

“Buy the Traits You Need” The honor roll of top-performing corn hybrids tested in 2012

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The principles for selecting corn hybrids in the transgenic era include: 1) using independent yield trial data and multi-location averages, 2) evaluating consistency of performance, 3) assuming that every hybrid must stand on its own for performance, 4) paying attention to seed costs, and 5) buying the traits you need. This publication addresses the principle of “Buying the traits you need.”

There are numerous sources of independent yield trial data, but few of these sources summarize data over numerous locations for the same set of hybrids. In the UW Corn Hybrid Performance Trials publication (A3653), multi-location averages are presented in Tables 7-22.

As farmers make hybrid selection decisions they must consider buying hybrids with the traits they need for their farming operation. Often farmers do not need all the traits sold in hybrids. For example, the corn rootworm trait is not usually required for production fields in northern Wisconsin. “Buying the traits you

need” can be confusing due to the number of hybrids and transgenic technologies available to farmers. Tables 1 (silage) and 2 (grain) list hybrids that were starred for both yield AND performance index(ices). They are sorted by trait cohorts. For details about the specific transgenic technology and performance see A3653.

Evaluating consistency of performance is done by considering yield for individual locations in A3653 Tables 7-22. Also, consistency can be evaluated using Tables 2 (Hybrid Index) and 23 (Hybrid History).

Transgenic technologies interact with the underlying genetic germplasm of hybrids within a “family.” These interactions can often result in poor performance. Always assume that every hybrid must stand on its own for performance when selecting hybrids. Do not select hybrids from genetic “families.”

A downloadable spreadsheet that can help calculate seed costs between two hybrids is at <http://corn.agronomy.wisc.edu/Season/DSS.aspx>.

Table 1. Corn silage hybrids tested during 2012 that performed statistically similar to the highest hybrid in one or more zones for forage yield, milk per ton, AND milk per acre (MILK2006). Traits: Conventional= no transgenic traits, CB= Corn Borer, LL= Liberty Link, RR= Roundup Ready, and RW= Corn Rootworm.

Brand Hybrid	Co. Zones RM tested	Brand Hybrid	Co. Zones RM tested	Brand Hybrid	Co. Zones RM tested
Conventional		Dairyland HiDF32909	90 N	CB,RR	
Masters Choice MC5250	102 SC	Dekalb DKC55-09	105 SC	Trelay 5DP495	100 NC
Prairie Hybrids 6212	110 S	Garst 85V88-3000GT	107 NC	CB,RR,RW	
Spectrum 5418	104 SC	Great Lakes 5339GT3	103 SC	Channel 207-13VT3P	107 S
CB,LL,RR		Legacy Seeds L5350-3000GT	104 SC	Croplan Genetics 5338VT3P	103 SC
Dairyland HiDF3197-7	97 NC	Legend Seeds 47J104-3000GT	104 SC	Great Lakes 4282VT3Pro	92 NC
G2 Genetics 5H-501	101 NC	Legend Seeds 9297-Vip3111	97 NC	Renk RK434VT3P	92 NC,N
Pilgrim 9601GTCBLL	96 NC	NuTech 5N-001	101 NC	Renk RK629VT3P	101 NC
CB,LL,RR,RW		NuTech 5N-406	106 SC	Trelay 4VP726	97 NC
AgriGold A6323GT3	103 S	Pioneer P9675AMX	96 N	Trelay 5VP688	101 NC
Cornelius C462-3000GT	104 S	Renk RK565GTCBLLRWBL	99 NC	RR	
Dairyland HiDF3396SSX	96 NC	CB,LL,RW		Carharts Blue Top CG104GT	104 SC
Dairyland HiDF3702-9	102 SC	Cornelius C619XTLL	110 S		

Table 2. Corn grain hybrids tested during 2012 that performed statistically similar to the highest hybrid in one or more zones for grain yield AND performance index. Traits: Conventional= no transgenic traits, CB= Corn Borer, LL= Liberty Link, RR= Roundup Ready, and RW= Corn Rootworm.

Brand Hybrid	Co. Zones RM tested	Brand Hybrid	Co. Zones RM tested	Brand Hybrid	Co. Zones RM tested
Conventional		Munson 5033-3000GT	90 NC	Croplan Genetics 5415VT3P	106 S
Lemke 5160	100 SC	Munson 5857-3000GT	98 NC	Croplan Genetics 5757VT3P	106 S
Munson 4690	86 NC	Mycogen 2M678	108 S	Croplan Genetics 5887VT3P	108 S
O'Brien OB1097	95 SC	Mycogen X12201S3	90 NC	Croplan Genetics 6125VT3	109 S
Spectrum 4725	97 SC	NK Brand N61P-3000GT	107 S,SC	Dahlman R4530VT3Pro	90 NC
Spectrum 5606	106 SC	NuTech 5N-803	101 SC	Dairyland DS9992	92 N
Spectrum 5902	109 S	O'Brien OB4089	89 NC	Dekalb DKC42-72	92 N
		Partners In Production 3190	90 NC	Dekalb DKC43-48	93 NC
CB,LL,RR		Partners In Production 4097	97 SC	Dekalb DKC49-30	99 SC
Dairyland DS7985	85 N	Partners In Production 4198	98 NC	Dekalb DKC62-09	112 S
G2 Genetics 5H-0504	105 S,SC	Partners In Production 4399	99 SC	Dekalb DKC62-97	112 S
G2 Genetics 5H-202	102 SC	Partners In Production 5308	108 S	FS InVision 38SV4	88 NC
G2 Genetics 5H-309	109 S	Pioneer P0062XR	100 SC	FS InVision 43SV4	93 NC
G2 Genetics 5H-399	99 SC,NC	Pioneer P0832AMX	108 S	FS InVision 46SV4	96 NC
G2 Genetics 5H-587	87 N	Pioneer P9910AM1	99 SC	FS InVision 55ZV4	105 SC
G2 Genetics 5H-806	106 S,SC	Pioneer P9917AM1	99 SC	FS InVision 59SV4	109 S
G2 Genetics 5H-890	90 N	Prairie Brand 892SX	89 NC	FS InVision 60TV4	110 S
G2 Genetics 5Z-008	108 S	Prairie Brand 920GT3	90 NC	Great Lakes 4006VT3Pro	90 NC
G2 Genetics 5Z-198	98 NC	Renk RK302GTCBLLRW	89 NC	Great Lakes 4041G3VT3	90 NC
Munson 4485GTCBLL	84 NC	Renk RK752SSTX	106 S	Great Lakes 4879VT3Pro	98 SC,NC
Mycogen 2G192	85 NC	Unity Seeds 7606-3000GT	106 SC	Great Lakes 5015VT3Pro	100 SC
NuTech 5B-410	110 S	Unity Seeds 7789-3000GT	90 NC	Great Lakes 5884VT3Pro	107 S
NuTech 5B-604	104 SC	Legacy Seeds L3910-3111	98 SC	LG Seeds LG2549VT3	109 S
Pioneer P1151HR	111 S	Golden Harvest H7652-4011	101 SC	LG Seeds LG5470VT3Pro	98 SC,NC
Pioneer P8906HR	89 NC			LG Seeds LG5499VT3Pro	100 SC
		CB,RR		LG Seeds LG5522VT3Pro	103 S
CB,LL,RR,RW		AgriGold A6192VT2RIB	95 SC	Legacy Seeds L2910VT3P	89 N
Carharts Blue Top CG90-3000GT	90 NC	Dekalb DKC38-03	88 NC,N	Legacy Seeds L3011VT3P	88 N
Carharts Blue Top CG9780-31Vip	97 SC	Dekalb DKC39-07	89 NC,N	Legacy Seeds L3712VT3P	97 SC
Cornelius C282-3111	99 SC			Legacy Seeds L5522VT3Pro	105 S
Cornelius C533SS	107 S	CB,RR,RW		Legend Seeds 9397VT3P	97 NC
Dairyland DS9789SSX	89 NC	AgriGold A6203VT3	97 SC	Legend Seeds 9495VT3P	95 NC
G2 Genetics 3D-909	109 S	AgriGold A6252VT3Pro	100 SC	Mycogen X12330VT	98 SC
G2 Genetics 5X-0004	100 SC,NC	AgriGold A6408VT3Pro	108 S	PIP/Steyer 4292	92 N
G2 Genetics 5X-193	93 N	AgriGold A6433VT3Pro	108 S	Prairie Brand 981VT3	98 NC
G2 Genetics 5X-795	94 N	AgriGold A6458VT3	110 S	Renk RK492VT3P	93 NC,N
G2 Genetics 5X-895	97 SC	AgriGold A6476VT3Pro	111 S	Renk RK568VT3P	95 NC
G2 Genetics 5X-9402	94 NC,N	Carharts Blue Top CR1890VT3P	90 NC,N	Renk RK585VT3P	95 NC
Hughes 5456GT3	106 S	Carharts Blue Top CR8992VT3P	90 NC,N	Trelay 2VP234	85 NC
Hughes 6132GT3	108 S	Channel 189-04VT3P	89 N	Trelay 4VP324	94 NC
Jung 7S316RIB	90 NC	Channel 190-95VT3P	90 N	Trelay 4VP473	94 NC
Legacy Seeds L2999-3000GT	91 N	Channel 192-09VT3P	92 NC	Trelay 4VP897	95 NC
Legacy Seeds L5810-3000GT	106 S,SC	Channel 199-55VT3	99 SC	Trelay 5VP925	100 SC
Legend Seeds 47J087-Vip3111	87 NC	Channel 200-91VT3P	100 SC		
Legend Seeds 9090-3000GT	90 NC	Cornelius C594VT3P	109 S	RR	
Legend Seeds 9098GENSSRIB	98 SC	Cornelius C631VT3P	111 S	Dahlman R4546	90 NC
Legend Seeds 9292GENSSRIB	92 NC	Croplan Genetics 3737VT3P	96 NC	Kussmaul GL983GT	83 N
Lemke 2027-3000GT	85 NC,N	Croplan Genetics 4033VT3P	100 SC,NC	Kussmaul GL990GT	90 NC