2026

Professional Dairy Managers of Pennsylvania (PDMP)

Corn Silage Hybrid Performance Trial Results



Prepared by: Dr. Alex Hristov (PSU Animal Sciences), Dr. Chris Canale (Cargill), Dr.Sergio Francisco (Cargill), Dr.Leoni Martins (PSU Animal Sciences), Hanna Wells(PSU Plant Science), Dayton Spackman (PSU Plant Science), Cassidy Bumbaugh (PSU Plant Science), and Dr.Charlie White (PSU Plant Science)

PDMP Corn Silage Hybrid Testing Program 2026

PDMP Professional Dairy Managers of Pennsylvania
in collaboration with
PennState Extension College of Agricultural Sciences

Late maturity (111-120) day RM silage hybrids in Chester, Juniata, and Lancaster Counties

Notes: SEE INDIVIDUAL REPORT FOR BACKGROUND INFORMATION

Cooperators: Southeast Agricultural Research Station(SEARC), Craig Finkbinder, and Walmoore Holsteins Inc.

Brand	Hybrid	Relative Maturity	Traits[1]	Pop. Plants/ac	Dry Matter %[2]	Crude Protein %DM	Lignin %DM	Ash %DM	Starch %DM	TFA %DM	NDFom %DM	uNDF 240 hr %DM	NDFD 30 %NDF	IVSD %Starch[3]	Fresh Yield tons/ac[4]	OM Yield tons/ac[5]	DOM Yield tons/ac[6]	OMD %[7]
111-114 day hybrids																		
Advanta Seeds	ADV C1142	114	10	34,000	38.8	8.0	2.3	2.9	43.0	2.6	31.3	10.3	51.6	65.6	24.1	8.2	5.2	62.8
Revere Seeds	113-T73	113	46	34,000	36.9	7.9	2.2	3.0	44.2	2.7	30.6	10.5	51.2	65.5	23.1	7.9	4.9	62.8
Kings Agriseeds	RT 64T39	114	17	33,722	36.8	7.9	2.2	3.0	42.2	2.7	30.9	9.9	54.1	66.8	23.9	8.1	5.2	64.4
Dekalb	DKC61-80RIB	111	42	34,000	36.7	8.2	2.3	3.0	41.4	2.7	31.3	10.1	54.9	65.5	23.7	8.0	5.1	64.0
Dyna-Gro	D54TC77RIB	114	46	34,000	36.7	8.0	2.2	3.0	41.9	2.6	31.2	10.8	51.7	65.6	24.7	8.4	5.3	62.8
Advanta Seeds	ADV XC24111	113	49	34,000	36.4	7.9	2.2	3.0	42.4	2.6	31.4	10.2	53.3	66.7	21.8	7.4	4.7	64.0
Hoegemeyer	8440V	114	51	33,667	36.3	8.0	2.1	3.1	43.1	2.8	30.5	9.5	56.5	66.9	23.9	8.1	5.3	65.3
Seedway	SW 1188SS	111	42	34,000	36.2	8.1	2.3	3.3	38.2	2.6	34.3	11.0	54.8	65.2	22.4	7.6	4.8	63.4
Dekalb	DKC114-14RIB	114	43	34,000	36.2	7.7	2.0	2.9	42.3	2.7	31.5	9.7	56.5	66.6	23.6	8.0	5.2	65.0
Dekalb	DKC111-02RIB	111	43	33,222	35.9	7.9	2.2	3.3	41.5	2.5	31.2	10.5	52.7	66.4	22.5	7.6	4.9	63.6
Growmark	FS 6265P RIB	112	45	33,333	35.9	7.9	2.2	2.9	43.8	2.8	30.3	10.2	53.5	66.1	24.1	8.2	5.3	63.9
Dekalb	DKC113-62RIB	113	43	34,000	35.7	7.9	2.3	2.9	42.0	2.7	32.0	10.5	52.9	65.8	23.6	8.0	5.1	63.3
Seedway	SW 1331SP	113	45	34,000	35.5	7.8	2.4	3.1	41.0	2.7	33.0	11.1	53.5	66.4	22.4	7.6	4.8	63.5
Channel	212-99SSPRIB	112	43	33,722	34.9	8.1	2.2	3.2	38.8	2.6	33.0	10.4	56.1	66.8	21.6	7.3	4.7	64.8
Advanta Seeds	ADV XC24921	113	19	33,056	34.2	7.8	2.3	3.0	40.7	2.5	33.7	10.9	53.3	66.8	22.0	7.5	4.8	63.6
Channel	214-95SSPRIB	114	43	34,000	33.8	8.2	2.3	3.3	40.6	2.7	32.5	10.9	53.3	66.1	22.8	7.7	4.9	63.5
Channel	213-53SSPRIB	113	43	33,222	33.7	8.1	2.3	3.1	41.3	2.6	32.1	10.6	53.6	66.4	22.4	7.6	4.9	63.7
Chemgro	7364PCE	113	34	33,556	33.4	8.0	2.2	3.3	40.4	2.6	32.5	10.1	55.6	67.9	22.4	7.6	4.9	65.2
			111-114 day means		***35.8***	***8.0***	***2.2***	***3.1***	***41.6***	***2.7***	***31.9***	***10.4***	***53.8***	***66.3***	***23.1***	***7.8***	***5.0***	***63.9***
115-118 day hybrids																		
Growmark	FS 6565P RIB	115	45	34,000	38.1	8.1	2.3	3.0	40.5	2.6	32.5	10.8	53.5	64.8	23.2	7.9	4.9	62.9
Revere Seeds	1839 TC	118	46	33,833	37.1	7.9	2.4	2.9	41.9	2.8	32.9	11.1	52.9	65.7	23.2	7.9	5.0	63.1
Dyna-Gro	D55VC86RIB	115	54	33,444	37.0	7.9	2.2	2.9	43.3	2.7	30.7	10.2	52.4	65.6	23.5	8.0	5.1	63.2
Growmark	FS 6665P RIB	116	45	33,667	36.4	7.9	2.1	2.9	42.8	2.7	30.7	9.7	56.0	66.2	25.0	8.5	5.5	64.6
Dekalb	DKC115-81RIB	115	43	33,778	35.8	7.8	2.2	2.8	40.9	2.7	32.1	10.3	56.1	66.4	23.5	8.0	5.2	64.5
Seedway	SW 1644SP	116	45	32,667	35.3	8.1	2.1	3.1	43.7	2.7	29.7	9.6	54.1	66.7	23.7	8.1	5.2	64.6
Channel	215-40VT4PIRB	115	57	33,778	34.7	7.9	2.3	3.2	37.6	2.5	34.6	11.4	54.0	65.7	23.1	7.8	4.9	63.1
Tidewater Seed Co	Axis Seed Co 67D67	117	46	34,000	34.7	8.0	2.3	3.0	40.4	2.5	32.6	10.7	53.5	66.7	24.0	8.2	5.2	63.6
Tidewater Seed Co	Axis Seed Co 68K80	118	15	33,444	34.6	8.3	2.3	3.2	39.2	2.7	31.4	10.2	54.8	66.6	24.1	8.2	5.3	64.5
Hoegemeyer	8594V	115	51	33,556	33.7	8.1	2.2	3.2	41.6	2.6	31.5	9.8	56.8	67.3	23.2	7.9	5.2	65.5
			115-118 day means		***35.7***	***8.0***	***2.2***	***3.0***	***41.2***	***2.7***	***31.9***	***10.4***	***54.4***	***66.2***	***23.7***	***8.1***	***5.2***	***64.0***
			Overall Mean		**35.8**	**8.0**	**2.2**	**3.1**	**41.5**	**2.7**	**31.9**	**10.4**	**54.0**	**66.3**	**23.3**	**7.9**	**5.1**	**63.9**
			LSD(0.1)		**1.9**	**0.2**	**NS**	**NS**	**3.2**	**NS**	**NS**	**NS**	**2.0**	**0.7**	**NS**	**NS**	**NS**	**1.1**
			CV%		**6.9**	**3.3**	**11.4**	**11.4**	**9.9**	**8.8**	**10.2**	**14.0**	**4.6**	**1.4**	**9.9**	**10.1**	**11.2**	**2.2**

[1] **Traits:** See tab " Trait Key" for individual trait designation.

[2] **Dry Matter:** Tables are sorted by dry matter. *Avoid making comparisons with hybrids that differ significantly in dry matter.*

[3] **IVSD:** Starch digestibiliy (% of starch) is analyzed by an NIRS method on samples ground through a 4-mm screen and incubated for 7 hours (IVSD).

[4] **Fresh Yield:** Silage yields are expressed on a 35 percent DM basis; all other parameters are expressed on a dry matter basis.

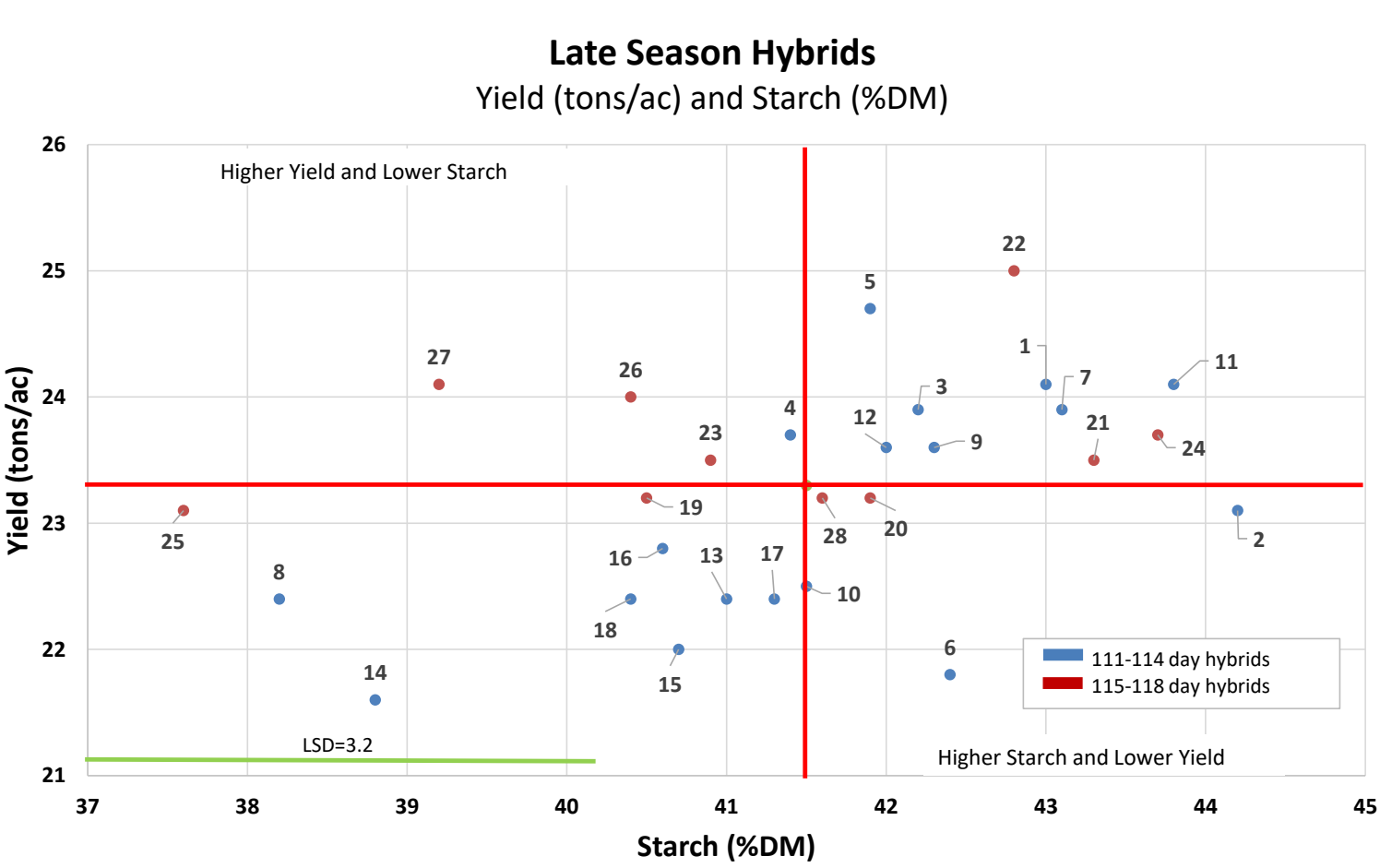
[5] **OM Yield:** Silage yield (tons/ac) expressed on an organic matter (OM) basis.

[6] **DOM Yield:** Yield of digestible organic matter.

[7] **OMD: Organic Matter Digestibility -** Please see "OMD Story" tab for information on how to use this column

NS = Not Significant

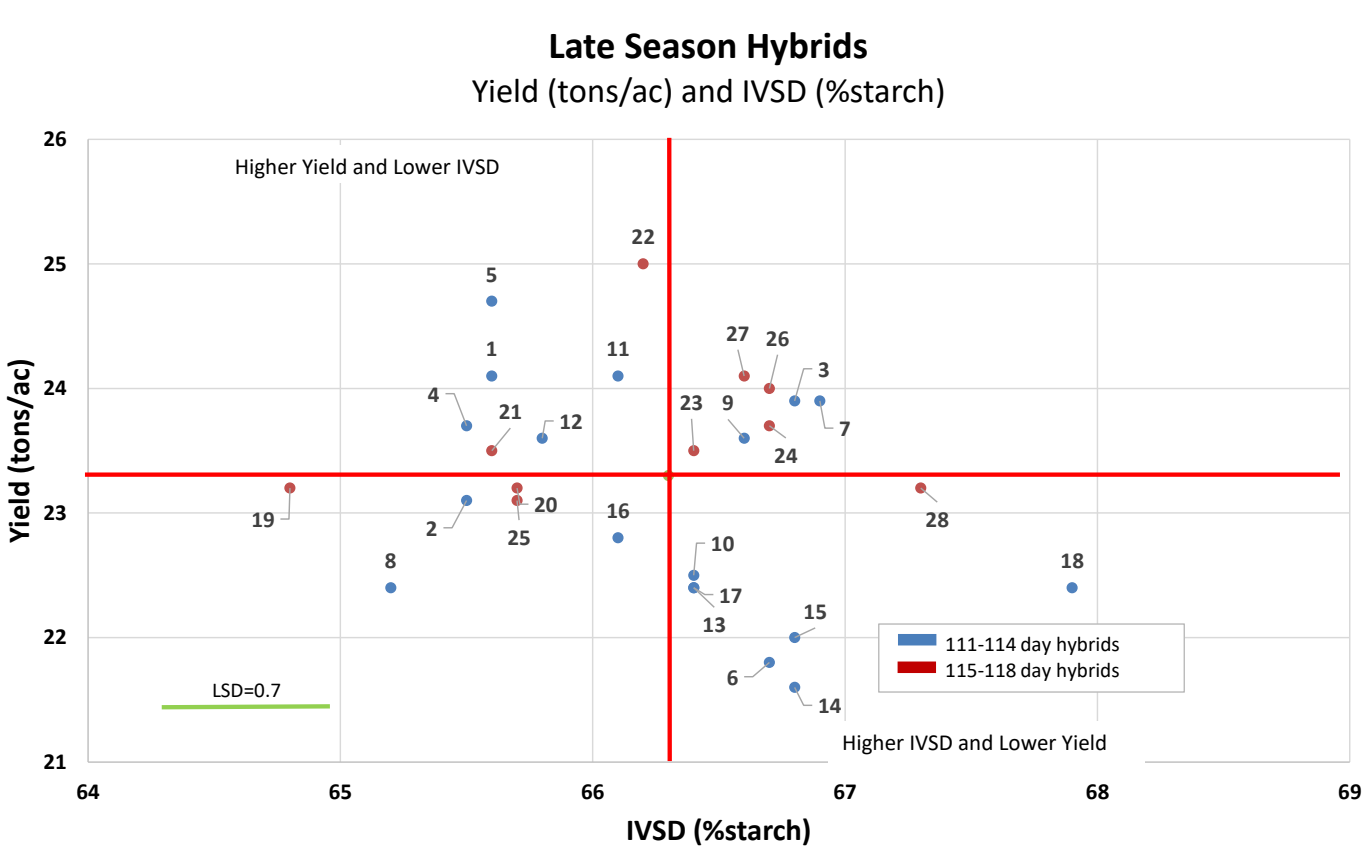
Prepared by: Dr. Alex Hristov (PSU Animal Sciences), Dr. Chris Canale (Cargill), Dr.Sergio Francisco (Cargill), Dr.Leoni Martins (PSU Animal Sciences), Hanna Wells(PSU Plant Science), Dayton Spackman (PSU Plant Science), Cassidy Bumbaugh (PSU Plant Science), and Dr.Charlie White (PSU Plant Science)



Legend

1.) Advanta Seeds ADV C1142
2.) Revere Seeds 113-T73
3.) Kings Agriseeds RT 64T39
4.) Dekalb DKC61-80RIB
5.) Dyna-Gro D54TC77RIB
6.) Advanta Seeds ADV XC24111
7.) Hoegemeyer 8440V
8.) Seedway SW 1188SS
9.) Dekalb DKC114-14RIB
10.) Dekalb DKC111-02RIB
11.) Growmark FS 6265P RIB
12.) Dekalb DKC113-62RIB
13.) Seedway SW 1331SP
14.) Channel 212-99SSPRIB
15.) Advanta Seeds ADV XC24921
16.) Channel 214-95SSPRIB
17.) Channel 213-53SSPRIB
18.) Chemgro 7364PCE
19.) Growmark FS 6565P RIB
20.) Revere Seeds 1839 TC
21.) Dyna-Gro D55VC86RIB
22.) Growmark FS 6665P RIB
23.) Dekalb DKC115-81RIB
24.) Seedway SW 1644SP
25.) Channel 215-40VT4PIRB
26.) Tidewater Seed Co Axis Seed Co 67D67
27.) Tidewater Seed Co Axis Seed Co 68K80
28.) Hoegemeyer 8594V

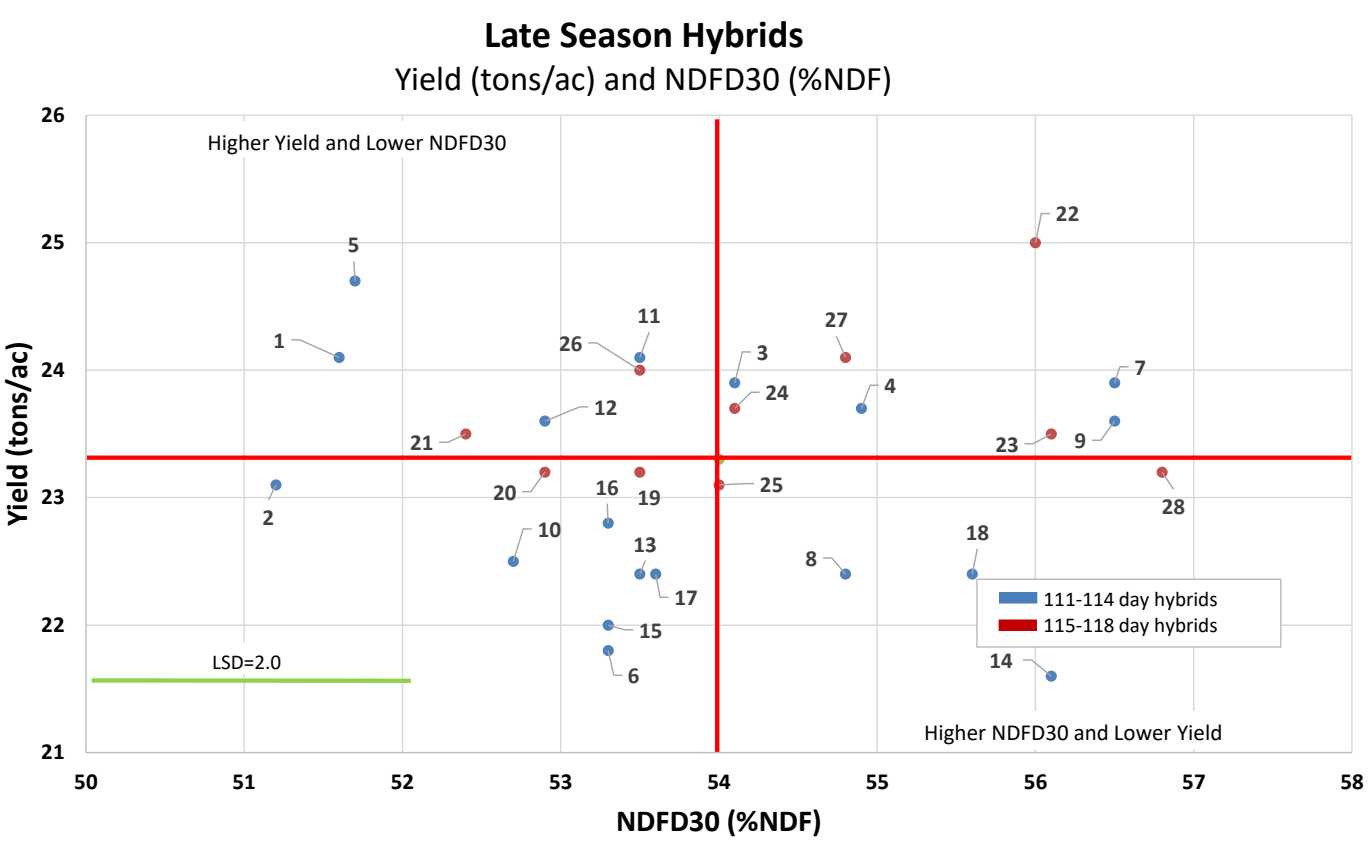
*How to use this chart: This chart can be used to determine yield (tons/ac) and starch(%DM) of corn silage hybrids. The horizontal line represents the starch mean in this group of data. The vertical line represents the fresh yield mean in this group of data. Each point represents a data point that reflects fresh yield to starch. The number beside the data point can be referenced to the hybrid name located within the legend. The LSD lines represent differences between hybrids that are significantly different at the 0.1 level. These lines can be moved around within the plot of data.



Legend

1.) Advanta Seeds ADV C1142
2.) Revere Seeds 113-T73
3.) Kings Agriseeds RT 64T39
4.) Dekalb DKC61-80RIB
5.) Dyna-Gro D54TC77RIB
6.) Advanta Seeds ADV XC24111
7.) Hoegemeyer 8440V
8.) Seedway SW 1188SS
9.) Dekalb DKC114-14RIB
10.) Dekalb DKC111-02RIB
11.) Growmark FS 6265P RIB
12.) Dekalb DKC113-62RIB
13.) Seedway SW 1331SP
14.) Channel 212-99SSPRIB
15.) Advanta Seeds ADV XC24921
16.) Channel 214-95SSPRIB
17.) Channel 213-53SSPRIB
18.) Chemgro 7364PCE
19.) Growmark FS 6565P RIB
20.) Revere Seeds 1839 TC
21.) Dyna-Gro D55VC86RIB
22.) Growmark FS 6665P RIB
23.) Dekalb DKC115-81RIB
24.) Seedway SW 1644SP
25.) Channel 215-40VT4PIRB
26.) Tidewater Seed Co Axis Seed Co 67D67
27.) Tidewater Seed Co Axis Seed Co 68K80
28.) Hoegemeyer 8594V

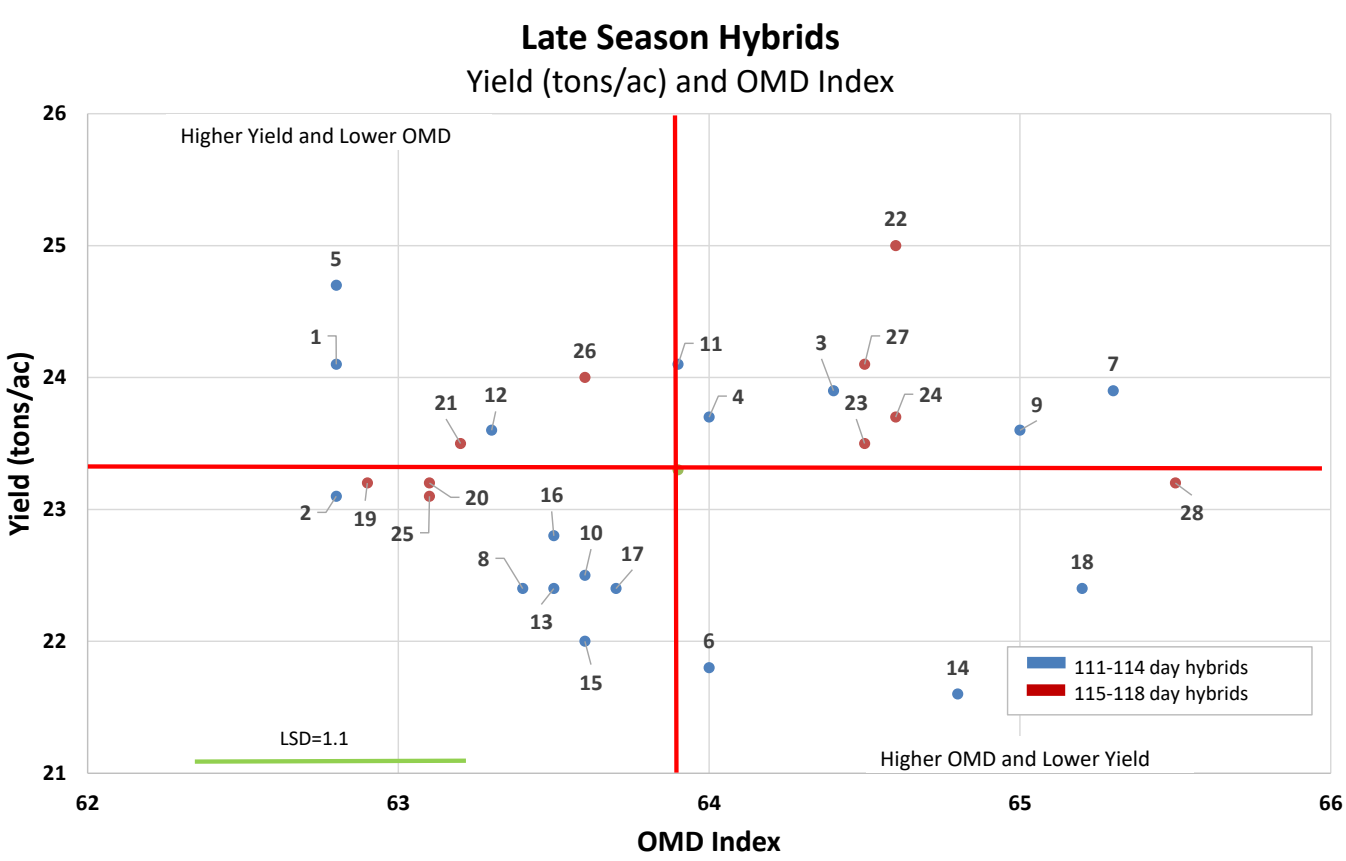
*How to use this chart: This chart can be used to determine yield (tons/ac) and IVSD(%starch) of corn silage hybrids. The horizontal line represents the IVSD mean in this group of data. The vertical line represents the fresh yield mean in this group of data. Each point represents a data point that reflects fresh yield to IVSD. The number beside the data point can be referenced to the hybrid name located within the legend. The LSD lines represent differences between hybrids that are significantly different at the 0.1 level. These lines can be moved around within the plot of data.



Legend

1.) Advanta Seeds ADV C1142
2.) Revere Seeds 113-T73
3.) Kings Agriseeds RT 64T39
4.) Dekalb DKC61-80RIB
5.) Dyna-Gro D54TC77RIB
6.) Advanta Seeds ADV XC24111
7.) Hoegemeyer 8440V
8.) Seedway SW 1188SS
9.) Dekalb DKC114-14RIB
10.) Dekalb DKC111-02RIB
11.) Growmark FS 6265P RIB
12.) Dekalb DKC113-62RIB
13.) Seedway SW 1331SP
14.) Channel 212-99SSPRIB
15.) Advanta Seeds ADV XC24921
16.) Channel 214-95SSPRIB
17.) Channel 213-53SSPRIB
18.) Chemgro 7364PCE
19.) Growmark FS 6565P RIB
20.) Revere Seeds 1839 TC
21.) Dyna-Gro D55VC86RIB
22.) Growmark FS 6665P RIB
23.) Dekalb DKC115-81RIB
24.) Seedway SW 1644SP
25.) Channel 215-40VT4PIRB
26.) Tidewater Seed Co Axis Seed Co 67D67
27.) Tidewater Seed Co Axis Seed Co 68K80
28.) Hoegemeyer 8594V

*How to use this chart: This chart can be used to determine yield (tons/ac) and NDFD30 (%NDF) of corn silage hybrids. The horizontal line represents the NDFD30 mean in this group of data. The vertical line represents the fresh yield mean in this group of data. Each point represents a data point that reflects fresh yield to NDFD30. The number beside the data point can be referenced to the hybrid name located within the legend. The LSD lines represent differences between hybrids that are significantly different at the 0.1 level. These lines can be moved around within the plot of data.



Legend

1.) Advanta Seeds ADV C1142
2.) Revere Seeds 113-T73
3.) Kings Agriseeds RT 64T39
4.) Dekalb DKC61-80RIB
5.) Dyna-Gro D54TC77RIB
6.) Advanta Seeds ADV XC24111
7.) Hoegemeyer 8440V
8.) Seedway SW 1188SS
9.) Dekalb DKC114-14RIB
10.) Dekalb DKC111-02RIB
11.) Growmark FS 6265P RIB
12.) Dekalb DKC113-62RIB
13.) Seedway SW 1331SP
14.) Channel 212-99SSPRIB
15.) Advanta Seeds ADV XC24921
16.) Channel 214-95SSPRIB
17.) Channel 213-53SSPRIB
18.) Chemgro 7364PCE
19.) Growmark FS 6565P RIB
20.) Revere Seeds 1839 TC
21.) Dyna-Gro D55VC86RIB
22.) Growmark FS 6665P RIB
23.) Dekalb DKC115-81RIB
24.) Seedway SW 1644SP
25.) Channel 215-40VT4PIRB
26.) Tidewater Seed Co Axis Seed Co 67D67
27.) Tidewater Seed Co Axis Seed Co 68K80
28.) Hoegemeyer 8594V

*How to use this chart: This chart can be used to determine yield (tons/ac) and the OMD Index of corn silage hybrids. The horizontal line represents the OMD Index mean in this group of data. The vertical line represents the fresh yield mean in this group of data. Each point represents a data point that reflects fresh yield to the OMD Index. The number beside the data point can be referenced to the hybrid name located within the legend. The LSD lines represent differences between hybrids that are significantly different at the 0.1 level. These lines can be moved around within the plot of data.

https://www.texasinsects.org/uploads/4/9/3/0/49304017/bttraittable_aug2025.pdf

Trait ID	Principal trait packages available in the U.S. (alternate names in parentheses)	Letter Code	Traits in the package ********** Font type denotes target: caterpillar or *rootworm*	Expected control by traits in the package *one or more remain effective (x) *resistance to all, widespread (R) / localized(RL)											Refuge in northern states (higher in the south)	Weed control Trait * check bag tag
				BCW	CEW	ECB	FAW	SB	SCB	SCWB	TAW	WBC	*NCR*	*WCR*		
1	Conventional															
2	Roundup Ready 2															GLY
3	AcreMax	AM	Cry1Ab Cry1F	x	R	RL	RL	x	x	RL		R			5% blend	GLY LL
5	AcreMax Leptra	AML	Cry1Ab Cry1F Vip3A	x	x	RL	x	x	x	x	x	x			5% blend	GLY LL
6	AcreMax Xtra	AMX	Cry1Ab Cry1F *Cry34/35Ab1*	x	R	RL	RL	x	x	RL		R	RL	R	10% blend	GLY LL
7	AcreMax Xtreme	AMXT	Cry1Ab Cry1F *Cry34/35Ab1 mCry3A*	x		RL	RL	x	x	RL		R	x	R	5% blend	GLY LL
10	Agrisure Above (Agrisure3120EZ)	AA	Cry1Ab Cry1F	x	R	RL	RL	x	x	RL		R			5% blend	GLY LL*
11	AA Refuge Renew (Agrisure3120)														Renew: 5%	
13	Agrisure Total (Agrisure3122EZ)	AT	Cry1Ab Cry1F *Cry34/35Ab1 mCry3A*	x	R	RL	RL	x	x	RL		R	x	R	5% blend	GLY LL*
14	AT Refuge Renew (Agrisure3122)														Renew: 5%	
15	Agrisure Viptera 3110	3110	Cry1Ab Vip3A	x	x	RL	x	x	x	x	x	x			20%	GLY LL
16	Agrisure Viptera 3111	3111	Cry1Ab Vip3A *mCry3A*	x	x	RL	x	x	x	x	x	x	x	R	20%	GLY LL
17	Duracade (Agrisure5122EZ)	D	Cry1Ab Cry1F *eCry3.1Ab mCry3A*	x	R	RL	RL	x	x	RL		R	x	R	5% blend	GLY LL*
18	D Refuge Renew (Agrisure5122)														Renew: 5%	
19	Duracade Viptera (Agrisure5222EZ)	DV	Cry1Ab Cry1F Vip3A *eCry3.1Ab mCry3A*	x	x	RL	x	x	x	x	x	x	x	R	5% blend	GLY LL*
20	DV Refuge Renew (Agrisure 5222)														Renew: 5%	
21	Duracade Viptera Z3 (Agrisure5332EZ)	DVZ	Cry1Ab Cry1A.105 Cry2Ab2 Vip3A	x	x	RL	x	x	x	x	x	x	x	R	5% blend	GLY LL*
22	DVZ Refuge Renew (Agrisure5332)														Renew: 5%	
26	Intrasect	YHR	Cry1Ab Cry1F	x	R	RL	RL	x	x	RL		R			5%	GLY LL
30	Leptra	VYHR	Cry1Ab Cry1F Vip3A	x	x	RL	x	x	x	x	x	x			5%	GLY LL
32	PowerCore Refuge Adv.	PWRA	Cry1A.105 Cry2Ab2 Cry1F	x	R	RL	x	x	x	RL		R			5% blend	GLY LL
33	PowerCore Enlist	PWE	Cry1A.105 Cry2Ab2 Cry1F	x	R	RL	x	x	x	RL		R			5%	GLY LL
34	or Enlist Refuge Advanced	PCE													Adv 5% blend	Enlist
35	PowerCore Ultra Enlist	PWUE	Cry1A.105 Cry2Ab2 Cry1F Vip3A	x	x	RL	x	x	x	x	x	x			5%	GLY LL
36	or Ultra Enlist Refuge Advanced	PCUE													Adv 5% blend	Enlist
37	QROME	Q	Cry1Ab Cry1F *Cry34/35Ab1 mCry3A*	x	R	RL	RL	x	x	RL		R	x	R	5% blend	GLY LL
38	SmartStax or Genuity SS	SS SX	Cry1A.105 Cry2Ab2 Cry1F *Cry3Bb1 Cry34/35Ab1*	x	R	RL	x	x	x	RL		R	RL	R	5%	GLY LL
39	SmartStax Enlist	SSE	Same as SmartStax	x	R	RL	x	x	x	RL		R	RL	R	5%	GLY LL
	SS Enlist Refuge Advanced														Adv 5% blend	Enlist
40	SmartStax Refuge Advanced	SXRA	Same as SmartStax	x	R	RL	x	x	x	RL		R	RL	R	5% blend	GLY LL
41	SmartStax RIB Complete															
43	SmartStax PRO	SSPro	Cry1A.105 Cry2Ab2 Cry1F *Cry3Bb1 Cry34/35Ab1 dvSnf7*	x	R	RL	x	x	x	RL		R	x	x	5%	GLY LL
44	SmartStax PRO Enlist	SSPro	Same as SmartStax Pro	x	R	RL	x	x	x	RL		R	x	x	5%	GLY LL
45	SSPro Enlist Refuge Advanced														Adv 5% blend	Enlist
	SmartStax PRO Refuge Advanced	SSPro	Same as SmartStax Pro	x	R	RL	x	x	x	RL		R	x	x	5% blend	GLY LL
	RIB Complete or w/RNAi Tech															
46	Trecepta RIB Complete	TRERIB	Cry1A.105 Cry2Ab2 Vip3A	x	x	RL	x	x	x	x	x	x			5% blend	GLY
47	Viptera (Agrisure3220EZ)	V	Cry1Ab Cry1F Vip3A	x	x	RL	x	x	x	x	x	x			5% blend	GLY LL*
48	Vip Refuge Renew (Agrisure3220)														Renew: 5%	
49	Viptera Z3 (Agrisure3330EZ)	VZ	Cry1Ab Cry1A.105 Cry2Ab2 Vip3A	x	x	RL	x	x	x	x	x	x			5% blend	GLY LL*
50	VZ Refuge Renew (Agrisure3330)														Renew: 5%	
51	Vorceed Enlist	V	Cry1A.105 Cry2Ab2 Cry1F *Cry3Bb1 Cry34/35Ab1 dvSnf7*	x	R	RL	x	x	x	RL		R	x	x	5% blend	GLY LL Enlist
52	Vorceed Enlist Structured *- Expected in 2026*	VS	Cry1A.105 Cry2Ab2 Cry1F *Cry3Bb1 Cry34/35Ab1 dvSnf7*	x	R	RL	x	x	x	RL		R	x	x	5%	GLY LL Enlist
53	VT Double PRO	VT2P	Cry1A.105 Cry2Ab2		R	RL	x	x	x	RL					5%	GLY
54	VT2 PRO RIB Complete	VT2PRIB	Cry1A.105 Cry2Ab2		R	RL	x	x	x	RL					5% blend	GLY
56	VT3 PRO RIB Complete	VT3PRIB	Cry1A.105 Cry2Ab2 *Cry3Bb1*		R	RL	x	x	x	RL			RL	R	10% blend	GLY
57	VT4 PRO w/RNAi Technology	VT4PRO	Cry1A.105 Cry2Ab2 Vip3A *Cry3Bb1 dvSnf7*	x	x	RL	x	x	x	x	x	x	x	x	5% blend	GLY

The OMD Index

The digestibility of nutrients in corn silage is paramount when determining nutritional value. Starch and NDF are responsible for much of the digestible energy in corn silage. In order to give dairy producers and nutritionist a tool to evaluate corn silage hybrids, we developed a new digestibility index, called the Organic Matter Digestibility Index (OMDI or just OMD), and is based on digestibility of protein, fat, NDF, and starch. The sum of which makes up approximately 86-88% of the organic matter in corn silage.

The OMD index represents the digestible portion of silage organic matter and is based on chemical analyses only. It does not predict dry matter intake or milk production, although numerous studies clearly show that digestibility of forage organic matter is directly related to lactation performance of dairy cows. The OMD index does not represent the absolute digestibility of silage organic matter, as this can be reliably determined only in experiments with live animals. But, OMD is representative of the potentially digestible organic matter of the whole plant and can be used to compare silage hybrids. Furthermore, simulation analyses using the Cornell Net Carbohydrate and Protein System (CNCPS v. 6.55; Cornell University, Ithaca, NY) show that OMD correlates reasonably well with model-predicted milk production of dairy cows fed a standard diet containing approx. 40% corn silage (dry matter basis).

How is the OMD Index Used?

Feeding value of corn silage is mostly associated with digestibility of NDF or starch. A long-standing goal of PDMP is to create a single measure of silage nutritive value using several variables associated with digestibility. Traditional variables, crude protein (accounted for fiber-bound nitrogen), NDF, starch, lignin, and fat, are combined with digestibility determinations for NDF (NDFD30*) and starch (IVSD; 7-hour, 1-mm grind). Once combined, these digestibility coefficients sum to predict OMD.

The OMD Index is calculated using the following equation: OMDI (%) = {[(crude protein – NDICP) × 0.89] + (total fatty acids × 0.75) + (starch × IVSD ÷ 100) + [(aNDFom - lignin) × NDFD30 ÷ 100)]} ÷ [(crude protein – NDICP) + total fatty acids + starch + (aNDFom – lignin)] × 100.

Where: OMDI (%) is Organic Matter Digestibility Index; crude protein, total fatty acids, starch, NDICP (NDF-bound crude protein), aNDFom (ash-free basis, amylase-treated NDF), and lignin (ash-free) are expressed as % of corn silage dry matter; 0.89 is assumed (based on literature data) coefficient of digestibility of silage crude protein; 0.75 is assumed (based on literature data) coefficient of digestibility of silage total fatty acids; IVSD is starch digestibility (by NIRS at 7-hour and sample ground through a 4-mm sieve) expressed as % of starch; and NDFD30.

Use of OMDI: The OMD index is intended to represent the digestible portion of silage dry matter and is based on chemical analyses. OMD does not represent the absolute digestibility of silage organic matter, but it is representative of the potentially digestible organic matter and can be used when comparing silage hybrids. ***Simply put, the higher the OMD value, the higher the overall expected digestibility of the silage.*** OMD reflects the digestibility of key nutrients within the entire plant. Producers without carryover of silage should consider the interaction of OMD and DOM (digestible organic matter yield per acre) as yield of digestible organic matter will be equally as relevant as OMD.

Conclusion

Organic matter digestibility is not a new measure. For years, researchers and nutritionists have used digestibility estimates to formulate rations for dairy cattle. Today, integrating these data is a useful practice to gauge silage value and match hybrid to farm needs. Put simply, OMD measures whole plant digestibility. Emphasis is on digestibility of all main nutrients. In the end, we hope OMD serves to facilitate discussion among producer, seed consultant, and dairy nutritionist as to which hybrids offer the best nutrient value for dairy cows.