppm	-	Micr	o + Ma	nure	Control
Appleton,WI	1001	Alfalfa	4/24/2009	11/12/2009	No Till	7.6	23	158	194	66	200	Credit extra 1 qt
Dave McCarthy	Hortonville		30									2 4 D 1 pt
Jeff Polenske			33,500									Imitator 1 pt
												Parallel 1 pt
												Orical 1 pt
Clintonville,WI	1002	Alfalfa	5/11/2009	12/1/2009		6.7	24	100	161	66	153	Volley ATZ Lite 1.75 qt
Doug Behnke	Hortonville		30									AMS 3 #
Mike Kiddy			32,000									Hornet 2.75 oz
Deerfield,WI	1003	Soybeans	5/5/2009	11/10/2009	No-till	6.3	27	88	108	21	21	Harness 2 pt
Russ Dahl	Dodge		30									Glyphosate 1 qt
Tom Novak	-		32,000									Status 3 oz
Fremont,WI	1004	Soybeans	5/2/2009	11/27/2009		6.4	51	125	142	13.5	45	Surestart 2 1/4 pt
Larry Danke	Hortonville											Atrazine 4L 1 pt
Paul Knutzen												Glyphosate 1 pt
												AMS 3#
Markesan,WI	1005	Corn	5/20/2009	11/11/2009	Spring Chisel				164	7.4	7.4	SureStart 2 pt
Russell Jahnke	Kidder		30		Spring Field							Cornerstone Plus 1 qt
Rachel Mueller			30,600		Cultivator							
Markesan,WI	1006	Corn grain	5/5/2009	11/7/2009	Fall Chisel	6.4	20	159	70	18	45	SureStart (impreg) 3 pt
Russell Zastrow	Plano		36		Spring Disk				6	S +.4Z	N	Roundup 1 qt
Rachel Mueller			31,500		Spring Mulcher							
Seymour,WI	1007	Soybeans	5/11/2009	11/5/2009	Fall Chisel	7.1	22	79	101	113	279	Lumax 2 qt
Pat & Karen Van Lanen	Menominee		30		Spring Field							
Jeff Polenske			36,000		Cultivator 2x							

# WAPAC Trial Information: 100 day cont:

Location	tri_id		Planting Date	;	Fall and	Sc	oil test		Fer	tilizer	(lb/a)	
Cooperator	Soil series	Previous	Row width	Harvest Date	Spring Tillage	pН	Р	Κ	Ν	Ρ	K	Weed
Consultant	Soil texture	crop	Population		Cultivation		ppm	-	Micro + Manure		anure	Control
Whitewater,WI	1008	Soybeans	5/18/2009	11/17/2009	Spring Soil	7.1	37	116	123	46	60	Harness 2 pt
Tom Hoffman	Mahalasville		30		Finisher							Glyphosate 1 qt
Tom Novak			32,000									Status 3 oz
Wrightstown,WI	1009	Soybeans	5/21/2009		Fall Chisel	7	27	113	170	88	320	TopNotch 3 pt
New Horizon Dairy	Oshkosh		30		Spring Field				1500	0gal n	nanure	Callisto 3 oz
Nathen Nysse	Silt loam		32,000		Cultivator 2x							Atrazine 3/4 lb

## WAPAC Trial Information: 105 day

Location	tri_id		Planting Date	9	Fall and	S	oil test		Fe	rtilizer	(lb/a)	
Cooperator	Soil series	Previous	Row width	Harvest Date	Spring Tillage	pН	Р	Κ	Ν	Р	K	Weed
Consultant	Soil texture	crop	Population		Cultivation		ppm	-	Mic	ro + Ma	anure	Control
Cambridge,WI	1051	Alfalfa	5/12/2009	11/5/2009	Fall Burndown	7	29	134	169	12	31	Harness 7EC 2 pt
Jeff Notstad	Rockton				No-till					1 ZN		Princep 90 .55 #/ac
A. D. Cole			34,000					A	lfalfa o	credit 1	60 units	
Elkhorn,WI	1052	Corn I /	5/5/2009	11/17/2009	Fall Chisel	7.2	40	120	138	68	140	Harness 2 pt
Lauderdale Farms	Warsaw	Fallow II	30		Spring Soil							Status 5 oz
Tom Novak			32,000		Finisher							
Lodi,WI	1053	Corn	5/5/2009	11/14/2009	Spring Field		47	173	155	82	193	Dual II Mag 2 pt
Lockner Dairy	Mt. Carrol				Cultivator					1ZN		Hornet WDG 4 oz
A. D. Cole	Silt loam		34-36,000						6	6,000 g	al	
									48	48	126	
Markesan,WI	1054	Wheat/	5/6/2009	11/13/2009	Spring Mulcher/	6.7	36	148	102	0	30	Roundup 1 qt
Gran Prairie Farms	Plano	Snap beans	30		Finisher 2x					12 S		Prowl, generic 1 qt
Rachel Mueller			32,000									Status 3 oz
Prairie Du Sac,WI	1055	Corn	5/12/2009	12/2/2009	Spring Aer-Way	6.6	25	122	98	13	34	Harness 2 pt
Rick Walgenbach	Ringwood		30		-				6,0	00 mar	nure	Hornet WDG 4 oz
A. D. Cole	Silt loam								48	48	126	

Brand	Hybrid	Stand, No./A†	Lodged, %†	Test Wt, Ibs/bu†	Grain Moisture, %†	Yield, Bu/A @ 15%†	Gross Margin, \$/A†‡
Croplan	3114VT3	30115 *	2.0 *	48.4	27.3	148 *	<u>+//1</u> 591 *
Jung	7344VT3	29864 *	3.1	47.3	30.0	144 *	575 *
LG	LG2411VT3	29539	2.6 *	48.3	27.0	140 *	562 *
Pioneer	38N88	29750 *	1.7 *	49.0 *	25.1 *	140 *	560 *
Kaltenberg	K3039LLGTB	29940 *	2.4 *	48.2	27.4	140 *	559 *
Golden Harvest	H-6455GTCB	30145 *	3.2	48.9 *	26.1 *	140 *	558 *
Dairyland	St9789	29641 *	1.1 *	48.4	27.6	137	549
PIP	4893GT	29843 *	3.3	47.4	29.1	134	537
Renk	RK438RRYGP	29250	2.5 *	48.5	28.4	133	531
Trelay	2T145	30080 *	2.9 *	49.2 *	26.8	132	528
Number of locati	ons	5	5.0	7.0	7.0	7	7
Mean		29817	2.5	48.4	27.5	139	555
LSD(10%)		577	2.0	0.7	1.5	9	37

WAPAC 2009 Corn Trials: 90 day RM Data - Means Across Locations.

† Means followed by a star are not significantly different than the "best" at the 10% level of significance. The "best" is the maximum value for all measures except lodged and moisture, where the best value is the minimum value.

**‡** Gross Margin = Gross Income - drying cost - test weight dockage, where

Gross Income is the yield times \$4.00/bu, and

drying cost is 3.5¢/bu wet corn for each point above 15%, and

test weight dockage is

1¢/bu for each lb/bu below 54 lbs/bu, plus

3¢/bu for each lb/bu below 52 lb/bu, plus

5¢/bu for each lb/bu below 50 lbs/bu,

assuming drying the grain adds 1 lb/bu to the test weight.

WAPAC 2009 Corn Trials: 90 day RM Yields by Location.

			L	ocation Yie	ld, bu/a 🤇	15% moistu	re	
	Trial ID	901	906	903	907	902	904	905
Brand	Hybrid	Bonduel	Pound	Marathon	Pulaski	Clintonville	Oneida	Pittsville
Croplan	3114VT3	159	151	106	164	135	149	173
Jung	7344VT3	146	149	123	160	106	146	177
LG	LG2411VT3	147	137	109	161	133	129	167
Pioneer	38N88	138	152	103	164	112	145	165
Kaltenberg	K3039LLGTB	135	146	116	156	122	118	184
Golden Harvest	H-6455GTCB	137	132	108	164	118	146	171
Dairyland	St9789	151	137	101	166	129	136	141
PIP	4893GT	136	127	100	145	127	148	156
Renk	RK438RRYGP	127	141	82	143	106	146	184
Trelay	2T145	115	137	95	148	123	135	171
Mean		139	141	104	157	121	140	169
Number of reps		2	1	2	2	2	2	2

Brand	Hybrid	Stand, No./A†	Lodged, %†	Test Wt, Ibs/bu†	Grain Moisture, %†	Yield, Bu/A @ 15%†	Gross Margin, \$/A†‡
Jung	7447VT3	27792 *	0.24 *	48.4	28.1	157 *	500
Trelay	4T722	29787 *	0.23 *	46.9	29.6	154 *	464
Renk	RK570VT3	28415 *	0.33 *	46.9	27.3	154 *	483
Pioneer	38M60	25991	0.15 *	49.9 *	22.8 *	153 *	543
LG	LG2426VT3	27186 *	0.96	49.7 *	25.4	153 *	519
Dairyland	St9196	28596 *	0.40 *	46.9	28.8	152 *	463
PIP	4895GTCBLL	26472	0.45 *	47.8	26.3	150 *	488
Croplan	3514VT3	28267 *	0.64 *	48.4	28.2	150 *	477
Kaltenberg	K3843VT3	28508 *	0.00 *	48.1	26.8	149	483
Golden Harvest	: H-6931GT	28929 *	0.96	45.1	31.7	141	382
Number of loca	tions	5	5	8	8	8	8
Mean		27994	0.44	47.8	27.5	151	480
LSD(10%)		3118	0.64	0.9	1.7	8	40

WAPAC 2009 Corn Trials: 95 day RM Data - Means Across Locations.

† Means followed by a star are not significantly different than the "best" at the 10% level of significance. The "best" is the maximum value for all measures except lodged and moisture, where the best value is the minimum value.

**‡** Gross Margin = Gross Income - drying cost - test weight dockage, where

Gross Income is the yield times \$4.00/bu, and

drying cost is 3.5¢/bu wet corn for each point above 15%, and

test weight dockage is

1¢/bu for each lb/bu below 54 lbs/bu, plus

3¢/bu for each lb/bu below 52 lb/bu, plus

5¢/bu for each lb/bu below 50 lbs/bu,

assuming drying the grain adds 1 lb/bu to the test weight.

WAPAC 2009 Corn Trials: 95 day RM Yields by Location.

				Locat	ion Yield, bu	/a @ 15%	moisture		
	Trial ID	952	953	956	955	951	957	958	954
Brand	Hybrid	Manawa	Manawa	Seymour	Reedsville	Depere	St. Nazianz	Suamico	Pulaski
Jung	7447VT3	164	163	193	160	171	160	125	119
Trelay	4T722	162	176	191	157	168	148	120	113
Renk	RK570VT3	164	157	191	147	173	153	128	119
Pioneer	38M60	150	169	189	156	166	146	135	117
LG	LG2426VT3	151	161	199	155	162	155	145	96
Dairyland	St9196	155	163	194	152	153	165	135	100
PIP	4895GTCBLL	140	165	189	162	161	160	131	93
Croplan	3514VT3	137	177	192	151	175	141	112	114
Kaltenberg	K3843VT3	153	141	188	155	165	152	124	116
Golden Harvest	H-6931GT	147	144	164	151	175	147	114	82
Mean		152	161	189	155	167	153	127	107
Number of reps		2	2	2	2	2	2	2	2

WAPAC 2009 Corn Trials: 100-day RM Data	- Means Across Locations.
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Brand	Hybrid	Stand, No./A†	Lodged, %†	Test Wt, Ibs/bu†	Grain Moisture, %†	Yield, Bu/A @ 15%†	Gross Margin, \$/A†‡
Jung	7475VT3	31089 *	1.00 *	50.7 *	26.1 *	175 *	599 *
Croplan	388TS	31268 *	2.04	48.6	25.9 *	175 *	578 *
Dairyland	St9799	31232 *	1.79 *	48.3	26.8	169	548
Pioneer	37Y14	31286 *	2.10	49.4	26.4 *	168	560
Trelay	5T128	32071 *	2.04	49.8	26.6	167	561
LG	LG2496VT3	29824 *	1.61 *	49.9	25.5 *	167	570
Kaltenberg	K4053VT3	31964 *	2.07	50.1 *	26.2 *	165	556
Renk	RK670VT3	29217	1.38 *	48.2	30.7	164	495
PIP	5804GT	31411 *	1.98	48.0	29.8	161	493
Number of loo	cations	7	6	9	9	9	9
Mean		31040	1.78	49.2	27.1	168	551
LSD(10%)		2772	0.98	0.8	1.1	6	28

† Means followed by a star are not significantly different than the "best" at the 10% level of significance. The "best" is the maximum value for all measures except lodged and moisture, where the best value is the minimum value.

**‡** Gross Margin = Gross Income - drying cost - test weight dockage, where

Gross Income is the yield times \$4.00/bu, and

drying cost is 3.5¢/bu wet corn for each point above 15%, and

test weight dockage is

1¢/bu for each lb/bu below 54 lbs/bu, plus

3¢/bu for each lb/bu below 52 lb/bu, plus

5¢/bu for each lb/bu below 50 lbs/bu,

assuming drying the grain adds 1 lb/bu to the test weight.

				Loca	tion Yield,	bu/a @ 15% mo	oisture			
	Trial ID Hybrid	1002	1005	1004	1001	1009	1003	1008	1007	1006
Brand		Clintonville	Markesan	Fremont	Appleton	Wrightstown	Deerfield	Whitewater	Seymour	Markesar
Jung	7475VT3	166	177	196	211	125	181	177	163	182
Croplan	388TS	169	160	191	211	133	185	180	168	177
Dairyland	St9799	146	166	190	204	145	178	171	159	158
Pioneer	37Y14	152	167	182	204	140	176	166	161	164
Trelay	5T128	146	147	179	213	136	183	173	161	168
LG	LG2496VT3	148	157	192	213	125	182	171	153	163
Kaltenberg	K4053VT3	151	163	184	187	138	175	171	151	164
Renk	RK670VT3	145	154	181	200	127	177	167	150	176
PIP	5804GT	153	127	176	209	135	183	173	144	149
Mean		153	158	186	206	134	180	172	157	167
Number of reps		2	2	2	2	2	2	2	2	2

WAPAC 2009 Corn Trials: 100 day RM Yields by Location.

Brand	Hybrid	Stand, No./A†	Lodged, %†	Test Wt, Ibs/bu¶	Grain Moisture, %†	Yield, Bu/A @ 15%†	Gross Margin, \$/A†‡
Croplan	5338VT3	30962 *	7.50 *		27.8 *	185 *	<u>+//1</u> 619 *
AgriGold	AG6309VT3	28628 *	10.83 *		27.4 *	179 *	604 *
Dairyland	St9006V	29871 *	6.67 *		27.6 *	176 *	592 *
Golden Harvest	H-8211 3000GT	28917 *	5.00 *		26.9 *	175 *	598 *
Trelay	6T510	29114 *	10.42 *		29.3	174 *	567 *
Jung	7514VT3	30628 *	10.42 *		25.9 *	173 *	597 *
Pioneer	35F44	26733	5.00 *		27.1 *	172	587 *
Kaltenberg	K5355LLGTBT	28847 *	6.25 *		28.4 *	170	563 *
LG	LG2532VT3	30603 *	6.67 *		30.6	165	524
Renk	RK686VT3	27604	7.08 *		27.0 *	163	553
Legend	9707RRHXT	27069	15.00		29.8	148	476
Number of locations		4	2.00		4.0	4	4
Mean		29000	5.28		28.0	171	571
LSD(10%)		2600	7.77		2.5	13	65

WAPAC 2009 Corn Trials: 105-day RM Data - Means Across Locations.

† Means followed by a star are not significantly different than the "best" at the 10% level of significance. The "best" is the maximum value for all measures except lodged and moisture, where the best value is the minimum value.

**¶** Insufficient data for an analysis across locations.

**‡** Gross Margin = Gross Income - drying cost - test weight dockage, where

Gross Income is the yield times \$4.00/bu, and

drying cost is 3.5¢/bu wet corn for each point above 15%.

WAPAC 2009 Corn Trials: 105 day RM Yields by Location.

		Location Yield, bu/a @ 15% moisture					
	Trial ID	1054	1053	1051	1055	1052	
		Markesan	Lodi	Cambridge	Prairie Du Sac	Elkhorn†	
Brand	Hybrid						
Croplan	5338VT3	219	191	203	128	182	
AgriGold	AG6309VT3	210	185	206	116	177	
Dairyland	St9006V	200	174	214	116	192	
Golden Harvest	H-8211 3000GT	217	181	189	114	196	
Trelay	6T510	203	180	196	116	194	
Jung	7514VT3	221	170	197	102	174	
Pioneer	35F44	205	168	191	123		
Kaltenberg	K5355LLGTBT	207	156	203	112	189	
LG	LG2532VT3	164	171	200	126		
Renk	RK686VT3	192	159	187	116	193	
Legend	9707RRHXT	179	153	165	92	171	
Mean		202	172	196	115	185	
Number of reps		2	2	2	3	2	

† This site not included in across site analyses because of missing hybrids. The LSD(10%) for the single site analysis of yield was 25.7 bu/a.

#### Thank you to everyone who contributed to the success of the 2009 WAPAC Corn Trials!

### Data Analysis

Dr. Jon Baldock, Research Director, AgStat, Verona, Wisconsin

### Seed Company Sponsors

Agrigold - Dave Welsh

Croplan Genetics – Pat Van Duerzen

- Dairyland Seed Kevin Naze
- Golden Harvest Jim Webb and Mike Weiss

Jung - Gale Harter

Kaltenberg – Jim Dassow

- LG Seeds Paul Reierson
- Partners in Production & Legend Seeds -
- Mike Haedt and Jack Kaltenberg Pioneer – Matt Pauli and Tim Mansell

Renk – Jeff Renk

Trelay-Kevin Schmitz

### On-Farm Trial Coordinators and Participating Growers

• Carl Buchner – Buchner Agronomy Consulting, Whitelaw, WI

- 1.) 95-day: Larry Krepline, Reedsville, WI
- A.D. Cole ITAC of Wisconsin, Prairie du Sac, WI
- 1.) 105-day: Jeff Notstad, Cambridge, WI
- 2.) 105-day: Lockner Dairy, Lodi, WI
- 3.) 105-day: Rick Walgenbach, Prairie du Sac, WI

Steve Hoffman, Hoffman Crop Consulting, Manitowoc, WI
1.) 95-day: Mark Litz, St. Nazianz, WI

- Mike Kiddy Kiddy Crop Consulting, New London, WI
- 1.) 90-day: Paul Kirchner, Clintonville, WI
- 2.) 95-day: Dan Boerst, Manawa, WI
- 3.) 100-day: Doug Behnke, Clintonville, WI
- Paul Knutzen Knutzen Crop Consulting, New London, WI
- 1.) 100-day: Larry Danke, Fremont, WI

• Rachel Mueller, Cornerstone Crop Consulting, Princeton, WI

- 1.) 100-day: Russell Jahnke, Markesan, WI
- 2.) 100-day: Russell Zastrow, Markesan, WI
- 3.) 105-day: Gran Prairie Farms, Markesan, WI

### On-Farm Trial Coordinators and Participating Growers, continued

- Tom Novak Total Crop Management, Sullivan, WI
- 1.) 100-day: Russ Dahl, Deerfield, WI
- 2.) 100-day: Tom Hoffman, Whitewater, WI
- 3.) 105-day: Lauderdale Farms, Elkhorn, WI
- Nathen Nysse Polenske Agronomic Consulting, Appleton, WI
- 1.) 95-day: Ullmer Acres, LLC, Pulaski, WI
- 2.) 95-day: Fietzer Dairy Farms, Manawa, WI
- 3.) 100-day: New Horizons Dairy, Wrightstown, WI

• Jeff Polenske – Polenske Agronomic Consulting, Appleton, WI

- 1.) 90-day: Lee & Cindy Herman, Pulaski, WI
- 2.) 95-day: Robertson Brothers Dairy, De Pere, WI
- 3.) 100-day: Dave McCarthy, Appleton, WI
- 4.) 100-day: Pat & Karen Van Lanen, Seymour, WI

• Scott Reuss – UW-Extension-Oconto/Marinette Counties, Marinette, WI

1.) 90-day: Darga Farms, Pound, WI

• Bill Schaumberg – Polenske Agronomic Consulting, DePere, WI

- 1.) 90-day: Oneida Nation Farms, Oneida, WI
- 2.) 95-day: Marvin & Ann Marie Kawieck, Seymour, WI
- Phil Stern Stern Crop Consulting, Bonduel, WI
- 1.) 90-day: James Stern, Bonduel, WI
- 2.) 95-day: Jerry Peters, Suamico, WI
- Paul Sturgis Croptech Agronomics, Vesper, WI
- 1.) 90-day: Draeger Dairy Farm, Marathon, WI

2.) 90-day: Pete Peterson, Pittsville, WI

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Links to the WAPAC Corn Trails are available on the WAPAC website: **www.wapac.info** under the Corn Trials tab, and also on the University of Wisconsin Extension Corn Agronomy website: **http://corn.agronomy.wisc.edu** under the Hybrid Trials tab.