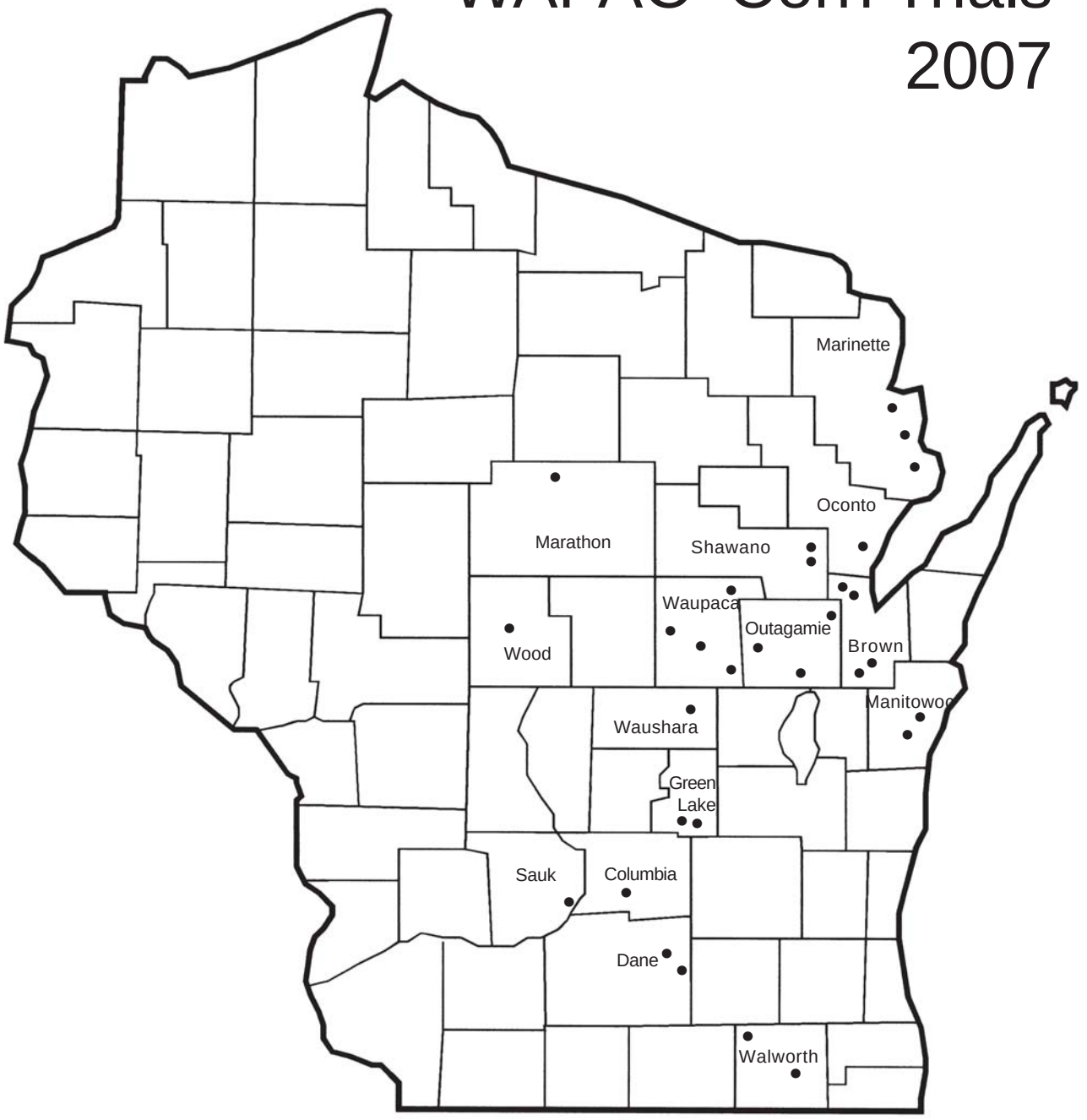
Wisconsin On-Farm Testing
WAPAC Corn Trials
2007



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

2007 WAPAC Corn Performance Trials

Analyzed and Compiled by Joe Lauer (University of Wisconsin) 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 2007.

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.

Grower return = (Yield*Price) - [Yield * (Handling+ Hauling+ Storage+ Drying+ Trucking)]

where **Price** = $3.39 = **Weighted Price per Bushel** = 50% November 15 Average Cash price + 25% March CBOT Futures price ($0.15 basis) + 25% July CBOT Futures price ($0.10 basis). November 15 Average Cash price derived from Wisconsin Ag Statistics; CBOT Futures prices derived from closing price on first business day in December.

Handling costs = $0.02 per bushel
Hauling costs = $0.04 per bushel
Storage costs = $0.02 per bushel for 30 days
Drying costs = $0.02 per bushel per point of moisture
Trucking costs = $0.11 per bushel for 100 miles

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.

Bill Stangel and Joe Lauer, WAPAC Board of Directors (written December 2003)

WAPAC Trial Information: 90 day

Location Cooperator Consultant	tri_id Soil series Soil texture	Previous crop	Planting Date Row width Population	Harvest Date Population	Fall and SpringTillage Cultivation	Soil test pH	Soil test P	Soil test K	Fertilizer (lb/a) N	Fertilizer (lb/a) P	Fertilizer (lb/a) K	Weed control	Insecticide + Fungicide
						--- ppm ---			Micro + Manure				
Bonduel, WI	2985	Corn	4/28/07		Spring Mulch finisher 2x	7	20	120				Lumax @ 2.5 qt/A on 29 April	None + None
Sorenson Grain	Onaway		30						No micro + Manure 3-3-8				
Stern Crop Consulting			29100										
Cecil, WI	2984	Alfalfa	5/1/07		Spring Disk + Field Cultivator	7.4	60	109	14	23	45	Volley ATZ + Hornet WDG @ 1.5 qt/A + 3 oz/A on 3 May	None + None
Jeff & Connie Horsens	Onaway		30						9 S + No manure				
Bill Schaumberg	fine sandy loam		31000										
Very drought stressed, very little moisture in July and August. The first rep of Dairyland was harvested by accident before we got there.													
Hamburg, WI	2986	Corn	5/19/07		Spring Chisel plow + Soil Finisher	7.1	29	183	34	12	4	Keystone LA + Python @ 3.5 pt/A + 0.7 oz/A on 25 May	None + None
Draeger Dairy Farm	Fenwood		30						No micro + No manure				
Paul Sturgis			29000										
Field had severe hail damage in mid June. Plant populations after hail event were 17-20,000 plants acre. No additional N was applied due to uncertainty of insurance company's status on field.													
Middle Inlet, WI	2983	Corn	5/25/07	11/4/07	Fall Chisel Plow Spring Disk 2x				77	35	70	Hornet WDG + Atrazine + Parallel @ 3 oz/A + 0.75 lb/A + 1 qt/A on 2 June	None + None
Michael Kaufman	Emmet		30						No micro + No manure				
Scott Reuss			30750										
Combined both reps as one; yield too low otherwise.													
Pittsville, WI	2987	Soybean	5/9/07		Fall Chisel plow Spring Soil finisher	6.3	38	174	66	8	2	Lumax @ 2.5 qt/A on 19May	None + None
Pete Peterson	Kert		30						No micro + 4000 gal/A (10-5-6)				
Paul Sturgis			30000										
Field was very dry with no rain from July 7th through Aug 18th.													
Porterfield, WI	2982	Corn	5/22/07	10/29/07	Fall Chisel Plow Spring Disk				117	32	13	Hornet WDG + Atrazine + Parallel + Steadfast @ 3 oz/A + 0.75 lb/A + 1.5 pt/A + 0.25 oz/A on 29 May	None + None
Harry Dudkiewicz	Emmet		30						No micro + No manure				
Scott Reuss			32000										
Pulaski, WI	2980	Soybean	5/14/07		No tillage	7.8	40	110	120	20	58	Lumax @ 2.5 qt/A on 25 may	None + None
Phil Ullmer	Onaway		30						No micro + No manure				
Nathen Nysse	sandy loam		32000										
Variety #9 second rep of Pioneer 38P03 (not in WAPAC trials anyway) was mistakenly taken out before weighing. There were also 72 rows of mixed corn from the plot located between plot numbers 8 and 10.													
Pulaski, WI	2981	Soybean	5/5/07		No tillage	8	12	68	140	26	61	Lumax @ 2.25 qt/A on 7May	None + None
Lee Herman	Solona / Hortonville		30						No micro + No manure				
Jeff Polenske			29917										

WAPAC Corn Hybrid Trial Results (90 day RM)

Entry	Plant stand	Lodging	Test Weight	Grain Moisture	Grain Yield	Grower Return	Pulaski 2980	Pulaski 2981	Porter-field 2982	Middle Inlet 2983	Cecil 2984	Bonduel 2985	Ham-burg 2986	Pitts-ville 2987
	no./A	%	lb/bu	%	bu/A	$/A	bu/A	bu/A	bu/A	bu/A	bu/A	bu/A	bu/A	bu/A
Croplan Genetics 296TS	27963	4	55	19.9	105	325	131	78	135	36	87	125	90	159
LG Seeds LG2411	27854	3	54	21.1	109	335	139	90	138	35	88	136	93	152
Pioneer 38W22	26938	2	55	21.5	104	317	138	87	144	48	85	108	94	124
Dekalb DKC42-88(RR2YGPL)	25667	2	53	22.3	101	309	133	78	132	37	82	138	74	135
Renk RK438RRYGPL	27692	2	54	22.8	106	324	138	81	139	20	89	135	98	150
Kaltenberg K3915Plus	27271	4	53	23.2	102	309	133	73	137	17	82	139	96	137
Mean	27231	3	54	21.8	104	320	136	81	138	32	85	130	91	143
LSD(0.10)	1213	NS	1	1.1	NS	NS	NS	7	NS	---	NS	---	----	---

Grower return = (Yield * Price) - [Yield * (Handling + Hauling + Storage + Drying + Trucking)]

where Price = $3.39 = Weighted Price per Bushel = 50% November 15 Average Cash price + 25% March CBOT Futures price ($0.15 basis) + 25% July CBOT Futures price ($0.10 basis). November 15 Average Cash price derived from Wisconsin Ag Statistics; CBOT Futures prices derived from closing price on first business day in December.

Handling = $0.02 per bushel
Hauling = $0.04 per bushel
Storage = $0.02 per bushel for 30 days
Drying = $0.02 per bushel per point of moisture above 15.5%
Trucking = $0.11 per bushel for 100 miles

WAPAC Trial Information: 95 day

Location Cooperator Consultant	tri_id Soil series Soil texture	Previous crop	Planting Date Row width Population	Harvest Date Population	Fall and SpringTillage Cultivation	Soil test pH	P	K	Fertilizer (lb/a) N	P	K	Weed control	Insecticide + Fungicide
						--- ppm ---			Micro + Manure				
Abrams, WI Ron Leja Stern Crop Consulting	2978 Onaway course	Soybean	5/7/07 30 28900		Spring To the Max 2x	7.4	20	136	119 No micro + No manure	23	5	Lumax + glyphosate + AMS @ 2 qt/A + 1 qt/A + 2 lb/A on 7 May	None + None
Uniform plot, very consistent ,dry summer,light bear damage													
Clintonville, WI Doug Behnke Mike Kiddy	2972 HnB	Corn	5/4/07 30 32000		Spring field cultivate 2x Cultivate 1x	6.8	31	124	166 13.2 S + 10000 gal/A (12-3.6-18.6-1.2)	52	213	Volley ATZ Lite + Hornet WDG + AMS @ 1.75 qt/A + 2.75 oz/A + 2.5 lb/A on 18 May	Chlorpyrifos @ 8.7 lb/A on 5/4/07 + None
Very dry June, July, and half of August.													
De Pere, WI Robertson Brothers Jeff Polenske	2975 Hortonville	Soybean	5/7/07 30 31167		Fall Chisel Spring Field Cultivated 2x	6.8	29	143	120 No micro + No manure	0	0	Lumax @ 2.25 qt/A on 9May	None + None
Iola, WI Paul Reierson Paul Knutzen	2974 Plainfield	Alfalfa	5/4/07		Spring disking	6	25	110	No micro + No manure			Define + Marksman @ 20 oz/A + 2.5 pt/A May	None + Headline @ 6 oz/A July
New London, WI Ryan Martin Paul Knutzen	2973 Kolberg	Soybean	5/5/07 30		Spring Disk	7.6	151	131	No micro + No manure			Dual 8E + Hornet WDG + Atrazine 4L @ 1.33 pt/A + 2.8 oz/A + 1 pt/A May Status @ 6 oz/A June	None + Headline + Crop oil @ 6 oz/A + 1 pt/A July
Oneida, WI Oneida Nation Farms Bill Schamberg	2977 Solona silt loam	Soybean	5/9/07 30 32500		Spring field cultivator + Rotary harrow	7.2	19	91	150 No micro + No manure	128	180	Confidence Extra + Hornet WDG @ 2.2 qt/A + 3 oz/A on 10 May	None + None
Peshtigo, WI Dale Schroeder Scott Reuss	2976 Emmet	Alfalfa	5/9/07 30 28000	10/20/07	Spring moldboard plow Spring Field cultivator & Disk				77 No micro + No manure	35	70	Hornet WDG + Prowl @ 3 oz/A + 1 qt/A on 15 May	None + None
St. Nazianz, WI Mark Litz Steve Hoffman	2971 Kewaunee	Corn	5/10/07 30 29625	10/16/07	Fall DMI Spring Field Cultivator 2x Cultivate 1x	7.2	22	163	No micro + Dairy Manure 9423 gal/A on 6Nov06			Metolachlor-Magnum + Stout + Impact + Atrazine @ 1 pt/A + 0.5 oz/A + 0.5 oz/A + 0.25 lb/A on 30 May	Force 3G @ 3.3 lb/A + None
Valders, WI Larry Krepline Carl Buchner	2979 Kewaunee loam	Wheat	5/10/07 30 30500	10/25/07	Fall Chisel plow Field cultivator 2x	7	39	112	No micro + No manure			Dual II Magnum @ 0.7 pt/A on 9May Status + Astrex @ 4 oz/A + 1 pt/A on 5 June	None + None

WAPAC Corn Hybrid Trial Results 95 day RM)

Entry	Plant stand	Lodging	Test Weight	Grain Moisture	Grain Yield	Grower Return	St. Nazianz 2971	Clinton-ville 2972	New London 2973	Iola 2974	De Pere 2975	Pesh-tigo 2976	Oneida 2977	Abrams 2978	Valders 2979
	no./A	%	lb/bu	%	bu/A	$/A	bu/A	bu/A	bu/A	bu/A	bu/A				
Dairyland Stealth 7196	27125	1	56	18.9	155 *	481	135	181	96	194	177	104	170	171	170
Dekalb DKC46-60(VT3)	28946	2	56	18.9	158 *	490	132	160	111	210	183	91	181	179	178
LG Seeds LG2463Bt	28321	3	55	19.0	151 *	468	138	171	94	192	155	102	171	173	166
Garst 8860CB/LL	26089	2	55	19.1	139	429	114	153	86	168	164	104	161	154	145
Golden Harvest L7H08BtRW	28339	2	56	19.3	150	464	128	176	92	191	155	88	176	180	165
Renk RK488RR/YGPL	28643	1	56	19.5	153 *	470	129	177	93	187	168	111	173	168	166
Kaltenberg K3843RRPlus	28536	1	55	19.9	151 *	466	128	178	83	187	187	94	170	173	163
Mycogen 2R428	28714	3	56	19.9	149	460	113	172	108	191	160	86	179	173	164
Mean	28089	2	56	19.3	151	466	127	171	95	190	169	98	173	171	165
LSD(0.10)	816	NS	1	0.6	7	20	14	NS	NS	6	9	9	NS	NS	16

Grower return = (Yield * Price) - [Yield * (Handling + Hauling + Storage + Drying + Trucking)]

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Hauling = $0.04 per bushel
Storage = $0.02 per bushel for 30 days
Drying = $0.02 per bushel per point of moisture above 15.5%
Trucking = $0.11 per bushel for 100 miles

WAPAC Trial Information: 100 day

Location Cooperator Consultant	tri_id Soil series Soil texture	Previous crop	Planting Date Row width Population	Harvest Date Population	Fall and SpringTillage Cultivation	Soil test pH P K --- ppm ---	Fertilizer (lb/a) N P K Micro + Manure	Weed control	Insecticide + Fungicide
Appleton, WI Dave McCarthy Jeff Polenske	2970 Hortonville	Alfalfa	4/24/07 20 32833		No Tillage	6.9 25 140	182 50 144 No micro + 10000 gal/A	Dual II Magnum + AaTrex 9.0 @ 1 pt/A + 1 lb/A on 21April Basis @ 0.33 oz/A on 30April	None + None
Planter had a hard time with flat seed sizes, that explains the high populations on some varieties above. Dry weather had an effect on yield.									
Deerfield, WI Russ Dahl Tom Novak	2914 Dosge sil	Corn	5/4/07 30 28000	11/5/07	Spring Disk + Field cultivator	6.5 27 92	124 20 20 No micro + No manure	Harness @ 2 pt/A early May Status @ 5 oz/A early June	Force 3G @ 4.4 lb/A + None
Very dry all season until mid-August. Pollination problems (see final ear counts). Reps 1+2 were on opposite ends of the field separated by several hundred feet.									
Manawa, WI Dan Boerst Mike Kiddy	2917 HnB/SyA	Alfalfa	4/29/07 30 34000		Fall Chisel plow Spring Field cultivate 2x Cultivate 1x	7.1 50 131	100 103 218 12 S + Manure at 10000 gal/A 10-8-21-1.2	Honcho Plus + AMS @ 1.5 qt/A + 3 lb/A on 5Oct06 Lumax + AMS @ 2 qt/A + 3 lb/A on 7May	Latitude @ 0.5 pk/bu on 29Apr + None
Very dry June, July and half of August.									
Markesan, WI Steve Stellmacher Rachel Mueller	2918 Kidder loam	Corn	5/12/07 38 29000	11/10/07	Fall chisel Spring disk	6 50 106	150 12 60 3.5 S + 0.3 Zn + No manure	Harness + Hornet WDG + Atrazine @ 2 pt/A + 4 oz/A + 0.5 lb/A on 14May	None + None
Fair amount of wind damage, broken stalks. Wind damage, snapped stalks, picked most of it up, stalk still hanging.									
Poy Sippi, WI Larry Paltzer Larry Paltzer	2969 Fisk loamy sand loamy sand	Soybean	5/5/07 30 31000		No tillage	6.4 47 135	135 9 75 12 S + No manure	2,4-D + Princep @ ? in fall Touchdown + Camix + Atrazine @ 12 oz/A + 1.75 qt/A + 0.6 lb/A on 12May	None + None
Very dry July weather. Approximately 1.5 inches of rain from planting to July 15.									
Readfield, WI Larry Danke Paul Knutzen	2915 Hortonville	Corn	5/4/07 30		No tillage	6.4 51 125	124 22 60 8 S + 1.2 Zn + No manure	Cornerstone Plus + Dual 8E + Hornet WDG + Atrazine 4L + AMS @ 1 qt/A 1.33 pt/A + 2.8 oz/A + 1 pt/A 3 lb/A pre	None + Headline + Crop oil @ 6 oz/A + 1 pt/A during July
Whitewater, WI Tom Hoffman Tom Novak	2861 Mahalasville sil	Soybean	5/4/07 30 30000	10/23/07	No tillage	7.1 28 106	108 46 150 No micro + No manure	Glyphosate + Harness + 2,4-D exter @ 1 qt/A + 2 pt/A + 0.5 pt/A ealy May Status @ 5 oz/A early June	Force 3G @ 4.4 lb/A + None
This location has the western CRW variant. We use insecticide on RW hybrids on all corn after soybean.									
Wrightstown, WI Dave Vandehey Nathan Nysse	2968 Kewaunee clay loam	Corn	5/14/07 30 32000	10/5/07		6.9 35 145	180 90 216 No micor + Dairy manure at 18000 gal/A (150-90-216)	Mee-to-Lachor + Callisto + Atrazine @ 1.67 pt/A + 3 oz/A + 0.5 pb/A on 20May	Lorsban on non-BtCR corn @ 8 lb/A on 14May + None
Good stand except for low areas.									

WAPAC Corn Hybrid Trial Results (100 day RM)

Entry	Plant stand	Lodging	Test Weight	Grain Moisture	Grain Yield	Grower Return	White-water 2861	Deer-field 2914	Read-field 2915	Manawa 2917	Mark-esan 2918	Wrights-town 2968	Poy Sippi 2969	Apple-ton 2970
	no./A	%	lb/bu	%	bu/A	$/A	bu/A	bu/A	bu/A	bu/A	bu/A			
Garst 8880YG1	27361	2	54	17.9	136	423	182	87	131	135	143	108	165	137
Trelay 5K626	28944	2	55	19.2	156	481	192	152	139	138	166	138	180	140
AgriGold A6225BtRR	29569	2	54	19.4	156	481	191	139	149	143	167	130	191	138
Golden Harvest H7506HxLL	28861	2	55	19.5	155	478	193	129	138	136	160	144	200	140
Croplan Genetics 3824TS	28444	1	55	19.7	155	478	188	137	133	147	162	139	191	143
LG Seeds LG2496BtRR	29944	1	54	19.8	161 *	495	185	158	159	146	169	143	187	141
Dairyland Stealth 7201	28028	2	56	20.1	151	466	188	117	133	146	165	117	189	155
Kaltenberg K4265RRBt	29361	2	55	20.2	160 *	491	193	131	154	153	152	144	202	150
Renk RK670VT3	29194	2	54	20.6	160 *	491	185	149	144	148	180	149	187	141
DeKalb DKC52-59	28403	2	53	20.6	167 *	510	193	141	156	161	179	152	204	149
Mean	28811	2	55	19.7	156	479	189	134	144	145	164	136	190	143
LSD(0.10)	NS	NS	1	0.9	8	24	NS	5	10	10	---	10	11	NS

Grower return = (Yield * Price) - [Yield * (Handling + Hauling + Storage + Drying + Trucking)]

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Trucking = $0.11 per bushel for 100 miles

WAPAC Trial Information: 105 day

Location Cooperator Consultant	tri_id Soil series Soil texture	Previous crop	Planting Date Row width Population	Harvest Date Population	Fall and SpringTillage Cultivation	Soil test pH P K --- ppm ---	Fertilizer (lb/a) N P K Micro + Manure	Weed control	Insecticide + Fungicide
Cambridge, WI	2966	Soybean	5/7/07	11/2/07	Spring disk	6.7 26 103	131 42 110	Harness 7EC + Princep 90 @ 3 pt/A + 1 lb/A on 12 May	Force 3G @ 3.4 lb/A on 7May + None
Jeff Notstad	Kidder-McHenry		38				1 Zn + Manure @ 10 T/A	Status @ 5 oz/A on 6June	
A.D. Cole	silt loam		29000						
Normal to above normal during growing season, low stress.									
Elkhorn, WI	2878	Corn	5/4/07	10/30/07	Fall chisel Spring soil finisher	7.3 78 187	150 95 260	Harness @ 2 pt/A pre Buctril @ 1.5 pt/A post	Force 3G @ 4.4 lb/A + None
Lauderdale Farms	Plano silt loam		30				+ Dairy manure 15000 gal/A		
Tom Novak	sil		30000						
This location has the western CRW variant so we use insecticde on RW hybrids on all corn after soybeans or corn. Perfect rainfall all year - never a day of moisture stress.									
Lodi, WI	2964	Corn	5/2/07	10/5/07	Field cultivate (Combo chisel & Disk) Cultivate 1x	6.7 38 195	190 72 177	Dual II Mag + Hornet WDG @ 2 pt/A + 4 oz/A on 10 May	Poncho SAI @ 250 g/seed + Force 3G @ 4.4 lb/A on 2May + None
Lockner Dairy	Mt. Carrol		30				1 Zn + 15000 gal/A (3x applications)		
A.D. Cole	silt loam		40000						
Planter went nuts, way too many seeds dropped, air planters leave a lot to be desired trying to calibrate. Peepers=5698/A (plants not contributing anything to yield). Ear droppage of 5-10 bu/A. Mid-season drought, but had good soil moisture. Anthracnose.									
Markesan, WI	2919	Sweet corn	5/10/07	10/22/07	Fall Chisel Spring Mulch/Finisher	6.7 36 148	124 20 50	Celebrity Plus @ 4 oz/A on 9June	None + None
Gran Prairie	Plano silt loam		30				3.5 S+0.3 Zn + Second year after manure application (24 lb N/A)		
Cornerstone Crop Consulting			30500						
Broken stalks from wind. Thanks to Leystra Vue Farms for weigh wagon!									
Prairie du Sac, WI	2879	Soybean	5/8/07	10/30/07	Aer-Way 1X	6.9 29 127	35 14 19	Generic glyphosate + Define + Sencor @ 32 + 10 + 2 oz/A on 30Apr	None + None
USDA-DFRC	Richwood & Rhb		30				No micro + 12000 gal/A Liquid Dairy	Liberty @ 34 oz/A on 11Jun	
A.D. Cole	silt loam								
These hybrids had western bean cutworm from 10-30% level in all reps, A range of ear droppage 7-11bu/ across all hybrids. Normal to above normal rain during growing season, low stress.									

WAPAC Corn Hybrid Trial Results (105 day RM)

Entry	Plant stand	Lodging	Test Weight	Grain Moisture	Grain Yield	Grower Return	Elkhorn 2878	Prairie du Sac 2879	Mark-esan 2919	Lodi 2964	Cam-bridge 2966
	no./A	%	lb/bu	%	bu/A	$/A	bu/A	bu/A	bu/A	bu/A	bu/A
Renk RK644YGCB	33594	6	57	19.0	176	543	188	170	180	155	185
Dairyland Stealth 5204	33896	6	57	19.1	177	548	188	172	190	164	173
Dairyland Stealth 4006	33642	7	56	20.0	197 *	607	220	186	196	179	206
AgriGold A6325RWRR	33767	6	55	20.1	200 *	615	221	182	204	193	203
Trelay 6T226	35583	6	57	20.1	193	594	215	178	199	181	194
Croplan Genetics 5338TS	32887	7	57	20.3	195 *	597	219	189	196	179	191
Kaltenberg K5823RRPlus	31358	3	58	20.4	188	575	199	176	195	177	191
Dekalb DKC57-79(RR2YGPL)	32021	5	57	20.4	202 *	618	217	191	210	203	189
Mean	33343	6	57	19.9	191	587	208	181	196	179	191
LSD(0.10)	NS	2	NS	0.8	7	24	10	NS	---	NS	NS

Grower return = (Yield * Price) - [Yield * (Handling + Hauling + Storage + Drying + Trucking)]

where Price = $3.39 = Weighted Price per Bushel = 50% November 15 Average Cash price + 25% March CBOT Futures price ($0.15 basis) + 25% July CBOT Futures price ($0.10 basis). November 15 Average Cash price derived from Wisconsin Ag Statistics; CBOT Futures prices derived from closing price on first business day in December.

Handling = $0.02 per bushel
Hauling = $0.04 per bushel
Storage = $0.02 per bushel for 30 days
Drying = $0.02 per bushel per point of moisture above 15.5%
Trucking = $0.11 per bushel for 100 miles

Thank you to everyone who contributed to the success of the 2007 WAPAC Corn Trials!

Data Analysis

Dr. Joe Lauer, Extension Corn Agronomist
and the Agronomy Department support staff at the University of Wisconsin - Madison

Seed Company Sponsors

Agrigold – Dave Welsh
Croplan Genetics – Pat Van Duerzen
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LG Seeds – Paul Reierson
Mycogen – Kelly Keyzers
Pioneer – Dan Wiersma/Arnie Imholte
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, Valders, 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: USDA-DFRC, Prairie du Sac, WI

• Steve Hoffman, Hoffman Crop Consulting, Manitowoc, WI
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• Mike Kiddy – Kiddy Crop Consulting, New London, WI
1.) 95-day: Doug Behnke, Clintonville, WI
2.) 100-day: Dan Boerst, Manawa, WI

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On-Farm Trial Coordinators and Participating Growers, continued

• Tom Novak – Total Crop Management, Sullivan, WI
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2.) 100-day: Tom Hoffman, Whitewater, WI
3.) 105-day: Lauderdale Farms, Elkhorn, WI

• Nathen Nysse – Polenske Agronomic Consulting, Appleton, WI
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2.) 100-day: Dave Vandehey, Wrightstown, 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.